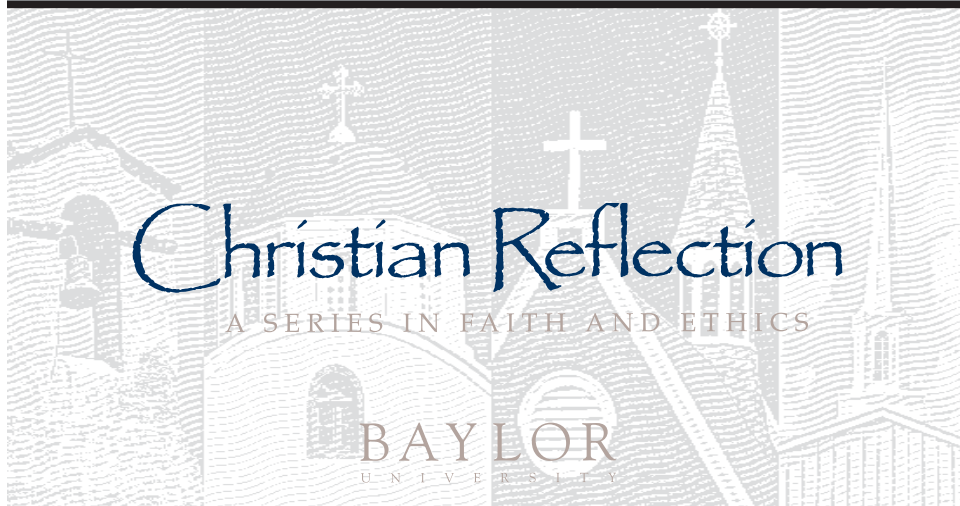


Cloning



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ISSN 1535-8585

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Christian Reflection is published quarterly by The Center for Christian Ethics at Baylor University. Contributors express their considered opinions in a responsible manner. The views expressed are not official views of The Center for Christian Ethics or of Baylor University.

The Center expresses its thanks to individuals, churches, and organizations, including the Cooperative Baptist Fellowship, who provided financial support for this publication.

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THE CULTURAL GEOGRAPHY OF CLONING

As we gain knowledge of the human genome and the power to clone, do we have the wisdom to use this knowledge and power for human flourishing? Or will we simply take the course of least resistance, the course determined by the cultural geography, the social enthusiasms, of our time?

CLONING FACTS AND FICTIONS

The heated debate in our society over reproductive cloning, as well as therapeutic cloning to obtain embryonic stem cells, has been fueled by misconceptions and hyperbole on both sides. We need to separate the facts from the popular fictions about human cloning.

CLONING PROMISES, PROFITS, AND PRIVILEGE

Who is funding cloning research, and who will reap the benefits? We should make sure that the common good, solidarity among rich and poor, and the justice of health care and health research economics become central in debates about reproductive cloning, research cloning, and stem cells.

THE HUMAN EMBRYO IN CHRISTIAN TRADITION

"The Christian churches teach not that the early embryo is certainly a person, but that the embryo should always be treated *as if* it were a person," says *A Theologian's Brief*. How have Christians interpreted Scripture over the centuries to clarify the moral status of the human embryo?

FAITH AND INFERTILITY

Facing the fact that one will never bear children is not just an experience of profound disappointment, but a kind of "dying," a loss of a longed-for relationship. Can we develop a Christian spirituality for growth through infertility? Can worship become a context for acquiring the grace to live into involuntary childlessness with hope and dignity?

MAKING DIFFICULT DECISIONS

Not every medical "advance" deserves our unquestioning acceptance. In deciding whether and how to employ new technologies, we must draw upon our religious values. Clearness committees can help individuals do this in a positive and helpful way.



Introduction

BY ROBERT B. KRUSCHWITZ

“We are learning to do a great many clever things,” G. K. Chesterton famously observed. “Unless we are much mistaken the next great task will be to learn not to do them.” Our contributors help us to explore how this aphorism applies to reproductive cloning and research cloning for embryonic stem cells.

Cloning at once fascinates and repulses us. “Is cloning attractive for the wrong reasons? Is it pure evil masquerading as the ‘Killer App,’ or is it a limited good that comes with a long list of possibly dangerous side affects, which we can avoid if we are careful?” Ronald Cole-Turner has asked in *Beyond Cloning*. “Is cloning quite literally a wolf in sheep’s clothing?”

The specter of reproducing human beings, as though by a genetic copy machine, occupies center stage in the popular imagination, though it is unlikely to work and is banned in most countries. The cloning of human embryos for research, on the other hand, is technologically more likely and morally more ambiguous. In *Cloning Facts and Fictions* (p. 21), James Marcum explains the process of cloning and examines how “the heated debate in our society over reproductive cloning, as well as therapeutic cloning to produce embryonic stem cells, has been fueled by misconceptions and hyperbole on both sides.”

Much of the hyperbole about cloning originates in what Allen Verhey calls “the cultural geography, the social enthusiasms, of our time.” These include our enthusiasms for reducing human life to genetic information, thinking technology inevitably advances human wellbeing, believing that maximizing freedom is morally unobjectionable, desiring to (re)produce perfect children, and trusting the market not only to be efficient but also

to deliver global equity. Do any of these show us how to use our knowledge of the human genome for human flourishing? Verhey warns in *The Cultural Geography of Cloning* (p. 11), “We must look for wisdom, and for justice, elsewhere.”

The willful destruction of human embryos is a central issue in evaluating therapeutic or research cloning. How have Christians interpreted Scripture over the centuries to clarify the moral status of the human embryo? “The Christian churches teach not that the early embryo is certainly a person, but that the embryo should always be treated *as if* it were a person,” says *A Theologian’s Brief* (p. 37), which marshaled evidence for the British House of Lords Select Committee on Stem Cell Research in 2001. The statement concludes with five helpful guidelines to “inform any Christian evaluation of the moral status of the human embryo.”

Our concern for justice in cloning must focus *not only* on the destruction of embryos. “Who is funding cloning research, and who will reap the benefits?” Lisa Cahill urges us to ask in *Cloning Promises, Profits, and Privilege* (p. 29). “Christians should make sure that the common good, solidarity among rich and poor, and the justice of health care and health research economics become central in debates about reproductive cloning, research cloning, and stem cells.”

In *Repeating Realities* (p. 58), Heidi Hornik examines our cover art, *Found Wasp Nest*, by contemporary sculptor Joshua Smith. Working with repetition both in its form and theme, the artist deliberately creates a fetus-or-wasp-nest optical illusion. His work reflects on “how people’s identities are reduced to repeated patterns of numbers—for example, to social security, cell phone, or credit card numbers,” a powerful current in our society that “culminates in the social fantasy that we might determine an entire individual before birth by repeating a genetic code through cloning.”

The temptation to view our lives as projects to be controlled, which is so prevalent in the current cloning debate, is hardly a new seduction. William D. Shiell’s *Receiving the Gift of Creation* (p. 60) traces this theme in the book of Colossians. “When we see our lives as gifts from Christ, the rationales for cloning become questionable,” Shiell observes, and he shows how “Paul’s choice to define life as originating and continuing in the work of Christ provides the Colossians a way of dealing with those who tried to intimidate them.”

In Ann Bell Worley’s service of worship (p. 52), we approach God in humility for guidance to comprehend the complex topic of cloning. “None of us fully comprehends the science of cloning, much less knows the mind of God with regard to each new technology and capability,” she writes. Yet “we gather as a worshipping community to grapple with the challenging issues of cloning, bring our theological tradition to bear on public debate, and search not only for answers but also for understanding.” The psalmist, she reminds us, pondered the rich mystery of our individual creation by

God; so, it is appropriate that Terry York and David Bolin's new hymn, *God Who Searches, God Who Knows* (p. 49), reflects on Psalm 139. "Breath of Life, refresh our thinking, clear away confusion, / as we join with you in knitting future generations," they write, concluding with this warning: "Help us see when wicked ways / with birth and death negate our praise."

In her prayers of the people, Worley leads us to pray with and for "friends and neighbors for whom cloning is more than a disembodied issue, whose lives are touched with sorrow as they yearn for a child but cannot conceive, grieve the decline of a loved one, or face their own impending death." Maura Ryan, in *Faith and Infertility* (p. 65), helps us to understand that "facing the fact that one will never bear children is not just an experience of profound disappointment, but a kind of 'dying,' a loss of a longed-for relationship." She urges us to develop a Christian spirituality that sees "worship as a context for acquiring the grace to live into involuntary childlessness with hope and dignity." Stuart Sprague's *Making Difficult Decisions* (p. 75) also recognizes that cloning, genetic technologies, and life-extending therapies require us to make hard choices. Sprague believes that through "clearness committees," a process of communal discernment adapted from the Quaker tradition, we can help one another to know God's will. "After hearing the complicated technical details from their physicians, many members will welcome the opportunity to sort through the moral questions with the help of trusted friends."

Only a generation ago, in the 1960s, ethicists asked "deeper questions of meaning, purpose, and human identity posed by developments in medicine," Andrew Lustig recalls in *Beyond Minimalist Bioethics* (p. 81). He praises three books—Allen Verhey's *Reading the Bible in the Strange World of Medicine*, Gilbert Meilaender's *Bioethics: A Primer for Christians*, and the President's Council on Bioethics report, *Beyond Therapy: Biotechnology and the Pursuit of Happiness*—which return to discussing human cloning and other bioethics issues in the wider context of the common good and human flourishing.

Finally, in *Are We Asking the Right Questions?* (p. 86), Mark Cherry reviews three challenging and important anthologies that reflect how "much of medical research and healthcare decision-making has been divorced from traditional Christian commitments"—*The Human Embryonic Stem Cell Debate: Science, Ethics, and Public Policy*, edited by Suzanne Holland, Karen Lebacqz, and Laurie Zoloth; *God and the Embryo: Religious Voices on Stem Cells and Cloning* edited by Brent Waters and Ronald Cole-Turner; and *Beyond Cloning: Religion and the Remaking of Humanity* edited by Ronald Cole-Turner. "Human beings are created to worship God," Cherry concludes. "If, in our moral analysis, we only inquire after temporal human goods and focus on equality, rights, justice, or fairness, we will fail to appreciate the depth of our humanity." ❖

The Cultural Geography of Cloning

BY ALLEN VERHEY

As we gain knowledge of the human genome and the power to clone, do we have the wisdom to use this knowledge and power for human flourishing? That's the map we truly need, the map to wisdom. Without such a map we will simply take the course of least resistance, the course determined by the cultural geography, the social enthusiasms, of our time.

The story is a familiar one. It begins in a garden. Not the Garden of Eden, but an abbey garden in Austria where Gregor Mendel, an Augustinian monk, planted different kinds of pea plants. Brother Gregor was the son of a farmer and knew something about breeding, but in that garden he set out to understand the rules of inheritance more systematically and statistically. He wrote his observations down and published them. No one took any special notice. Indeed, the world yawned. That was 1865, but it was not the end of the story.

Maybe the world yawned because he was a monk. Or maybe the world yawned because the mathematics seemed tedious. Or maybe the world was simply distracted by the theory that Charles Darwin had recently advanced (1859). At any rate people began to wake up to the significance of Mendel's observations about inheritance as the twentieth century dawned. His work was rediscovered, republished, and independently confirmed. His hypotheses about inheritance came to be called genetics, and the rest, as they say, is history. It is not an altogether pleasant history, it must be said. It got mixed up in the story of eugenics pretty quickly. Science, ever

the servant of some larger vision, got co-opted by the social enthusiasms of the time.¹

In 1953 James Watson and Francis Crick discovered the structure of DNA. When they celebrated in a pub near their lab, Crick announced that they had just discovered “the secret of life.”² That sort of rhetoric, of course, was commonplace in pubs, but it was to grow commonplace also in the descriptions of the genome. It was the “Bible” for life, the “Book of Man,” “the Holy Grail.”³

The discovery and the rhetoric triggered—and governments and corporations financed—a massive investigation. The Human Genome Project (aka the Holy Grail Project) undertook to map the human genome. Knowledge of the human genome continues to grow, and along with that growing knowledge comes growing power over nature, including perhaps the power to clone. The old Baconian equation seems confirmed: knowledge is power. The question, of course, is whether the next part of Francis Bacon’s equation will be confirmed, whether, that is, knowledge as power over nature will bring human flourishing in its train. So, at this point in the story we have knowledge (or at least some have some knowledge), and we have power (or at least some have some power), but we also have questions. What should we do with this knowledge? What should we leave undone with such power? We have knowledge and we have power, but do we have wisdom? Does anyone? And where is wisdom to be found? That’s the map we truly need, the map to wisdom. Without such a map we will simply take the course of least resistance, the course determined by the cultural geography, the social enthusiasms, of our time.

In spite of the success of the Human Genome Project, and in spite of Crick’s rhetoric about “the secret of life,” genetics has not yet located the gene for wisdom. “But where can wisdom be found?” It’s an old question, of course, hardly asked for the first time in response our new genetic knowledge and power. Job asked it long ago (Job 28:12), and he had no easy answers. Some things are just inscrutable, he said, “hidden from [our] eyes” (Job 28:21). He knew, however, that what passed for pious wisdom in the mouths of his friends was really folly. And he knew something else. He knew, as he said, that God knows the way to it, that God “established it,” and that those ancient sages were right who said that faith in God [or “the fear of the LORD”] is the beginning of it (Job 28:23-28; cf. Proverbs 1:7; 9:10).

Christians look for wisdom in another story that begins in a garden. We need to ask what it might mean to map the human genome biblically, to locate our genetic powers and to orient ourselves to them biblically. I am confident that there is wisdom in Scripture, wisdom there to guide Christian discernment concerning what should be done and left undone with our genetic powers, including our powers to clone, so that we might “glorify God in our bodies” (1 Corinthians 6:20) and with the human ge-

nome.⁴ In this essay, however, I will neither survey Scripture nor try to apply its wisdom to cloning. Here the task is rather to survey the cultural geography, to consider what passes for wisdom in our culture, and to suggest that the current cultural enthusiasms may really be the paths of folly. We will consider some of the ways our culture maps the human genome, locating us and orienting us to this new knowledge and power.

GENETIC REDUCTIONISM

Consider the rhetoric that sometimes accompanies genetic investigation in our culture. It pretends to wisdom, as if the human genome were the “secret of life” or the “code of codes” or the “map of human life.” That invites us, of course, to read the map of the human genome as if it were necessary and sufficient for understanding human life. But we should reject this way of thinking about and talking about the Human Genome Project. We should reject genetic reductionism. It is the way of folly, not wisdom.

Walter Gilbert, a Nobel laureate in genetics, made the plausible prediction that we will each one day have a CD containing a map of our individual genetic code. But he went on to make the foolish suggestion that we could hold up that CD and say, “This is me.”⁵ Such a future (along with such rhetoric) we must resist. The human person may not be reduced to her genes. The ability to map and sequence the genes does not give us what Gilbert hoped for, “the ultimate answer to the [ancient] commandment ‘know thyself.’”⁶ Indeed, not even the body may be reduced to genes; a genotype is not to be confused with a phenotype.⁷ Persons and bodies have histories, not just genetic fates.

One need not read Scripture to recognize the folly of genetic reductionism—or the folly of the genetic determinism it sometimes generates. The folly is displayed in a contradiction: on the one hand, there is the denial of human freedom in the assumption that human beings are totally determined by their DNA; while, on the other hand, there is the claim that human beings are free, indeed free to control their DNA, their own nature, and their evolutionary future.⁸

When we reject genetic reductionism, we do not reject the study of genetics. We reject the arguments concerning cloning (on both sides of the dispute) that assume such reductionism. More important, we reject the claim that the map of the human genome is sufficient to locate its own significance. We acknowledge, that is, the necessity of some other map (or maps) of “the human” to locate and to orient ourselves with respect to our genetic knowledge and power. There is no great wisdom in rejecting genetic reductionism and determinism, but there is no hope for wisdom unless we do.

THE BACONIAN PROJECT

Consider also the map provided by what is aptly named “the Baconian project,” which locates genetic knowledge as a “practical” science and ori-

ents it toward “the relief of human subjection to fate or necessity.”⁹ That sounds commendable enough, and it is surely commonplace enough in the modern world. But it is the path of folly.

It is not folly to distinguish the “practical” from the “speculative” (or theoretical) sciences. Aquinas, too, had done that, but Aquinas affirmed that all knowledge is “good.” Bacon distinguished them in order to reject

The Baconian project sets humanity not only over nature but against it. Natural processes have no dignity of their own; their value is reduced to their utility to humanity. Nature may be, and must be mastered.

the “speculative” sciences as the mere “boyhood of knowledge” and as “barren of works.”¹⁰ Western culture has followed Bacon in exalting a particular form of knowledge, the knowledge for which it reserves the honorific term “science.” In the classical account, theory (or the speculative sciences) pro-

vided the wisdom to use the practical sciences appropriately. In Bacon’s account—and in a culture formed by Bacon’s account—where shall we look for wisdom?

The modern account may admit, as Bacon did, that for knowledge to be beneficial humanity must “perfect and govern it in charity,”¹¹ but science is “not self-sufficiently the source of that human quality that makes it beneficial.”¹² The compassion that responds viscerally to suffering will urge us *to do something* in response to suffering, but it will not tell us *what thing* to do. The Baconian confidence in technology tells us that the thing to do is to reach for the latest technique or the nearest tool in an effort to eliminate suffering. The Baconian project simply arms compassion with artifice, not with wisdom. For the wisdom to guide charity (or compassion), science must call upon something else. But upon what? And how, in Bacon’s account, can humanity have “knowledge” of it?

The “practical” knowledge Bacon celebrated was sought in the confidence that it would render humanity “capable of overcoming the difficulties and obscurities of nature,” able to subdue and overcome the vexations and miseries that nature brings, and “to endow the human family with new mercies.”¹³ The Baconian project sets humanity not only over nature but against it. The natural order and natural processes have no dignity of their own; their value is reduced to their utility to humanity. And nature does not serve humanity “naturally.” Nature threatens to rule and to ruin humanity. The fault that runs through our world and through our lives must finally be located in nature. Nature may be, and must be mastered.¹⁴ Technology becomes the faithful savior.

The confidence that technology inevitably brings human wellbeing in its train is a creed ripe for doubt. The Baconian project is a powerful, but foolish, map to locate genetic knowledge and powers and to orient us within them. We must look for wisdom elsewhere.¹⁵

THE PROJECT OF LIBERAL SOCIETY

In the midst of moral diversity, the project of liberal society is to keep the peace.¹⁶ That, too, sounds commendable enough, and it is surely commonplace enough in the modern (and post-modern) world. But this project, too, puts us on the path to folly.

Because people disagree widely and deeply about their moral convictions, a liberal society insists on respect for the autonomy of each person and attempts to guarantee a space for each one to act in ways that suit one's moral preferences as long as such actions do not violate the autonomy of another. It is not folly to attempt to keep the peace in the midst of diversity. It is not folly to insist on respect for the moral integrity of each member of a diverse society. But the weakness of the project of liberal society is precisely its minimalism, and its folly is its failure (or its refusal) to acknowledge this minimalism.

Its minimalism shows up in a variety of ways. The liberal project tells us nothing about what goods to seek, only something about the constraints to exercise in seeking them. Moreover, it is attentive to only one constraint, prohibiting any violation of another's freedom. Because it pretends that freedom is a sufficient moral principle, it reduces covenantal relationships (like the relationships of husband and wife, or parent and child) to matters of contract. By its emphasis on the procedural question—the question of “Who should decide?”—it pushes to the margins of public discourse the substantive moral questions of conduct and character—the questions of “What should be decided?” and “What virtues should mark the one who decides?”

Its minimalism does not make it wrong, but if its minimalism is not acknowledged, it can distort and subvert the moral life, and the moral begetting of life. It is true, for example, that “non-consensual sex” is wrong—but there is more to say about a good sexual life, and if we deny that there is more to say, then we distort and subvert a good sexual life.

When “reproductive liberty” is taken to be a sufficient principle, then we publicly reduce the self to capacities for agency and reduce acts of begetting to mere physiology and to matters of contract. Consider the folly of surrogate mothers, who are sometimes alienated from the embodied experience of pregnancy and birth by the contract and sometimes alienated from the contract by their embodied experience of begetting.

Or consider the folly, the apparent incoherence, of our public morality with regard to disabled persons. On the one hand, we support their full inclusion into society and their rights to an equal freedom. On the other

hand, we seem committed to a reproductive freedom that includes the freedom to prevent a child with a disability from being born. It is not easy to see how the negative judgment on the lives of disabled persons in such reproductive freedom can long sustain the social commitment to their full inclusion.¹⁷

Notice, also, the folly of the pretence that “maximizing freedom” is always morally innocent. “Maximizing freedom” ironically can increase our

This account of parenting—that parents have the awesome responsibility of making perfect (or at least above average) children—turns our children into technological achievements. It may finally reduce our options to a “perfect child” or a dead child.

bondage. What is introduced as a way to increase our options can become socially enforced.¹⁸ The genetic technologies put forward as ways of increasing the options of parents, including pre-natal diagnosis, for example, may come to be socially enforced.

“What, you knew you were at risk for bearing a child with that disease, and you

did nothing about it? And now you expect help with this child?” Now it is possible, of course, to claim that pre-natal diagnosis is the path of progress, but then the argument has shifted from the celebration of options and the maximizing of freedom to something else, to the meaning of progress. And that argument, of course, requires more substantive moral convictions than the liberal project is prepared to invoke.

Moreover, note this irony: maximizing freedom, increasing options, can sometimes eliminate options. When, for example, under cover of maximizing freedom, we offer the option of physician-assisted suicide, we eliminate the option of staying alive without having to justify one’s existence to anyone. And when, under cover of reproductive liberty, we offer the option of preventing birth defects by preventing the births of defectives, we may eliminate the option of having and caring for a child without having to justify the child’s existence to anyone. Reproductive cloning, under cover of reproductive liberty, establishes a particular genetic identity for a child, a genetic identity that already has a history, a history against which the child will unavoidably be measured. The capacities for agency of such a child are unlikely to be “maximized” or even nurtured.

Maximizing freedom should not be regarded as a sufficient justification for a change in social practices, especially if the change leaves the weak still more vulnerable. The confidence that freedom is a sufficient principle and that maximizing freedom is always morally unobjectionable is a creed ripe for doubt. The project of liberal society is a powerful, but foolish, map to

locate our power over the human genome and to orient us within it. We must look for wisdom elsewhere.

THE PROJECT OF (RE)PRODUCING PERFECT CHILDREN

The Baconian project and the project of liberal society conspire to distort our relationship with our children. The suspicion of nature joined to confidence in technology and the celebration of options conspire to nurture a new “wisdom” about parenting, a new project of reproduction. We are tempted to view our children as human achievements rather than as gifts of God and as the basis of hope rather than as a gesture of our hope in God.

Few people think any more that children are the property of their parents, to be disposed of as parents choose. Today the confusion stems rather from the view that parents have the awesome responsibility of making perfect (or at least above average) children, and of making children perfect (or at least above average) in order to assure them a happy and successful life. But this account of parenting turns our children into products, into human and technological achievements. Such an account allows (and may finally require) the abortion of the unborn who do not meet our standards of quality control, the neglect of newborns with diminished capacities to achieve our ideal of the good life, and the pursuit of technical possibilities of genetically improving our children. Such a project may finally reduce our options to a “perfect child” or a dead child.

But children are begotten, not made; they are gifts, not achievements.¹⁹ The language of gift calls upon us to relate to our children as little ones who are related to God, to the God known in the Jesus who blesses little children, the God invoked as *Abba*. And the Father’s uncalculating nurturance is still the place to learn parenting, to learn to love the imperfect, the snotty-nosed, and the just plain snotty. Then it is not accidental that the language of gift involves acceptance of our children as given. We do not regard them as products, as achievements, and may not beget them as though they were. Children come to us as given—they are not of our choosing, not under our control, not necessarily the children we want or expect or would choose if we could. Children come to us as given, and therefore always have a measure of independence from us and from our rational choices. To regard children as gifts may be necessary if children are to be regarded as ends in themselves and not merely as instruments to achieve parental ends and projects.²⁰

The project of (re)producing perfect children is a powerful, but foolish, map to locate our genetic knowledge and to orient our reproduction within it. We must look for wisdom elsewhere.

THE PROJECT OF CAPITALISM

As the inquiry into genetics has developed, it has become increasingly clear that it cannot be viewed apart from the financial incentives that fuel

the project. The project of capitalism and the map it provides transform scientific knowledge into a marketable commodity.²¹ Those at the forefront of investment in genetics—the United States, the European nations, and Japan—expect lucrative returns from commercial applications by their biotechnology industries. At the beginning of the international research effort it was cost-effectiveness that was invoked to justify the coordinated

and collaborative effort.²²

The beneficiaries of genetic knowledge and power, both economically and medically, very likely will live in the developed nations and be among the relatively well off within those populations.

Subsequently, as particular diseases were identified with particular sequences, in order to assure investment in research and product development, the commercial interests of the biotechnology companies led to the patenting of gene sequences.²³ Collaboration and cooperation gave way

to competition and secrecy because the market demanded it.

The medical advances promised by genetic science are tied to successful (i.e., commercially successful) product development by biotechnology companies. Social benefits depend upon the market, and the medical goals are intimately related to commercial goals. The beneficiaries of genetic knowledge and power, both economically and medically, very likely will live in the developed nations and be among the relatively well off within those populations. It is hardly accidental that the most studied gene is the cystic fibrosis gene; 1 in 25 northern Europeans carry it.²⁴ It is hardly accidental that the most common worry is that companies that hire people or that provide health insurance will use this knowledge and power to serve their own financial interests rather than the interests of the sick poor.

Perhaps we are to believe that some “invisible hand” will guide the market toward not only efficiency but also toward global equity. Perhaps we are to believe that at least some benefits will “trickle down” to the poor and economically powerless. But this is a creed ripe for doubt. What we have seen so far does not bode well for justice, especially for global justice. The project of capitalism is a powerful, but foolish, map to locate the Human Genome Project and to orient us within it. We must look for wisdom, and for justice, elsewhere.

NOTES

1 See Arthur J. Dyck, “Eugenics in Historical and Ethical Perspective,” in John F. Kilner, Rebecca D. Pentz, and Frank E. Young, eds., *Genetic Ethics* (Grand Rapids, MI: Wm. B. Eerdmans, 1997), 25-39.

2 James D. Watson, *The Double Helix* (New York: Athenaeum, 1968), 126.

3 See Walter Gilbert, "A Vision of the Grail," in Daniel Kevles and Leroy Hood, eds., *The Code of Codes* (Cambridge, MA: Harvard University Press, 1992), 83-97.

4 See Allen Verhey, *Reading the Bible in the Strange World of Medicine* (Grand Rapids, MI: Wm. B. Eerdmans, 2003), 158-193. My reflections in this article are drawn from pp. 145-158.

5 Gilbert, "A Vision of the Grail," 96.

6 Jean Bethke Elshtain, *Who Are We?* (Grand Rapids, MI: Wm. B. Eerdmans, 2000), 90, citing Gilbert.

7 Consider this question: What is it that the Human Genome Project mapped? Not the human person. Not the human body. Not even that thing called "the human genome." There is no such thing as "the human genome." The Human Genome Project itself has reminded us that genes differ from person to person. The aim of the project is to publish the average or 'consensus' sequence of 200 different people. But that will provide a map neither of everyone nor of anyone. Does "the human genome" have blood group A? or B? or AB? or O? We know where to look on chromosome 9 for a marker for blood type, but if we look carefully, we will not see the blood type of "the human genome." We will see that "Variation is an inherent and integral part of the human—or indeed any—genome" (Matt Ridley, *Genome* (New York: HarperCollins, 1999), 145).

8 See Ted Peters, *Playing God? Genetic Determinism and Human Freedom* (New York: Routledge, 1997), xiii.

9 On the Baconian project and responses to it see Gerald McKenny, *To Relieve the Human Condition: Bioethics, Technology and the Body* (Albany, NY: State University of New York Press, 1997), 22.

10 Aquinas, *Commentary on Aristotle's ON THE SOUL* 1.3; Francis Bacon, *The New Organon and Related Writings*, ed., F. H. Anderson (Indianapolis, IN: The Liberal Arts Press, Bobbs-Merrill Co., 1960 [1620]), 8.

11 Bacon, 15.

12 Hans Jonas, *The Phenomenon of Life: Toward a Philosophical Biology* (New York: Dell, 1966), 195.

13 Bacon, 19, 29.

14 Jonas, 192. The Baconian project finds a natural expression in genetic enhancement. The nature we are is the nature we suffer from. The ambitions of the Baconian project extend to human finitude itself, to human nature. The Baconian project will find it increasingly difficult to think (or to make and preserve) a distinction between healing and enhancement. There is an irony here, of course. The very success of enhancement technologies, as Mark Hanson has observed, "serves to broaden the scope of conditions from which humans can be said to suffer." Mark J. Hanson, "Indulging Anxiety: Human Enhancement from a Protestant Perspective," *Christian Bioethics* 5:2 (August, 1999), 121-138, quoting from page 125.

15 Let it be acknowledged, however, that we will not find wisdom in any casually anti-technological spirit, in slogans about "playing God" when people intervene in natural processes, or in the cry "It's not nice to fool with Mother Nature" with its obsequious subservience to Nature. That, too, is folly. It is God who is God, not Nature.

16 See the treatment of "the liberal convention" in Hans Reinders, *The Future of the Disabled in Liberal Society: An Ethical Analysis* (Notre Dame, IN: University of Notre Dame Press, 2000), 22-35.

17 Reinders, 65; see also 77-78.

18 The technology that surrounds our dying, for example, was introduced to give doctors and patients options in the face of disease and death, but such "options" became socially enforced; at least one sometimes hears, "We have no choice!"

19 Oliver O'Donovan, *Begotten or Made?* (Oxford, UK: Oxford University Press, 1984).

20 On the relation of parents and children see Sondra Wheeler, "Contingency, Tragedy, and the Virtues of Parenting," in Ronald Cole-Turner, ed., *Beyond Cloning* (Harrisburg, PA: Trinity Press International, 2001), 111-123.

21 See Julie Clague, "Genetic Knowledge as a Commodity: The Human Genome Project, Markets and Consumers," in Maureen Junker-Kenny and Lisa Sowle Cahill, eds., *The Ethics of Genetic Engineering* issue of *Concilium*, 1998:2 (London: SCM Press, 1998), 3-12, quoting from page 6.

22 Robert Mullan Cook-Deegan, "Genome Mapping and Sequencing," in Warren Reich, ed., *Encyclopedia of Bioethics*, revised edition (New York: Macmillan, 1995), 1011-1020, especially 1014-15. See also Karen Lebacqz, "Fair Shares: Is the Genome Project Just?" in Ted Peters, ed., *Genetics: Issues of Social Justice* (Cleveland, OH: The Pilgrim Press, 1998), 82-107.

23 See Stephen Sherry, "The Incentive of Patents," in Kilner, et al., *Genetic Ethics*, 113-123.

24 There is an obvious connection between the liberal project and the project of capitalism. New technological developments are introduced as ways to increase choice for consumers.



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Cloning Facts and Fictions

BY JAMES A. MARCUM

The heated debate in our society over reproductive cloning, as well as therapeutic cloning to obtain embryonic stem cells, has been fueled by misconceptions and hyperbole on both sides. We need to separate the facts from the popular fictions about human cloning.

Cloning is revolutionizing and reshaping our understanding of human nature: just as Darwinian evolution challenged the belief in humans as a special creation of God, so cloning is challenging the belief in the uniqueness of human identity and individuality. And just as human sanctity was defended from the perceived attacks of Darwinian theorists, so today human dignity is defended from the perceived threat of cloning scientists.

The possibility that a person's genome can be cloned repetitively strikes fear into our collective consciousness and causes us to question our identity. Who or what exactly are we? Are we reducible simply to genes? In other words, is genetic material responsible for our individual uniqueness and identity, or are there dimensions of our existence not reducible to the genome? These types of questions are at the center of the debate over human cloning, especially reproductive cloning. In addition, there is an equally contentious debate over therapeutic cloning. What is the moral status of the blastocyst or embryo? Is its dissection to obtain embryonic stem cells morally justifiable?

Although animal cloning was first conducted successfully in the 1950s—the first animal cloned by nuclear transfer was a tadpole—biologists commonly held that mammals could not be cloned. They believed that the adult mammalian body cell's nucleus is too specialized or differentiated to provide the genetic information needed to direct an organism's development. That is, the information necessary to guide an organism's growth is

locked up too securely to be accessed or, simply stated, the cell's nucleus is just too old to be born anew. Of course, that position changed with the cloning of the sheep "Dolly," who was born on July 5, 1996. Since then other mammalian species, such as cows, pigs, mice, and cats, have been cloned successfully. Some biologists believe it is only a matter of time until humans are cloned.

Since the cloning of the sheep "Dolly" in 1996, other mammals such as cows, pigs, mice, and cats have been cloned successfully. Some biologists believe it is only a matter of time until humans are cloned.

Biologists also knew about stem cells for decades, but their therapeutic potential was not generally appreciated until human stem cells were isolated in 1998. Stem cells are immature cells found both within embryos and adults. Some of these cells, especially from the embryo, have the potential to form any cell within the body. For example, embryonic stem

cells can form nervous and heart tissue. But the use of embryonic stem cells has met with severe criticism.

Since the late 1990s, then, reproductive and therapeutic cloning has engendered a heated debate in our society. But the debate has at times been fueled by misconceptions and hyperbole on both sides. We need to separate the facts and from the popular fictions about human cloning.

TYPES OF CLONING

Two types of cloning are prevalent today in the biomedical sciences. The first is *reproductive cloning* in which an adult organism is duplicated by removing a nucleus from one of its body cells and transferring it to an egg in which the nucleus has been removed. The cloned cell is totipotent, in that it gives rise to all the cells needed for development of a new organism. In the case of mammals, the resulting embryo from the cloned cell is then transferred to a womb for the remaining period of gestation. This type of cloning is asexual and the cloned organism is genetically similar to the organism donating the nucleus. These clones are usually called "delayed genetic" or "spaced" twins, in contrast to identical twins.

The second type is *therapeutic cloning*. The initial process is similar to that described above for reproductive cloning, except the clone is dissected at an early development stage to harvest its stem cells. The embryonic stem cells are pluripotent, in that they can form any one of the roughly 210 specialized cells types that make up the human body. Scientists claim that these stem cells represent the potential for curing degenerative diseases such as Alzheimer's disease, Parkinson's disease, diabetes, heart disease, and cystic fibrosis, among many other diseases.

EARLY STAGES OF HUMAN DEVELOPMENT

Human development normally begins with fertilization, that is, when a sperm enters an egg. Upon entry the sperm is dissolved and absorbed by the egg, except for its chromosomes—structures that contain the genes. These chromosomes couple with their mates from the egg to form a new, genetically unique individual organism. But before chromosome coupling can occur, the egg must eject its excess chromosomes. After fertilization, which occurs in the fallopian tubes and takes about one day, the fertilized egg or zygote then begins the journey to the womb or uterus and, along the way, undergoes cell division to form a multicellular morula—a solid ball of cells resembling a mulberry. The morula enters the uterus and continues to undergo cellular division, until a cavity appears in its center called the blastocoele.

After the formation of the blastocoele, the morula or zygote is now called a blastocyst and is composed of two cell types. The first type is the cell present in the interior of the embryo called the inner mass cell or embryoblast. This is the pluripotent cell that gives rise to the cells that make up the developing organism and thereby represents its potential or presumptive tissues. It is the cell harvested as embryonic stem cells. The second cell type is the trophoblast, which is the embryo's outer lining of cells and forms the placenta. The trophoblast cells are also responsible for implantation of the developing zygote into the lining of the uterus. The blastocyst continues to undergo cell division and differentiation—the process by which cells eventually become different tissues and organs of the organism.

Around two weeks later, the blastocyst transforms into the gastrula, with the appearance of the primitive streak—the structure that eventually becomes the nervous system. The gastrula is composed of three cell layers—ectoderm, endoderm, and mesoderm—that give rise to the various tissues and organs of the developing organism. For example, the ectoderm gives rise to the skin, nerves, and brain, while the mesoderm gives rise to muscles, bones, heart, and blood and the endoderm to respiratory and digestive tissues. These various stages of human development are complete around three weeks after fertilization.

CLONING TECHNOLOGY

The basic cloning technology, called somatic cell nuclear transfer, is rather simple conceptually. Begin with an egg and remove its nucleus, the cell structure that contains the chromosomes, being careful not to damage the egg's viability or capability to divide and develop after introduction of another nucleus. This process is called enucleation. A donor nucleus—generally from an adult body or somatic cell—is then transferred to the enucleated egg. Two ways are commonly used to achieve the transfer: one is by promoting union between the enucleated egg and the intact body or

somatic cell; the other way is to remove the nucleus from the donor cell and place it directly inside the enucleated egg.

The reconstituted or nucleated egg is then activated by a specific chemical or an electric shock in order to start cell division. The zygote is now placed in an artificial environment that contains a chemical medium to stimulate growth through cell division and other chemical substances to promote differentiation associated with the early stages of human development. For reproductive cloning the embryo is placed next into the womb, while for therapeutic cloning the embryo remains in a Petri dish or test tube until it reaches the blastula stage, after which it is dissected for the embryonic stem cells.

PROBLEMS WITH CLONING

Although the process of cloning is easy conceptually, it faces a number of technical difficulties and challenges. The technique for reproductive cloning is terribly inefficient in that the success rate is very small. To clone "Dolly," for example, required 277 cloned embryos and thirteen pregnancies before success was achieved. Overall, more than 90% of attempts to clone an organism are unsuccessful. Besides the poor efficiency of the process, successfully cloned organisms usually do not live terribly long. "Dolly" lived only one-half of her expected life-span of twelve years (interestingly, she was cloned from a six year-old sheep), and around a third of the cloned bovine calves die prematurely. Unfortunately, many cloned organisms do not survive long enough to evaluate their aging process—although studies show that the ends of the chromosomes, which are indicators of an organism's longevity, are usually much shorter in cloned than non-cloned organisms.

Most cloned organisms live unhealthy and poor quality lives like "Dolly," who developed a host of chronic diseases prematurely, including obesity, arthritis, and lung cancer. Many cloned organisms have poorly functioning immune systems that lead to high rates of infection. Although clones may appear to be healthy at birth, they often have subtle defects and die prematurely for no apparent reason. Interestingly, studies show that cloned bovine calves score lower on average than non-cloned calves in behavioral tests for attentiveness and intelligence. Finally, the genomes of many cloned organisms are compromised or defective; for instance, cells from cloned monkeys do not contain nuclei, so that the chromosomes (which normally are located within the nucleus) are scattered throughout the cells.

These problems may result from the enormous stress placed upon both the cell and nucleus during the cloning process. Enucleating an egg involves suctioning out its nucleus, which often removes more than the nucleus. The process may also remove the fluid filling—the cytoplasm—of the egg, which contains many important substances for directing the

early stages of development. Biologists believe that disruption or removal of these substances leads to many of the cloning problems. Meanwhile, other problems connected with cloning may result from asking a mature or differentiated nucleus, which has been regulating cellular activity within a specific somatic or adult cell, suddenly to direct the development of an embryo. The genetic material of an adult cell is programmed to maintain the viability of that cell type only. Cloning demands that the genetic material of a differentiated cell be reprogrammed, and by a process that is poorly understood.

Similar challenges and problems face the techniques of therapeutic cloning to obtain embryonic stem cells. The efficiency of therapeutic cloning is almost as dismal as it is for reproductive cloning, for only about one out of ten embryos can be used to provide embryonic stem cells. Moreover, many embryonic stem cells simply do not grow under artificial conditions. It is well known that the microenvironment of the developing embryo provides the cues needed for cell growth and differentiation. These cues are lost in an artificial environment, unless supplied externally. Many of the cues are not known and it is hard to induce the pluripotent stem cell to differentiate into the specialized cell required to address the patient's need. Often the stem cells produce an unwelcome mixture of specialized cell types under artificial conditions.

Two other problems concern the fate of embryonic stem cells after they are placed in the patient. The first is that the cells do not effectively relieve the symptoms of the disease. For example, stem cells induced to produce insulin under artificial conditions were injected into mice, but the level of insulin production was insufficient to prevent the mice from dying from the complications of diabetes. In another example, only half of rats suffering from Parkinson's disease were modestly relieved of symptoms using embryonic stem cells. Recently, however, paralyzed mice and rats regained partial function of their limbs after an infusion of human embryonic stem cells.

The second problem with the fate of embryonic stem cells involves the production of tumors within the host. Although many embryonic stem cells do not grow under artificial conditions, there is a small number that grow uncontrollably. When embryonic stem cells engineered to produce insulin

Although the process of reproductive cloning is easy conceptually, it faces a number of technical challenges. Besides the poor efficiency of the process, successfully cloned organisms often have subtle defects and die prematurely for no apparent reason.

were transplanted into mice to treat diabetes, some cells did not reverse the diabetes but formed tumors. Moreover, not only do these rogue cells produce a tumor but also a wide range of other specialized cells. For example, transplantation of fetal tissue into the brain of a person suffering from Parkinson's disease resulted in the formation of non-brain tissue such as bone, skin, and hair. Of course, the patient did not survive.

Another technical problem involves the timing for the expression of the genes in embryonic stem cells. During development genes are turned on at precise times and are responsible for the synthesis of a protein, which often influences the next stage of development. Stem cells when placed in a foreign environment do not control the expression of their genes in a reliable fashion, which may lead to problems associated with an unstable genome. For example, studies with mice demonstrate that embryonic stem cells express genes in a highly variable way—around 4% of the roughly 10,000 genes from liver and placental cells of cloned mice were expressed abnormally. If the genes expressed abnormally are critical for development, often grotesque morphological anomalies result.

The last of the challenges is not technical but involves the supply of eggs. For therapeutic cloning to be beneficial for the thousands of patients with degenerative diseases, the number of eggs needed would be enormous. Some researchers would need hundreds of eggs per day, compared to the handful available today. The problem is where to obtain that supply. One solution is to use eggs from other species, such as cow. However, this raises the technical problem of patient's rejection of the hybrid-species embryonic stem cells—not to mention the ethical issues involving the generation of hybrid-species organisms.

FACTS AND FICTIONS

The debate over human cloning involves a tremendous amount of hype. Today companies like Clonaid claim that human cloning is just around the corner and that it represents the first step towards immortality by creating "identical twins" of ourselves or deceased family members. Unfortunately, "Dolly" or any other animal created using nuclear transfer technology, is not truly an identical clone of the donor animal. Only the clone's chromosomal or nuclear DNA is the same as the donor. Some of the clone's genetic materials come from the mitochondria in the cytoplasm of the enucleated egg. Mitochondria, which are subcellular structures called organelles and serve as power sources to the cell, contain their own short segments of DNA. Moreover, there are important factors within the cytoplasm of the egg that dictate gene expression during development. Change that pattern of expression and the result is a different individual.

Can we clone our loved ones? No. We are historical, contingent beings. Human personhood is not reducible to a genetic code—as natural identical twins so vividly demonstrate. Clones cannot be nurtured under the same

conditions or environment as the nuclear donor. The only way to clone an individual is to produce the body from a donor's nucleus and download the donor's personality, including memories, cognitive patterns, intelligence, etc., into the clone. Of course, the obvious problem, besides the technology to achieve such a feat, is the more fundamental issue of what constitutes an individual's personality. Is it memories, cognitive patterns, intelligence, etc.?

In regard merely to protecting human identity, then, there is no reason in principle why humans should not be cloned. Since we are not reducible to our genome, clones would certainly be unique individuals. The only problem would be a reduction in genetic variability in the human population, if reproductive cloning were conducted on a grand scale. But this does not consider the technical or ethical issues now facing reproductive cloning, which prohibit any attempt currently at human cloning.

The reductive sword, however, cuts the opposite way with therapeutic cloning. Just as we are not reducible to our genetic material, neither are we reducible to a ball of cells such as skin cells. Therapeutic cloning is often justified by claiming the embryo is nothing more than a ball of cells. The justification of therapeutic cloning based on this reductive move is at best blind to the importance of the cells that make up the embryo. Each cell represents the tissues that will eventually comprise the adult organism. Thus, embryonic cells are not comparable to adult somatic cells.

Importantly, there is a viable alternative to embryonic stem cells. Adult tissue from almost every organ in the body, umbilical cord blood, and the placenta contain stem cells.

These stem cells are generally called adult stem cells, although this is misleading since they are also present in fetal tissue. They were originally thought to be multipotent in their ability to form specific tissues—in other words, adult stem cells would only form tissue similar to the organ from which they were har-

vested. For example, stem cells from bone marrow responsible for the production of blood cells were thought only to form these cells. However, recent studies demonstrate that adult stem cells may rival the pluripotency of embryonic stem cells. Adult bone marrow stem cells can form skeletal and cardiac muscle cells. Some researchers believe that adult stem cells are better suited for therapeutic purposes, since they avoid problems associ-

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ated with embryonic stem cells. Currently a dozen companies, like Osiris Therapeutics of Baltimore, are developing therapies using adult stem cells.

CONCLUSION

The fact is that cloning today is more art than science. All else is fiction. Success often depends more on the tacit skills of the investigator, like riding a bike, than on the techniques employed. We understand little about the processes involved in the development of an organism, and without an answer sheet on the subject we cannot gauge our progress in mastering those processes. Until we can efficiently and effectively control cloning, the results will be hit or miss as they are now, often with unfortunate results. Human cloning, whether reproductive or therapeutic (to obtain embryonic stem cells), is certainly out of the question until we better understand the underlying developmental mechanisms.



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Cloning Promises, Profits, and Privilege

BY LISA SOWLE CAHILL

Who is funding cloning research, and who will reap the benefits? Christians should make sure that the common good, solidarity among rich and poor, and the justice of health care and health research economics become central in debates about reproductive cloning, research cloning, and stem cells.

In the popular imagination, “cloning” conjures up the creation of look-alike human beings who can be mass-produced. A common ethical reaction is that this would be a violation of nature, of human dignity, and of God’s authority over creation. In reality, there is no evidence cloning has ever produced a living human baby. Another type of cloning is quite well established, however. This is the cloning of embryos to serve as sources of stem cells. Cloning for medical research is hotly debated in the churches and in society because it destroys embryos. An ethical issue that is still below the surface of public consciousness is the economics of cloning, especially cloning for stem cells. Who is funding cloning research, and who will reap the benefits? Cloning and social justice is the subject of this essay.

TYPES OF CLONING

Human cloning is divided into two medically and morally different categories: reproductive cloning and therapeutic cloning. Reproductive cloning is the creation of a new individual from the DNA of only one parent. This is accomplished by removing the nucleus of a human egg and replacing it with the nucleus of a cell taken from the person or animal who

becomes the genetic parent of the resulting embryo. The embryo is then placed in the uterus of a female animal or woman, and gestated until birth. The offspring will be the genetic “identical twin” of the parent donating the DNA. This has been done successfully only in animals—and in mammals, one living cloned individual is achieved only at the price of many failed attempts.

The second type of cloning is called therapeutic cloning or research cloning. It begins in the same way as reproductive cloning, but its purpose is not the reproduction of a fully formed new individual. Instead a cloned embryo is produced to become a source of stem cells. Stem cells are very early cells—human or animal—that have not yet differentiated into the different types of tissue that make up a developed and functioning new organism. These can be found in the inner cell mass of an embryo at the blastocyst stage, that is, for up to about a week after fertilization. Stem cells are of immense scientific interest because researchers hope to use them to replace damaged parts of the human body. Scientists claim that they could be used to heal illnesses like Alzheimer’s disease, Parkinson’s disease, diabetes, spinal cord injuries, heart disease and cancer, by giving patients replacement cells that would develop into new tissue and organs. However, these therapies are for the most part still in the early stages of development, with real payoffs probably decades away.

Creating an embryo by cloning is not the only way to obtain embryonic stem cells, however. Alternatively, a frozen embryo that is “left over” from in vitro fertilization can be donated by a couple that does not plan to use it to create a child. These “spare” embryos, originally created as part of infertility treatment, can also be used to obtain stem cells. In addition to embryonic stem cells from these two sources, there are also stem cells in over a dozen parts of the human body, including the bone marrow, umbilical cord, and placenta. However, scientists argue that these might not be as pliable as embryonic stem cells. They also point out that if an embryo were cloned from a patient’s DNA, and stem cells were derived from that embryo, then those cells would be a perfect match, avoiding rejection by the recipient’s immune system. At this point research on both embryonic and adult stem cells continues. Which will turn out to be the most promising for the purpose of therapeutic cloning is a puzzle to be solved in the future.

MORAL ISSUES IN REPRODUCTIVE CLONING

What are some of the key moral issues posed by cloning? Obviously these will differ for reproductive and nonreproductive cloning. In reproductive cloning, the aim is to create a child of a specified genetic code, a code that is the same as an existing adult or child. Although some have raised fears about using human cloning to create whole classes of elite or subservient humans with identical genetic profiles, this is highly unlikely. Such a prospect ignores the differences that exist even between identical

twins, as well as the effects of environment on the expression of genetic traits. It is more likely that reproductive cloning would be used in cases in which a couple, where one spouse is infertile, wants to have a genetically related child without using a donor. (A donor could provide either sperm or eggs, to compensate for male or female infertility. This obviously brings a third party into the reproductive plans of the couple. Multi-party reproduction is morally objectionable to many, and creates an imbalance in the relation of the rearing parents to the child.)

If cloning were used to address infertility, a child would be created who has only one genetic parent, the one who supplied the DNA. The genetic characteristics of the child would resemble his or her one genetic parent.¹ This might give the parent or parents of a clone too much control over the child, say some ethicists. Another ethical worry comes from the fact that creating children with only one genetic parent—his or her “identical twin”—would seriously challenge the meaning of intergenerational relationship and parenthood as we know it. Although it is hard to prove that there is something intrinsically wrong with cloning, it is certainly prudent to be very cautious in pursuing such radical innovations in family structure. Moreover, responsible researchers and ethics committees have excluded reproductive cloning as too unpredictable and dangerous to be used in humans. To try to improve human reproductive cloning through experimentation on human embryos and infants would be unethical.

I want to highlight another ethical problem that would arise with reproductive cloning, even if risks were removed. Cloning as a new reproductive option would be aggressively marketed to childless couples with the economic resources to pay for it. This already occurs with existing types of assisted reproduction, such as in vitro fertilization, despite a failure rate of about 66%. Fertility pills and artificial insemination can run from \$1000 to \$2000, with treatments involving injected drugs costing up to \$5000. In vitro fertilization with a woman’s own eggs runs from \$12,500 to \$25,000, while donor eggs can take the expenses up to \$35,000. Will cloning eventually become another weapon in the infertility arsenal? “Desperate” patient demand is something that not all physicians resist, and some may even solicit and exploit it.

If cloning as a reproductive technology should become available for sale, not all will be able to afford it, of course. Infertility therapy is not generally covered by medical insurance. It is not uncommon for couples to spend in the hundreds of thousands of dollars in their quest to bear a child. Not surprisingly, most couples who utilize it are white, well-educated professionals, even though the typical infertile woman is black and has less than a high school education. Socioeconomic status conditions access to reproductive technologies. The commercialization of family and parenthood is a social trend that should worry all those who are concerned

about the special nature of intimate human relationships, especially parent-child bonds. It should alarm all who react negatively to the idea that the ability to create a family is a market commodity.

A 2004 report of the President's Council on Bioethics, *Reproduction and Responsibility*, addresses many ethical concerns that would apply to reproductive cloning.² The PCB report affirms "the fundamental value of human life and the respect owed to it in its various stages." It also mentions "human dignity" including the dignity of the body, parental and intergenerational relationships, and justice in access.³ Ultimately the report acknowledges the need for greater public discussion, and perhaps a national regulatory agency. It identifies an immediate need to prohibit "boundary-crossing" innovations such as reproductive cloning, the sale of embryos, and research on embryos after fourteen days of development.

MORAL ISSUES IN THERAPEUTIC CLONING

In therapeutic cloning we encounter still another major moral problem. This is the destruction of embryos to obtain stem cells, or even the creation of embryos with the purpose of so destroying them. Because it is convenient and advantageous for researchers to create their own cloned embryos for research, rather than using frozen "left over" in vitro fertilization embryos, there is a pragmatic and financial incentive to do so. Creating embryos for research has become a fairly common practice. Concern about the moral justifiability of destroying embryos has influenced national policy on cloning. However inadvertently, the limits placed on the use of federal funds for cloning research has had the effect of pushing this research into the province of unregulated "for profit" investment.

How did this happen? From 1996 until 2000, the U.S. banned the use of federal money for embryo experimentation, including stem cell research. This restriction did not apply to research privately funded by researchers or corporations. In 1997, the National Bioethics Advisory Commission, under the Clinton administration, recommended that cloning to produce children be banned, but that nonreproductive or therapeutic cloning be permitted. In 2000, Great Britain published guidelines that explicitly permitted nonreproductive cloning of embryos to furnish stem cells for new therapies. This created pressure on U.S. authorities to do likewise. In August 2001, President George W. Bush issued an executive order mandating that public funds could not be used to do research that involves destroying embryos. Yet he decided to permit research to be done on stem cell lines that had been derived from embryos before the time of his announcement. At first it was estimated that there were about sixty such lines in existence, but the number was later revised downward to about a dozen usable lines. The moral point of this restriction was to allow researchers to take advantage of stem cells if "the damage had already been done," so to speak, while not encouraging them to destroy any more embryos.

In 2002, The President's Commission in Bioethics studied stem cell research ethics and failed to come up with a unanimous report.⁴ The majority favored a ban on reproductive cloning and a four-year moratorium on research for therapeutic cloning. They did not rule out research cloning entirely. Yet the report did acknowledge the argument (against destroying embryos) that relief of suffering must be balanced against the negative moral factor of saving some by sacrificing others. A minority favored allowing federal money to be used for research cloning. The rationale was that this would bring research cloning under federal regulation, rather than leaving creation of embryos and sale of stem cell lines to the discretion of scientists and businesses working in the private sector. Those endorsing this position justified it by saying that cloned research embryos should be viewed as being created to serve others, rather than as created "to be destroyed." The President's Council did not, however, raise the issue of fairness in accessing future therapies, or the pressure of profit motives on research directions, as significant moral issues in the area of research cloning.

In April 2005, the National Academies of Science released a report claiming that the federal government has not provided adequate guidelines for stem cell research, leading to unregulated activity in a controversial field. In the past few years, universities and state governments, as well as corporations, have sought to promote and to invest in stem cell research, usually involving the cloning of research embryos. For example, Harvard University launched a stem cell institute with private money in 2004. In the same year, voters went to the polls in California to approve a ballot measure that set up a stem cell project that would receive three billion dollars in state money over ten years. The campaign was organized by a real estate figure, later to be named head of the newly created institute. The promotion made to voters included promises of fabulous medical discoveries, along with an increase in business opportunity and competitiveness at the state level. Legislation favoring stem cell research has been proposed in other states, including New Jersey and Massachusetts. While states may establish regulations governing such ventures, there is still no federal policy that applies across the board. The National Academies proposed that research cloning be permitted, that

Concern about the moral justifiability of destroying embryos has influenced national policy on cloning. However inadvertently, the limits placed on the use of federal funds for cloning research has pushed it into the province of unregulated "for profit" investment.

no research be allowed on embryos beyond fourteen days of age, and that women who donate eggs should not be paid. The last restriction is intended to discourage the exploitation of poor women who might submit to the invasive procedure of egg extraction for a fee. However, the ultimate destiny of the research results, in terms of development, marketing, availability of therapies, and justice, was not addressed.

While Pope John Paul II reminded President Bush that the creation of research embryos was, in his view, “an assault on innocent life,” he also called for the U.S. to exercise leadership in helping economically marginalized people obtain the essential goods of life.

CLONING AND THE COMMON GOOD

The prioritizing of the destruction of embryos as the major—or only—ethical concern has characterized the positions of a variety of churches on stem cell research.⁵ Rarely is the social justice question made a prominent part of the ethical analysis. In a joint statement, a number of Anglican, Catholic, Orthodox, and Reformed theologians

allude to Jesus’ care for those excluded by society. They mention the parable of the good Samaritan (Luke 10:25-37) and the parable of the sheep and the goats (Matthew 25:31-46), ending with the observation, “Just as you did it to one of the least of these little ones you did it to me.”⁶ However, this is turned into a warning against destroying embryos. It is not used, as I believe it should be, to generate a protest against letting profitable therapeutic innovations distract attention and resources from meeting the basic need for health and life suffered by the poorest of the poor.

In July 2001, President George W. Bush paid a visit to Pope John Paul II. In relation to Bush’s impending decision about stem cell funding and policy, the pope reminded the president that the creation of research embryos was, in his view, “an assault on innocent life.” This warning was widely reported in the secular press. Much less frequently noted was the pope’s opening call for the U.S. to exercise leadership in helping economically marginalized people obtain the essential goods of life. “Respect for human dignity and belief in the equal dignity of all the members of the human family demand policies aimed at enabling all peoples to have access to the means required to improve their lives....” A serious moral issue is whether proposals to clone for stem cell research are aimed at access for all people, or at prestige, profits, and products for the privileged.

In a scathing attack on drug industry practices, former *New England Journal of Medicine* editor Marcia Angell accuses companies of abandoning

unprofitable products despite medical need, resulting in shortages of drugs and vaccines for conditions like prematurity, hemophilia, cardiac resuscitation, flu, pneumonia, diphtheria, tetanus, whooping cough, measles, mumps, and chickenpox.⁷ Even in the faltering economy of 2002, the ten drug companies in the Fortune 500 made bigger profits than the other 490 businesses together. According to Angell, “big pharma” spends more on marketing than on research, bribes doctors with bonuses and gifts, and spends huge sums lobbying Congress and supporting the political campaigns of supporters.

The drug industry’s sphere of influence extends to academic medical centers and universities, eroding their objectivity, independence, and commitment to the common good. Drug companies are major benefactors to medical schools. Universities and their faculty conduct paid trials for industry, receive a portion of profits, and may even hold stock in the company. Rather than pursuing solutions to social problems and honestly evaluating the effects of new technologies, research scientists can sometimes be persuaded to let their priorities be dictated by commercial interests and their personal or institutional stakes in the financial outcomes.

Scientists who can promise health benefits are often perceived as saviors from human suffering. Profits and fame may encourage some scientists to welcome this role, but the public is also responsible for entrusting to medicine the alleviation of problems that deserve a more holistic response. Religious traditions encourage us to see ourselves in solidarity with others who suffer, and to be most concerned about those with the least access to goods and benefits. While North Americans and Europeans seek answers to Alzheimer’s and Parkinson’s, millions die around the world, and at a young age, from treatable causes like malaria, anemia, and tuberculosis.

I would certainly not rule out market investment and entrepreneurial biomedical research as ethical means of making a living, enhancing one’s scientific reputation, or exploiting the opportunities of globalization. All of the above, however, are subject to moral constraints. They should come under legal and regulatory limits that help societies, international bodies and alliances, and transnational institutions (including markets and corporations) maintain legal and ethical standards of behavior. The common good of all, including the poor and those currently with inadequate or no health care, should be salient among such standards.

A COMPROMISE PROPOSAL

Can we design a national policy on stem cell research that focuses not only on the moral value of the embryo, but also on the common good—one that promotes justice in health care for the economically disadvantaged more than prestige, profits, and products for the privileged?

A compromise proposal on stem cell research might include the following elements: one law, applying to both federally and privately or state-

funded research; a ban on the creation of embryos for research; permission to use donated, spare IVF embryos; a ban on patents deriving from work on embryo research; and advocacy for more aggressive and better financed research on adult stem cells. These are suggestions meant to provoke thoughtful reflection and democratic engagement on the issues. The ethical analysis of cloning and of social policies on cloning should continue to be a matter of vigorous debate in faith communities and in the public sphere.

The churches and faith traditions should raise the quality of ethical discussion and discernment by expanding beyond a single-issue focus on the embryo. It is our obligation to make sure that the common good, solidarity among rich and poor, and the justice of health care and health research economics become central in debates in this country about reproductive cloning, research cloning, and stem cells.

NOTES

1 It is possible that the egg donor would also have some genetic influence on the new individual. There is mitochondrial DNA in eggs, and its function and effects, in addition to the primary DNA in the cell nucleus, are not fully understood.

2 President's Council on Bioethics, *Reproduction and Responsibility: The Regulation of New Birth Technologies* (Washington, DC: President's Council on Bioethics, 2004), also available online at www.bioethics.gov.

3 *Reproduction and Responsibility*, 5.

4 The President's Council on Bioethics, "Human Cloning and Human Dignity: An Ethical Inquiry," in Brent Waters and Ronald Cole-Turner, eds., *God and the Embryo: Religious Voices on Stem Cells and Cloning* (Washington, DC: Georgetown University Press, 2003), 206-221.

5 Positions of Roman Catholic, Orthodox, Methodist, Southern Baptist, United Church of Christ, Presbyterian, and Jewish denominations are included as appendices in *God and the Embryo*. None of these take up the ethical question of access to the goods of health care, nor set embryo research in the context of justice in relation to the common good of health.

6 See David Jones, et al., *A Theologian's Brief: On the Place of the Human Embryo Within the Christian Tradition and the Theological Principles for Evaluating Its Moral Status*, paragraph 31. The document is reprinted in this volume on pp. 37-48.

7 Marcia Angell, *The Truth About Drug Companies: How They Deceive Us and What to Do About It* (New York: Random House, 2004), 91-92.



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A Theologian's Brief

This statement on the place of the human embryo in the Christian tradition and the theological principles for evaluating its moral status was submitted to the House of Lords Select Committee on Stem Cell Research on June 1, 2001, by an ad hoc group of Christian theologians from the Anglican, Catholic, Orthodox, and Reformed traditions.

BASIS OF THIS SUBMISSION

1. In a multi-cultural and multi-religious society, it is appropriate to take account not only of secular arguments concerning the place of the human embryo but also of arguments expressed in the religious language of some sections of the community. It is particularly important to understand the *Christian* tradition in this regard because of the place Christianity has had in shaping the moral understanding of many citizens in this country, and because this tradition has already been invoked in the context of public debate.¹

2. The Human Fertilisation and Embryology (Research Purposes) Regulations 2001 greatly expand the purposes for which research using human embryos can take place, and thus, if implemented, will inevitably lead to a massive increase in the use and destruction of embryos. The Select Committee has expressed its wish not "to review the underlying basis of the 1990 Act";² however, the ethical and legal issues surrounding "the Regulations as they now stand" *cannot* adequately be addressed without considering the moral status of the human embryo. Similarly, the "regulatory framework established by the 1990 Act" *cannot* operate effectively if it is flawed in principle.

3. Adding more purposes for which human embryos can be created for destructive use builds upon a mistake that has already been made in the

existing legislation. By far the most important ethical issue involved in the Regulations “as they now stand” relates to the ethical significance of embryonic human individuals whether produced by cloning or by the ordinary process of fertilization. The spectacle of thousands of stock-piled frozen human embryos being destroyed at the behest of this legislation bore witness that, even in the area of fertility treatment, too little consideration had been given to regulating the initial production of human embryos, as opposed to their subsequent disposal. The Regulations 2001 make the situation even worse in this regard.

THE CHRISTIAN TRADITION

4. Some scholars, considering the prospective benefits to be derived from experimenting on human embryos, have alleged that the Christian tradition had already set a precedent for treating the early human embryo with “graded status and protection.”³ In support of this it has been noted that there were seventh century books of penance (“Penitentials”) which graded the level of penance for abortion according to whether the foetus was “formed” or “unformed.” The same distinction was invoked in Roman Catholic canon law which, from 1591 to 1869, imposed excommunication only for the abortion of a “formed” foetus. Furthermore, St. Thomas Aquinas, one of the most authoritative theologians of the Middle Ages, explicitly held that the human embryo did not possess a spiritual soul and was not a human being (*homo*) until forty days in the case of males or ninety in the case of females.⁴ Texts from the Fathers of the Church could easily be found to support a similar conclusion.

5. Nevertheless, the contention that for most of Christian history (until 1869) the human embryo has been considered to possess only a relative value—such as might be outweighed by considerations of the general good—relies on a misreading of the tradition. Even in the Middle Ages, when most Western Christians held that the early embryo was not yet fully human, it was held that the human embryo should never be attacked deliberately, however extreme the circumstances. To gain the proper historical perspective it is necessary to supply a wider context by incorporating other elements of that tradition.

6. The earliest Christian writings on the issue declared simply, “you shall not murder a child by abortion”⁵: the embryo was held to be inviolable at every stage of its existence.⁶ The first Christian writings to consider the question of when human life began asserted that the spiritual soul was present from conception.⁷ As one account puts it: “The Early Church adopted a critical attitude to the widespread practice of abortion and infanticide. It did so on the basis of a belief in the sanctity of human life; a belief which was in turn an expression of its faith in the goodness of creation and of God’s particular care for humankind.”⁸

7. The earliest Church legislation also contains no reference to the dis-

inction of formed and unformed,⁹ and St. Basil the Great, who did consider it, saw it as a sophistical exercise in splitting hairs: "We do not consider the fine distinction between formed and unformed."¹⁰

8. In the fourth and fifth centuries some theologians argued that human life began at conception,¹¹ some held that the spiritual soul was "infused" at forty days or so¹² (following Aristotle)¹³ and some held that the timing of the infusion of the soul was a mystery known to God alone.¹⁴ However, whatever their views about the precise moment when human life began, all Christians held that abortion was gravely wrong,¹⁵ an offense against God the Creator and either the killing of a child, or something very like the killing of a child. If it was not regarded as homicide in the strict sense, "it was looked upon as anticipated homicide, or interpretive homicide, or homicide in intent, because it involved the destruction of a future man. It was always closely related to homicide."¹⁶

9. In the Anglo Saxon and Celtic "Penitentials" (from the seventh century) and in the canon law of the Latin Church (from the eleventh century), abortion of a formed foetus sometimes carried heavier penalties than did abortion of an unformed foetus. Yet canon law has an eye not just on objective harm done but also on subjective culpability and on enforceability. The decision of Gregory XIV in 1591 to limit the penalty of excommunication to the abortion of a formed foetus was expressly due to problems enforcing earlier legislation.¹⁷ Abortion of an unformed foetus was sometimes regarded as, technically, a different sin—and sometimes (though not universally) as a lesser sin—than abortion of a formed foetus, but it continued to be regarded as a grave sin closely akin to homicide.

10. From the twelfth century until the seventeenth century, convinced by the anatomy of Galen and the philosophy of Aristotle, most Christians in the West came to believe that the spiritual soul was infused forty days or so after conception. Nevertheless, during this whole period, there was no suggestion that the unformed foetus was expendable. The unformed foetus continued to be regarded as sacrosanct. It was *never* seen as legitimate to harm the embryo directly, only incidentally, and only then in the course of trying to save the mother's life.¹⁸

11. The first theologian to suggest explicitly that the embryo had a graded moral status, that is, a relative value that could be outweighed by other values, was Thomas Sanchez in the late sixteenth century.¹⁹ He and other "laxists" proposed that a woman could legitimately abort an unformed foetus to avoid public shame of a kind which might endanger her life. This suggestion constituted a radical departure from the thinking of previous moralists such as St. Raymond of Penafort or St. Antoninus of Florence and provoked the criticism of Sanchez's contemporaries, the scandal of the faithful and, in 1679, the condemnation of Pope Innocent XI.²⁰

12. Between this discredited school of the seventeenth century and the re-emergence of similar views in the late twentieth century, there is no sig-

nificant or continuous strand of Christian tradition—either in the Catholic or the Reformed churches. The most balanced and representative Catholic moralist of the eighteenth century, St. Alphonsus Liguori, allowed no exception to the prohibition on “direct” (intentional) abortion and allowed “indirect” (unintentional) abortion only in the context of attempting to save the mother’s life. In a statement reminiscent of St. Basil he declared that the distinction of formed and unformed made no practical difference.²¹ He is the last great moralist to consider the inviolability of the “unformed” foetus as such, because, during his time, the prevailing medical opinion moved away from the distinction between formed and unformed. In his later writing (on baptism) St. Alphonsus also became sympathetic to the view that the spiritual soul was infused at conception.²²

13. From the seventeenth century the classical biology of Galen and Aristotle had begun to be displaced by a variety of other theories. One, in particular, gave a more equal role to the female and male elements in generation, and therefore increased the significance of “fertilization,” that is, the moment of the union of male and female gametes.²³ This theory was finally confirmed in 1827 with the first observation of a mammalian ovum under the microscope, a scientific development which informed the decision of Pius IX in 1869 to abolish the distinction in legal penalties between early and late abortions. By the mid-nineteenth century the prevailing opinion, among both Reformed and Roman Catholic Christians, was that, most probably, the spiritual soul was infused at conception.²⁴

14. In asserting that “life must be protected with the utmost care from conception”²⁵ and rejecting “the killing of a life already conceived,”²⁶ twentieth-century Christians were in continuity with the belief of the Early Church that all human life is sacred from conception. This had remained a *constant* feature of Christian tradition despite a variety of beliefs about the origin of the soul and a similar variety in what legal penalties were thought appropriate for early or late abortion.²⁷

15. In the tradition, the only precedents for attributing a “graded status and protection” to the embryo can be found in the speculations of some of the Roman Catholic laxists of the seventeenth century and the re-emergence of similar and even more radical views among some Protestant and Roman Catholic writers in the late twentieth century.²⁸ The great weight of the tradition, East and West, Orthodox, Catholic, and Reformed, from the apostolic age until the twentieth century, is firmly against any sacrifice or destructive use of the early human embryo save, perhaps, “at the dictate of strict and undeniable medical necessity”;²⁹ that is, in the context of seeking to save the mother’s life.

SOME THEOLOGICAL PRINCIPLES

16. For a Christian, the question of the status of the human embryo is directly related to the mystery of creation. In the context of the creation of

things “seen and unseen”³⁰ the human being appears as the *microcosm*, reflecting in the unity of a single creature both spiritual and corporeal realities.³¹ The beginning of each human being is therefore a reflection of the coming to be of the world as a whole. It reveals the creative act of God bringing about the reality of *this* person (of me), in an analogous way to the creation of the entire cosmos. There is a mystery involved in the existence of each person.

17. Often in the Scriptures the forming of the child in the womb is described in ways that echo the formation of Adam from the dust of the earth (Job 10:8-12; Ecclesiastes 11:5; Ezekiel 37:7-10; cf. Wisdom 7:1, 15:10-11). This is why Psalm 139 describes the child in the womb as being formed “in the depths of the earth” (139:15). The formation of the human embryo is archetypal of the mysterious works of God (Psalm 139:15; Ecclesiastes 11:5). A passage that is significant for uncovering the connections between Genesis and embryogenesis is found in the deuterocanonical book of Maccabees, in a mother’s speech to her son:

I do not know how you came into being in my womb. It was not I who gave you life and breath, nor I who set in order the elements within each of you. Therefore the Creator of the world, who shaped the beginning of man and devised the origin of all things, will in his mercy give life and breath back to you again (2 Maccabees 7:22-23).

18. The book of Genesis marks out human beings from other creatures. Only human beings—male and female—are described as being made in “the image and likeness of God”; only they are given dominion over creation; only Adam is portrayed as receiving life from God’s breath and as naming the animals (Genesis 1:26-28; 2:7, 19-20). However, at the same time, it is clear that human beings are earthly creatures, made on the same day as other land animals, made from the dust of the earth, not descending out of heaven. Because they are earthly, human beings are mortal: “Dust you are and to dust you will return” (Genesis 3:19). There is no sign in these stories of the dualism of body and soul that is found in Pythagoras or in the ancient mystery religions. The soul is not a splinter of God that is trapped in a body. The soul is the natural life of the body, given by the life-giving God.

19. It was because of the Jewish conviction of the unity of the human being that, when hope was kindled within Israel for a life beyond the grave, it was expressed as a hope for the resurrection of the *body* (Daniel 12:2-3; cf. Ezekiel 37:1-14; John 11:24). The disembodied life of the shades in the gloomy underworld of Sheol (Job 10:21-22; Psalms 6:5, 88:10, 115:17; Ecclesiastes 9:3-6; cf. Homer *Odyssey* XI. 485-491) was not an image of hope but an image of death. The resurrection of the body was presented as the triumph of the Lord over death, the vindication of those who had been

faithful to the Lord, even unto death (Isaiah 26:19; Hosea 13:14; cf. 2 Maccabees 7:9-14), and for Christians was given new meaning and foundation in the resurrection of Jesus (John 11:1-44). The story of the empty tomb and the description of the resurrection appearances emphasized the bodily reality of the life of the resurrection. Jesus walked with the disciples and ate with them and invited them to touch his hands and his feet. "Handle me and see that I am no bodiless phantom."³²

20. The Fathers of the Church attempted to do justice to the scriptural truths of the bodily resurrection and of the mysterious parallel between the origin of each human individual and the origin of the entire cosmos. From different competing beliefs, the doctrine which prevailed was that the spiritual *soul*—what makes each individual human person unique, and gives each one the ability to know and to love—is neither generated by the parents nor does it pre-exist the body, but it is created directly by God with the coming to be of each human being.³³ Throughout the history of the Church, Christians have used the language of "body and soul" to understand the human being, but in such a way as not to deny the unity of God's creation. In the fourteenth century, in an attempt to defend this human unity, the Ecumenical Council of Vienne defined the doctrine that the soul was "the form of the body" (*forma corporis*),³⁴ by which it meant: what gives life to the body. Christians held, and continue to hold, that the spiritual soul is present from the moment there is a living human body³⁵ until the time that body dies.

21. The Scriptures also emphasize how God's provident care for each person is present before he or she is ever aware of it. The Lord called his prophets by name before they were born: "The Lord called me from the womb, from the body of my mother he named my name" (Isaiah 49:1) "Before I formed you in the womb I knew you, and before you were born I consecrated you" (Jeremiah 1:5). It is possible to understand these passages as referring not only to the prophets, but to each one of God's children. The Lord calls each one from the womb, forms each one, gives each one into the care of his or her mother, and will not abandon his creature in times of trial (Psalms 22:10-11, 71:6; Job 10:8-12).

For it was you who created my being,
knit me together in my mother's womb.
I thank you for the wonder of my being,
for the wonders of all your creation.

Already you knew my soul
my body held no secret from you
when I was being fashioned in secret
and moulded in the depths of the earth.

Psalms 139

22. Such passages do not establish *when* human life begins, but they establish God's involvement and care from the very *beginning*, a concern that is not diminished by our lack of awareness of him.

23. "In reality it is only in the mystery of the Word made flesh that the mystery of the human being truly becomes clear."³⁶ To illuminate the mystery of the origin of human persons it seems reasonable to turn to the mystery of the Incarnation. In order to do justice to the infancy narratives, especially that of the Gospel of Luke, one must believe that, from the moment of the Annunciation to Mary of Jesus's birth, Mary conceived by the Holy Spirit and carried the Saviour in her womb. This is emphasized by the story of the Visitation—where one pregnant mother greets another, and the unborn John bears witness to the unborn Jesus.

24. The Incarnation was revealed to the world at the Nativity when Jesus was born, but the Incarnation *began* at the Annunciation, when the Word took flesh and came to dwell within the womb of the Virgin. This understanding of the text of Scripture is confirmed by the witness of the Fathers of the Church,³⁷ by the development of the feast of the Annunciation and, not least, by the solemn declaration of the Fourth Ecumenical Council, the Council of Chalcedon (451 CE):

We profess the holy Virgin to be Mother of God, for God the Word became flesh and was made man and from the moment of conception (*ex auteis teis sulleipseoes / ex ipso conceptu*) united himself to the temple he had taken from her.³⁸

25. In the Eastern Church, St. Maximus the Confessor turned to the Annunciation³⁹ to illuminate the intractable problem of when human life begins. Jesus is said to have been like to us in all things but sin (Hebrews 4:15) and Christians believe that Jesus was a human being from the moment of conception: therefore, it seems, every human being must come into existence at the moment of conception.

26. In the West, Christians were more strongly influenced by the biology of Galen and the philosophy of Aristotle and held that the spiritual soul was only infused at the moment when the body was perfectly formed, forty days after conception. The great medieval Christian thinkers all held that the conception of Jesus was an exception, and that he was *unlike* us in the womb.⁴⁰ This was an unhappy conclusion, forced upon theologians by an erroneous biology. Is it really sustainable to argue that Jesus was unlike us in his humanity? A more adequate vision was supplied by the seventeenth century Anglican theologian Lancelot Andrewes, in a sermon on the Nativity:

For our conception being the root as it were, the very ground sill of our nature; that he might go to the root and repair our nature from the very foundation, thither he went.⁴¹

27. The words of this sermon bring our attention, not only to the work of the Redeemer from the beginning of his life, but also to our need for redemption from the beginning of our lives. It was this need that David recognized in himself according to the psalm, "Behold, I was brought forth in iniquity, and in sin did my mother conceive me" (Psalm 51:5), where these words refer not to his mother's sinfulness, but to the complete extent of his own sinfulness. This psalm and the Eden story were given a deeper sense by Christians in light of the redemption accomplished by Jesus. As Jesus had achieved a total transformation, so all human beings were in need of a total transformation: total in the sense of including their very origins. In his letter to the Romans, St. Paul drew out the parallel between Adam and Christ and so asserted the involvement of all human beings in Adam's sin (Romans 5:12-21).

28. This association of sin and conception is also shown within the Roman Catholic tradition in the development of the doctrine of Mary's complete redemption from sin. The doctrine of the Immaculate Conception appears to imply that Mary was receptive to grace from the moment of her conception in her mother's womb. This Roman Catholic argument is simply an expression of a more widely accepted argument from the Christian doctrine of original sin. Both arguments express the general truth that each and every human being needs the help of God from the very first—which is constantly and, it seems, inevitably expressed as "from the first moment of his or her conception."

29. The Christian churches teach not that the early embryo is certainly a person, but that the embryo should always be treated *as if* it were a person.⁴² This is not only a case of giving the embryo the benefit of the doubt—refraining from what might be the killing of an innocent person. It is also that the ambiguity in the appearance of the embryo has never been thought of as taking the embryo out of the realm of the human, the God-made and the holy. When Pope John Paul II asks, "how can a human individual not be a human person?"⁴³ he is not denying the mysteriousness of the implied answer. Christians recognize the embryo to be sacred precisely because it is inseparable from the mystery of the creation of the human person by God.⁴⁴ What is clear, at the very least, is that the embryo is "a living thing—under the care of God."⁴⁵

30. The following, then, are five principal considerations which should inform any Christian evaluation of the moral status of the human embryo:

I. Though penalties have varied, the Christian tradition has always extended the principle of the sacredness of human life to the very beginning of each human being, and never allowed the deliberate destruction of the fruit of conception.

II. The origin of each human being is not only a work of nature but

is a special work of God in which God is involved from the very beginning.

III. The Christian doctrine of the soul is not dualistic but requires one to believe that, where there is a living human individual, there is a spiritual soul.

IV. Each human being is called and consecrated by God in the womb from the first moment of his or her existence, before he or she becomes aware of it. Traditionally, Christians have expressed the human need for redemption as extending from the moment of conception.

V. Jesus, who reveals to Christians what it is to be human, was a human individual from the moment of his conception, celebrated on the feast of the Annunciation, nine months before the feast of Christmas.

31. Jesus reveals the humanity especially of the needy and those who have been overlooked. Concern over the fate of embryos destined for research is inspired, not only by the narratives of the Annunciation, the Visitation and the Nativity, but also by the parable of the good Samaritan and the parable of the sheep and the goats: "Just as you did it to one of the least of these little ones you did it to me" (Matthew 25:40). The aim of an ethically serious amendment to the 1990 Act should be to regulate the procedures in fertility treatment and non-destructive medical research on human embryos such that these human individuals are adequately protected.⁴⁶

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NOTES

1 Hansard (House of Lords Debates) Vol. 621, No. 16, column 35-37 (22 January 2001).

2 In its "Call for Evidence."

3 Cf. G. R. Dunstan, "The Human Embryo in the Western Moral Tradition" in G. R. Dunstan and M. J. Sellers, *The Status of the Human Embryo* (London: King Edward's Hospital Fund, 1988), 55.

4 *Commentary on the Sentences*, book IV, d. 31 exp. text.

5 *Didache* 2.2; *Epistle of Barnabas* 19.5.

6 See also *Apocalypse of Peter* 2.26; St. Clement of Alexandria, *Teacher* II.10.96; Athenagoras, *Legatio* 35; Municius Felix, *Octavius* 30.2; Tertullian, *Apology* 9.4-8; Hippolytus, *Refutation of All Heresies* 9.7.

7 St. Clement, *Prophetic Eclogues* 41, 48-49; cf. M. J. Gorman, *Abortion and the Early Church: Christian, Jewish & Pagan Attitudes in the Greco-Roman World* (Downers Grove, IL: InterVarsity Press, 1982), 52; and Tertullian, *On the Soul* 27. "Now we allow that life begins with conception, because we contend that the soul also begins from conception; life taking its commencement at the same moment and place that the soul does."

8 "Some Current Ethical Issues Concerning the Treatment of the Pre-Implantation Human Embryo," a briefing paper prepared by the General Synod Board for Social Responsibility; cf. G. Bonner, "Abortion and Early Christian Thought" in J. H. Channer, ed., *Abortion and the Sanctity of Human Life* (Exeter: The Paternoster Press, 1985); M. J. Gorman; L. Crutchfield, "The Early Church Fathers and Abortion" at www.all.org/issues/ab99x.htm.

9 Elvira (305 CE) canons 53, 65; Ancyra (314 CE) 21; Lerida (524 CE) 2; Braga (527 CE) 77; Trullo (692 CE) 91; Mainz (847 CE) 21; cf. S. Troianos, "The Embryo in Byzantine Canon Law."

10 Basil, *Epistle* 118.2.

11 St. Gregory of Nyssa, *On the Making of Man* 29; cf. St. Maximus the Confessor, *II Ambigua* 42.

12 Lactantius, *De Opificio Dei* 12; Ambrosiaster, *QQ Veteris et Novi Testamenti* 23.

13 *On the History of Animals* VII.3, 4:583.

14 St. Jerome, *On Ecclesiastes* 2.5; *Apologia adversus Rufinum* 2.8; St. Augustine, *Enchiridion* 85, *On Exodus* 2.80; though each of these sometimes state that the foetus is not a man (*homo*) until he is fully formed.

15 St. Augustine, *On Marriage and Concupiscence* 1.15; St. Ambrose, *Hexameron* 5.18; St. Jerome, *Epistle* 22, 13; St. John Chrysostom, *Homily 24 on the Epistle to the Romans*; Caesarius of Arles, *Sermons* 9, 91.

16 J. Connery, *Abortion: The Development of the Roman Catholic Perspective* (Chicago, IL: Loyola University Press, 1977), 306; cf. G. Grisez, *Abortion: The Myths, the Realities, and the Arguments* (New York: Corpus Books, 1970); J. T. Noonan, "An Almost Absolute Value in History," in J. T. Noonan, ed., *The Morality of Abortion: Legal and Historical Perspectives* (Cambridge, MA: Harvard University Press, 1970).

17 Bull of 1591, *Sedes Apostolica*; cf. Connery, 148; Grisez, 167-168; Noonan, 33.

18 Connery, 114-134; Grisez, 166-168; Noonan, 26-27.

19 Connery, 134-141; Grisez, 168-169; Noonan, 27-31.

20 Denzinger-Schoenmetzer, *Enchiridion Symbolorum* (Rome: Herder, 1965), 2134-2135; cf. Connery, 189; Grisez, 174; Noonan, 34.

21 *Theologia Moralitatis* III, 4.1, n. 394.

22 *Theologia Moralitatis* VI, 1.1, dubia 4, n. 124; cf. Connery, 210; Grisez, 176; Noonan, 31.

23 The theory developed by Fienus (1567-1631), Zacchia (1584-1659), and Cangiamila (1701-1763); cf. Connery, ch. 10-11; Grisez, 170-172; Noonan, 34-40.

24 This has also become the prevailing opinion among followers of St. Thomas Aquinas; cf. B. Ashley, "A Critique of the Theory of Delayed Hominization" in D. McCarthy and A. Moraczewski, *Evaluation of Fetal Experimentation: An Interdisciplinary Study* (St. Louis, MO: Pope John Center, 1976); B. Ashley and A. Moraczewski, "Cloning,

Aquinas, and the Embryonic Person," *The National Catholic Bioethics Quarterly* 1 (2000), 189-201; S. Heaney, "Aquinas and the Presence of the Human Rational Soul in the Early Embryo," *The Thomist* 56 (1992), 1; M. Johnston, "Delayed Hominization," *Theological Studies* 56 (1995); R. Joyce, "The Human Zygote Is a Person," *The New Scholasticism* 51 (1975).

25 Second Vatican Council, *Gaudium et Spes*, 51.

26 Lambeth Conference 1958 report, "The Family in Contemporary Society," in *What the Bishops Have Said about Marriage* (London: SPCK, 1968), 17.

27 "The Church has always held in regard to the morality of abortion that it is a serious sin to destroy a fetus at any stage of development. However, as a *juridical norm* in the determination of penalties against abortion, the Church at various times did accept the distinction between a *formed* and a *non-formed*, an *animated* and a *nonanimated* fetus." R. J. Huser, *The Crime of Abortion in Canon Law* (Washington DC: Catholic University Press, 1942), preliminary note.

28 An ill-tempered but perceptive critique of some recent attempts to reread the Christian tradition on abortion as "relatively tolerant" to abortion of an unformed foetus is D. DeMarco, "The Roman Catholic Church and Abortion: An Historical Perspective," in *Homiletic & Pastoral Review* (July 1984), 59-66 and (August-September), 68-76; cf. www.petersnet.net/research/retrieve.cfm?RecNum=3362.

29 Lambeth Conference 1958 report, 17.

30 Creed of Nicaea, in N. Tanner, *Decrees of the Ecumenical Councils* (London: Sheed & Ward, 1990) I, 5.

31 Gregory of Nyssa, *On the Making of Man*; John Damascene, *Exposition of the Orthodox Faith* II.12; Creed of Lateran IV, Tanner, 230.

32 Ignatius of Antioch, *Smyrneans* 3; cf. Luke 24:13-51; John 20:19-29.

33 John Damascene; Peter Lombard; St. Thomas Aquinas, *Summa Theologiae* Ia Q. 118 AA. 2-3; Pius XII, *Humani Generis*.

34 Council of Vienne, *On the Catholic Faith*; Tanner, 361.

35 The debate about the timing of the "infusion of the soul" was a debate about when the living human body came into existence.

36 Second Vatican Council, *Gaudium et Spes*, 22.

37 J. Saward, *The Redeemer in the Womb* (San Francisco: Ignatius, 1993), chapter 3.

38 Epistle of St. Cyril to John of Antioch; Tanner, 70.

39 *II Ambigua* 42.

40 Cf. Thomas Aquinas, *Summa Theologiae* IIIa Q.6 A.4.

41 Sermon IX on the Nativity in J. Saward, 100.

42 For example, "The human being is to be respected and *treated as* a person from the moment of conception." Pope John Paul II, *Evangelium Vitae* 60, emphasis added.

43 *Ibid.*

44 Cf. O. O'Donovan, *Begotten or Made?* (Oxford: Clarendon Press, 1984), ch. 4.

45 Athenagoras, *Legatio* 35.

46 This article appeared in *Ethics & Medicine: An International Journal of Bioethics* 17:3 (Fall 2001), 143-154, and is reprinted by permission.

God Who Searches, God Who Knows

BY TERRY W. YORK

God who searches, God who knows
when we sit and when we rise,
God who gives our lives their soul,
our thoughts, our words, our ways you know.

God who wonderfully made
each of us inside the womb,
darkness we shall never fear;
since you were there, you're surely here.

bridge:

Breath of Life, refresh our thinking,
clear away confusion,
as we join with you in knitting
future generations.

Help us ponder human life;
when it starts, how it should end.
Help us see when wicked ways
with birth and death negate our praise.

God Who Searches, God Who Knows

TERRY W. YORK

G. DAVID BOLIN

1. God who search-es, God who knows when we sit and
 2. God who won-der - ful - ly made each of us in -
 3. Help us pon-der hu - man life; — when it starts, how

when we rise, God who gives our lives their soul, our
 side the womb, dark - ness we shall nev - er fear; since
 it should end. Help us see when wick - ed ways with

thoughts, our words, our ways you know.
 you were there, you're sure - ly here. (to bridge)
 birth and death ne - gate our praise.

Third time to Coda

Bridge

Breath of Life, re - fresh our think - ing, clear a - way con -
fu - sion, as we join with you in knit - ting
fu - ture gen - er - a - tions.

D.C. al Coda

D.C. al Coda

Worship Service

BY ANN BELL WORLEY

Prelude

Call to Worship: John 1:1-5

In the beginning was the Word, and the Word was with God, and the Word was God. He was in the beginning with God. All things came into being through him, and without him not one thing came into being. What has come into being in him was life, and the life was the light of all people. The light shines in the darkness, and the darkness did not overcome it.

Processional Hymn:

“Immortal, Invisible, God Only Wise”

Immortal, invisible, God only wise,
in light inaccessible hid from our eyes,
most blessed, most glorious, the Ancient of Days,
Almighty, victorious, Thy great Name we praise.

Unresting, unhasting, and silent as light,
nor wanting, nor wasting, Thou rulest in might;
Thy justice, like mountains, high soaring above
Thy clouds, which are fountains of goodness and love.

To all, life Thou givest, to both great and small;
in all life Thou livest, the true life of all;
we blossom and flourish as leaves on the tree,
and wither and perish—but naught changeth Thee.

Great Father of glory, pure Father of light,
Thine angels adore Thee, all veiling their sight;
all praise we would render; O help us to see
‘tis only the splendor of light hideth Thee!

Walter Chalmers Smith (1824-1908), alt.

Tune: ST. DENIO

Invocation:

O God, you have given us the breath to sing your praise,
you hold the power of life in your hand.
Keep us mindful of our creation in your image,
the privilege we share as co-creators with you,
and our responsibility as bearers of hope in an ever-changing world.
Awaken us to your presence, O God, that we might hear your voice
amid our shared reflections and the words we speak.
Give us wisdom and discernment to be faithful followers of Jesus,
who is the way, the truth, and the life. Amen.

Welcome to Worshipers:

None of us fully comprehends the science of cloning, much less knows the mind of God with regard to each new technology and capability. Yet we should consider the issues surrounding therapeutic and reproductive cloning in all of their complexity, with a keen eye toward the moral implications of human action and society's laws. We gather as a worshipping community to grapple with the challenging issues of cloning, bring our theological tradition to bear on public debate, and search not only for answers but also for understanding.

Old Testament Reading: Genesis 11:1-9

Now the whole earth had one language and the same words. And as they migrated from the east, they came upon a plain in the land of Shinar and settled there. And they said to one another, "Come, let us make bricks, and burn them thoroughly." And they had brick for stone, and bitumen for mortar. Then they said, "Come, let us build ourselves a city, and a tower with its top in the heavens, and let us make a name for ourselves; otherwise we shall be scattered abroad upon the face of the whole earth." The LORD came down to see the city and the tower, which mortals had built. And the LORD said, "Look, they are one people, and they have all one language; and this is only the beginning of what they will do; nothing that they propose to do will now be impossible for them. Come, let us go down, and confuse their language there, so that they will not understand one another's speech." So the LORD scattered them abroad from there over the face of all the earth, and they left off building the city. Therefore it was called Babel, because there the LORD confused the language of all the earth; and from there the LORD scattered them abroad over the face of all the earth.

"When a person fell, the work went on, but when a brick fell, all wept"
(*Midrash Rabbah*)¹

Meditation:

“Letter to Genetically Engineered Super Humans”²

You are the children of our fantasies of form,
our wish to carve a larger cave of light,
our dream to perfect the ladder of genes and climb

its rungs to the height of human possibility,
to a stellar efflorescence beyond all injury
and disease, with minds as bright as newborn suns

and bodies which leave our breathless mirrors stunned.
Forgive us if we failed to imagine your loneliness
in the midst of all that ordinary excellence,

if we failed to understand how much harder
it would be to build the bridge of love
between such splendid selves, to find the path

of humility among the labyrinth of your abilities,
to be refreshed without forgetfulness,
and weave community without the threads of need.

Forgive us if you must re-invent our flaws
because we failed to guess the simple fact
that the best lives must be less than perfect.

Fred Dings

Hymn:

“God Who Searches, God Who Knows”

Terry W. York

Tune: KAPIOLANI

(text and tune pp. 50-51 of this volume)

Faith Stories

(Invite two or three families with stories germane to cloning to write a one-page witness to their struggle and hope, to be shared in worship by a lay reader. Examples might include a couple’s journey through infertility, a

*young adult with terminal illness facing death, a family with a sick child
whose only avenue for medical help is through advances in stem-cell research.)*

Choral Anthem (Youth Choir):

"Psalm 139"³

Allen Pote (1992)

Prayers of the People:

In peace we pray to you, O God.

For our friends and neighbors for whom cloning is more than a disembodied issue, whose lives are touched with sorrow as they yearn for a child but cannot conceive, grieve the decline of a loved one, or face their own impending death, *(silent prayers)*

Lord, in your mercy,

hear our prayer.

For those who pursue new avenues for human life and health, and need wisdom to serve the common good through their work, *(silent prayers)*

Lord, in your mercy,

hear our prayer.

For those who set government policy with regard to human cloning and stem-cell research, who draw the line between what we *can* do and what we *should* do, *(silent prayers)*

Lord, in your mercy,

hear our prayer.

For those in desperate need of basic health care, who will rarely benefit from sophisticated medical technologies and whose voices are lost in debates about cloning, *(silent prayers)*

Lord, in your mercy,

hear our prayer.

For this faith community as we seek divine guidance on the matter of cloning—awareness of our place in your creation, compassion toward your world, justice in medical and financial ethics, humility in our convictions, and unity in our confession, *(silent prayers)*

Lord, in your mercy,

hear our prayer.

Passing of the Peace

Epistle Reading: 1 Corinthians 13:1-13

If I speak in the tongues of mortals and of angels, but do not have love, I am a noisy gong or a clanging cymbal. And if I have prophetic powers, and understand all mysteries and all knowledge, and if I have all faith, so as to remove mountains, but do not have love, I am nothing. If I give away all my possessions, and if I hand over my body so that I may boast, but do not have love, I gain nothing.

Love is patient; love is kind; love is not envious or boastful or arrogant or rude. It does not insist on its own way; it is not irritable or resentful; it does not rejoice in wrongdoing, but rejoices in the truth. It bears all things, believes all things, hopes all things, endures all things.

Love never ends. But as for prophecies, they will come to an end; as for tongues, they will cease; as for knowledge, it will come to an end. For we know only in part, and we prophesy only in part; but when the complete comes, the partial will come to an end. When I was a child, I spoke like a child, I thought like a child, I reasoned like a child; when I became an adult, I put an end to childish ways. For now we see in a mirror, dimly, but then we will see face to face. Now I know only in part; then I will know fully, even as I have been fully known. And now faith, hope, and love abide, these three; and the greatest of these is love.

*Sermon**Hymn:*

"If You Will Only Let God Guide You"

If you will only let God guide you,
and hope in Him through all your ways,
whatever comes, He'll stand beside you,
to bear you through the evil days.
Who trusts in God's unchanging love
builds on the Rock that cannot move.

Only be still, and wait His leisure
in cheerful hope, with heart content
to take what'er the Father's pleasure
and all discerning love have sent;
nor doubt our inmost wants are known
to Him who chose us for His own.

Sing, pray, and swerve not from His ways,
but do your part in conscience true;
trust His rich promises of grace,
so shall they be fulfilled in you;
God hears the call of those in need,
the souls that trust in Him indeed.

Georg Neumark (1621-1681); tr. Catherine Winkworth (1827-1878), alt.
Tune: NEUMARK

Offering

(An offering is received to support a local ministry serving children who are underprivileged, have special needs, or are awaiting adoption.)

Benediction: The Lord's Prayer

Postlude

NOTES

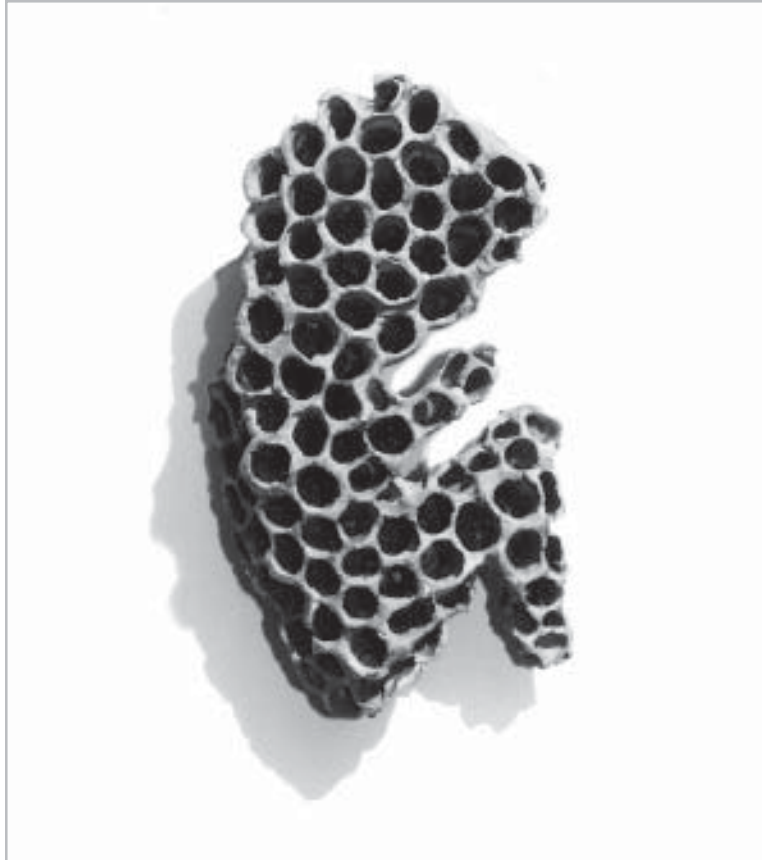
1 This rabbinic midrash on Babel from *Midrash Rabbah* is cited by Laurie Zoloth, "Born Again: Faith and Yearning in the Cloning Controversy," in Paul Lauritzen, ed., *Cloning and the Future of Human Embryo Research* (New York: Oxford University Press, 2001), 136.

2 Fred Dings, "Letter to Genetically Engineered Super Humans," *Poetry* 167 (March 1996), 333, and reprinted in the poet's *Eulogy for a Private Man* (TriQuarterly Books/Northwestern University Press, 1999). Used by permission.

3 *Psalm 139* (SATB, piano, CGA610) Words and Music: Allen Pote. Copyright © 1992 Choristers Guild (www.choristersguild.org).



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On first glance we see a human shape; looking closer, we realize it's a wasp nest. Yet as we examine FOUND WASP NEST ever more closely, what it is becomes more difficult to interpret. The optical illusion is intentional.

Joshua Smith. FOUND WASP NEST, 2004. Cast resin, 4" x 2" x 1.5". Used by permission of the artist.

Repeating Realities

BY HEIDI J. HORNIK

In *Found Wasp Nest*, Josh Smith exhibits his fascination with fake things that look “real,” as well as his interest in repetition of form. The sculpture intentionally looks like an intricate “real” wasp nest, yet also suggests the figure of a human fetus.

The sculptor, who is an MFA candidate at the University of Dallas after studying studio art at Baylor University, began fabricating wasp nests in a roundabout way, through a previous interest in faux history or a nostalgic aesthetic. In earlier work he had combined materials to look like old signs from the 1950s, and then placed fake wasp nests inside the signs that were painted and rusted to look as realistic as possible. Smith had noticed that we like things that *look* antique, but don’t care whether the objects really *are* old. Our desire for such things as new “worn and rustic” furniture and “vintage” couture is stimulated by the merciless repetition of objects marketed through nostalgia specialty catalogs, Internet sites, and shops.

Repetition occurs in the form and thematic concept of this piece. While casting artificial wasp nests, the process of forming the repeated holes encouraged Smith to reflect on how people’s identities are reduced to repeated patterns of numbers—like social security, cell phone, or credit card numbers. This culminates in the social fantasy that we might determine an entire individual before birth by repeating a genetic code through cloning.

Smith says that he plays with ideas in his sculpture and expects his audience to do the same; for instance, *Found Wasp Nest* has prompted discussion not only about cloning but also about abortion. He thinks the interpretation of this piece, like most contemporary art, is entirely dependent on what the viewer brings to it. Yet Smith knows several other artists who explore the themes of multiplicity and repetition in their art and he suspects, given the fascination with cloning in our society, these artists are concerned about cloning as well.

Found Wasp Nest was featured last year in the artist’s Master of Fine Arts thesis exhibition entitled “Pulling Punches.” Each work in the exhibition had multiple layers of meaning and encouraged viewers to wonder: “What is real?” “Why is it real?” and “Is it real simply because it ‘looks’ real?” Smith challenges us to ask how we feel about being identified by numbers in a society where identity theft is prevalent and scientists can replicate DNA, the numbers of biological life.

Receiving the Gift of Creation

BY WILLIAM D. SHIELL

When we see our lives as gifts from Christ, the rationales for cloning become questionable. We welcome the gift of creation in God's image and enjoy the relationships that are provided for as long as we have them. Even the pain that accompanies the limits of our humanity is not a problem to be avoided, but a part of life to be received.

Growing up in Pensacola, Florida, I loved to build sandcastles on the beach. I dreamed like every other child that my sandcastle would withstand the onslaught of beach combers, tidal waves, and crabs. Yet, by the time my family had packed the car to return home, my precious creations were destroyed.

We live in a world full of sandcastles, in which tsunamis, hurricanes, and earthquakes remind us of the fragility of life. Nevertheless, the fierce competition to build a better body, career, business, church, or corporation extends to every aspect our existence. We do not learn quickly or listen well. We may climb to the top of a mountain to see it taken away in a matter of moments.

The warning signs for impending spiritual disasters are just as difficult to spot as for natural ones. Yet many of us can feel spiritual tremors or foreshocks—the early warning signs that an earthquake is coming—in our society's fascination with cloning. Ironically, while society has not agreed when life should begin or end, scientists seek to populate life with replicas.

Ancient cultures faced a world full of natural disasters that pressed spiritual problems. The town of Colossae was no different: the area was earthquake-prone, and sometime after Paul's letter circulated among the

churches of that region, an earthquake destroyed the town.

The Colossian believers were experiencing tremors of different kind. Some of the residents of this little village on the Lycus River heard the message of the gospel, but they felt threatened from people who challenged their faith and attempted to shake their confidence. The substantial Jewish members of the community were intimidating the Colossian Gentiles into thinking they had to observe Jewish rituals in order to be true believers. Other members of the church were apathetic, were dropping out, or were not as concerned about their faith as they were before. These problems had grown so large that the people were beginning to wonder if they were right to believe in Christ in the first place. It was a shaky time as people questioned every aspect of their faith. One can imagine that the cynical ones said, "We knew this was just going to be an emotional decision, and it would soon fade away." Their doubt, apathy, and cynicism were just foreshocks, tastes of the coming spiritual earthquake in their lives.¹

Although Paul had never visited Colossae, he had heard about their problems. He provides a preparation manual that helps them address their opponents. He tells them that rather than dwelling on the impending cultural threats to their existence, they should choose ahead of time to be defined by Jesus Christ who first gave them life.

THE GIFT OF CHRIST

Paul attributes all of life to Christ who first gave life to his creation. The language of "image of the invisible God" and "firstborn of all creation" (Colossians 1:15) is his way of saying to the Jews and Gentiles of Colossae, "The God of the Old Testament is perfectly revealed in the life of Christ; if God was present at creation, so was his son Jesus. Those of you who have placed your faith in him, you have nothing to worry about. You have enough to grant you eternal life and hope in the days to come."

Clarence Jordan paraphrases verse 15: "[Jesus Christ] is a perfect photo of the Unseen God, and has got it over everything that ever was made, because he's the reason everything was put together."² When looking for hope, Paul explains, look no further than the one who created everything.

This gift extends to all life. Not only was Christ present when life began, his life continues to bring vitality to the Colossians' existence. Christ penetrates every avenue of the universe, seen and unseen, even the things they had not imagined (1:17).

The Colossians had heard from some members of the opposition that God was disengaged, removed, and distant from the world. Consequently, this world should be rejected because God is not active in its affairs. Yet if individuals tried to attain a better knowledge of God, they might reach God. This belief system caused some Colossians to place their hope in human self-sufficiency (2:8, 16-23). Humans must try to attain God through

their own abilities and rational skills. You can imagine these opponents saying, "We are the ones in charge. We will attain knowledge of God on our own. We will reach the heights of greatness. And Christ will wait for us in the end." Paul, however, counters this notion with an understanding that Christ initiates and sustains life.

Paul's choice to define life as originating and continuing in the work of Christ provides the Colossians a way of dealing with those who tried to intimidate them. Life no longer had to be viewed as a project to be controlled but as a gift to be received.

He describes another facet of the gift: Christ not only creates and sustains life, but also reconciles his creation to God. Knowing how separated we are from God, he draws individuals closer through his death on the cross (1:20-22).

Paul's choice to define life as originating and continuing in the work of Christ provides the Colossians a way of dealing with those who tried to intimidate them. Life no

longer had to be viewed as a project to be controlled but as a gift to be received.

THE GIFT OF OUR LIVES

These difficulties faced by the Colossians are creeping into modern life as well. Society is driven by the desire to give individuals control over their destinies. It's hard not to laugh when I read some of the promises made for human cloning, the latest example of this desire. Under the guise of finding cures for diseases and preventing birth defects, scientists attempt to change children into their parents' likeness. These studies open a Pandora's Box of problems, the natural result of which will one day be an attempt to replicate humans born into our world. I have to ask, "Are you sure you want to clone us?" If the last fifty years are indicative of the next, I cannot imagine what a group of humans would do to each other if there were more than one of each of us to go around.

The one we should be cloning, instead, is Christ. The one who should be replicated is the one who gave his life for us. As Calvin Miller says, we must allow him to "Christify" our lives, until we are "consciously viewing the people and circumstances in our lives with the eyes of Christ."³ Christ does not come to help us avoid the pain caused by the limitations of humanity. He shows us how to view one another as gifts in relationship.

For the Apostle Paul there is a remarkable litmus test that demonstrates whether we have received the gift of Christ: it is our actions toward the creation (3:12-17). The Colossians, who focused on *escaping* this

world, had begun to disregard the creation and to think of themselves as superior beings. Paul responds that though we live in a world full of evil, Christ is reconciling all creation—"on earth and in heaven"—to himself. Therefore, we have a responsibility to it. Elsewhere Paul says the whole creation is groaning as it waits for "the revealing of the children of God" (Romans 8:22), reminding us that our stewardship of creation should flow from our relationship with God.

But we may ask, "Wouldn't the world be a better place, and wouldn't we be caring for creation, if we did everything we could to make human beings healthier?" Yet physical health and prosperity are not the ends that the Lord seeks. We are stewards of God's gifts of life and creation for as long as he allows. We do not take this creation into our own hands, but receive it as a gift from the heavenly Father. This means that we do not possess the created order for our own purposes; as a Native American proverb puts it, "We do not inherit the land from our ancestors, we borrow it from our children." Our relationship with Christ is reflected in our treatment of his world and our proper relationships with all the people he has created.

When we understand our lives as gifts from Christ, the rationales for cloning become questionable. Christ's work gives the creation its life. "We do not choose our families," as the old saying goes, or what our families will be like. We welcome the gift of creation in God's image and enjoy the relationships that are provided for as long as we have them. We see the pain that accompanies the limits of our humanity not as a difficulty to be managed or a problem to be avoided, but as a part of life to be received. Our problems—caused biologically or otherwise—are stations along the journey that will draw us even closer to the one who suffered for us and suffers with us today. Believers know that the whole creation groans, knowing that one day Christ will complete the work of reconciliation.

THE GIFT OF GOOD COMPANY

In *The Cloister Walk*, Kathleen Norris describes a visit to see her physician for treatment of her bruised knee. In the waiting room she meets a group of monks who are also awaiting appointments and have their fair share of broken limbs. When two eighty-year-old monks notice Norris walk in with a cane, they begin telling stories about the various accidents they have suffered in life. They have fallen off roofs, out of trees, into quicksand, and into lakes. As their stories keep growing in a game of one-upmanship, the men correct one another about the facts behind them. Soon a younger monk interrupts to ask Norris if she is all right. "Look at the company I'm in," she replies, "I'm not only fine; I'm in heaven."⁴

Norris understands the grace of the Christian life. We share life with individuals who have fallen so often, and we are grateful for the ways that God continues to sustain us on the journey. We are not like sandcastles that

collapse because of a brush with nature. Instead we've landed safely on the shore of grace, knowing that we have received Christ's gift and are called to share it with his creation.

NOTES

1 Most scholars agree that Paul's epistle preceded the earthquake that destroyed most of the city of Colossae around A.D. 61-62. I have chosen this as a metaphor for the spiritual problems in the community. See David E. Garland, *Colossians and Philemon* (The NIV Application Commentary; Grand Rapids, MI: Zondervan Publishing, 1998), 81-115; and Peter T. O'Brien, *Colossians, Philemon* (Word Biblical Commentary 44; Waco, TX: Word Books, 1982), 31-72. I am indebted to both of these authors for their insights on this passage.

2 Clarence Jordan, *The Cotton Patch Version of Paul's Epistles* (New York: Association Press, 1968), 25.

3 Calvin Miller, *The Table of Inwardness* (Downers Grove, IL: InterVarsity Press, 1984), 76

4 Kathleen Norris, *The Cloister Walk* (New York: Riverhead Books, 1996), 338-339.



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Faith and Infertility

BY MAURA A. RYAN

Facing the fact that one will never bear children is not just an experience of profound disappointment, but a kind of “dying,” a loss of a longed-for relationship. Can we develop a Christian spirituality for growth through infertility? What would it mean to see worship as a context for acquiring the grace to live into involuntary childlessness with hope and dignity?

I recall hearing the influential Jesuit moral theologian Richard McCormick say more than once that the best reason to ban reproductive cloning was that there were no good reasons to do it. By the time of McCormick’s death in 2000, Chicago entrepreneur Richard Seed had already announced his intentions to found a cloning clinic and the international debate over whether cloning should be permitted in any form loomed on the horizon.

Always a pastor, McCormick considered deeply the arguments marshaled by supporters in the name of compassion: reproductive cloning would extend the possibilities for overcoming infertility; allow gay and lesbian partners to have a genetically-related child; turn back the clock on aging; and make it possible for parents who suffered the loss of a child to see that child, in some measure, “raised from the dead.” Yet, he would remind us, no technology is an unqualified good or suffering an absolute evil; “good reasons” for developing new reproductive technologies must acknowledge our creaturely status, weigh the social and individual risks against the benefits and, especially where fundamental human practices such as parenthood are threatened with radical reinterpretation, consider alternatives.

Although McCormick was not opposed to in vitro fertilization, he was never persuaded that the losses experienced because of infertility (or even the suffering occasioned by the loss of a child) outweighed the significance of reproduction as an “enfleshed partnership” between husband and wife nor the duty of science and public policy to respect certain “natural” boundaries of human agency. While I don’t remember him addressing directly the use of cloning to “replace” a deceased child, I suspect that he would have echoed bioethicist Thomas Murray in cautioning against the illusion that technology can erase grief: “Life flows in only one direction. Science can’t reverse the steam or reincarnate the dead.”¹

I think that McCormick was right about reproductive cloning. Even if the serious safety concerns that currently attend cloning technologies could be overcome, it is not obvious that the ends served by reproductive cloning justify the potential social and individual costs of ushering in the practice of asexual reproduction. Widespread international resistance to reproductive cloning signals a deep and healthy concern that the advent of cloning is not simply an incremental addition to the arsenal of technologies for serving the desire to have a child, but a shift in our way of understanding the nature of reproduction that touches the very foundations of respect for human dignity.

However, there remains the question of how to take seriously the intense desire for a child that helps to drive the development of reproductive technologies and fuels the willingness of individuals, especially women, to assume great physical, relational, and economic burdens for an outside chance of a successful delivery. If we are to say that there are limits to what ought to be sanctioned in the pursuit of parenthood (either limits to the sort of technologies we allow or limits to the medical resources we commit to addressing infertility) how are we to respond to the very real losses experienced by those who are infertile or unable to carry a child to term?

Facing the fact that one will never conceive or bear children is not just an experience of profound disappointment. Rather, those who have gone through it describe it as a kind of “dying,” a loss of both an envisioned future and a possible self, a potential role and a longed-for relationship. Infertility is rarely recognized as a personal crisis, however, and even when it is, it is treated largely as a medical or social crisis. It is seldom recognized as a spiritual crisis, a deep confrontation of meaning and belief. Yet, it is precisely when infertility is acknowledged as a question to one’s very understanding of oneself and one’s place in the universe that the pain and disappointment of infertility can become an opportunity for personal and spiritual growth. Indeed, it is only when infertility is seen as a spiritual crisis that it can initiate a *spiritual quest*, an occasion for “a blossoming of self far more rewarding than mere endurance.”² In the same way, it is

when the threat to the integrity of the self (posed by a diagnosis of infertility) is addressed that it becomes possible to say no to medical interventions that have become pointless or destructive to persons or relationships, and to explore other alternatives such as adoption in a healthy way.

How might we develop a Christian spirituality for growth or transcendence through infertility? What theological and liturgical resources exist for helping those who struggle with infertility to learn as well as to share the lessons it teaches about finitude and humility? What would it mean to see the liturgical and pastoral life of the churches as a context for acquiring the grace to live into involuntary childlessness with hope and dignity?

MIXED MESSAGES AND MISSED OPPORTUNITIES

There are many references to infertility in Scripture.³ The birth of a son to a long-infertile or “barren” wife is a familiar symbol of God’s favor. Isaac is born to Abraham, signifying both Abraham’s reward for his fidelity and Yahweh’s guarantee of a viable future for Israel. Through the child, the covenant is established; Sarah (at the biblical age of ninety) becomes not only an improbable mother, but the “mother of nations” (Genesis 17:15-21). In turn, the Lord grants Isaac’s prayer and the barren Rebekah gives birth to Esau and Jacob (Genesis 25:21). Vowing to dedicate her child to God if only God would grant her a son, Hannah is finally “remembered,” and she bears Samuel (1 Samuel 1:9-11, 19-20). Like Abraham and Sarah, the righteous Zechariah and Elizabeth of the New Testament, well beyond childbearing years, are sent a son who is to be “great in the sight of the Lord,” whose birth in joy and wonder is a foretaste of the redemptive events to come (Luke 1:5-25). The long-awaited child, born to this woman now at the “end” of her life, is testimony indeed that “nothing will be impossible with God” (Luke 1:36-37).

Although barrenness plays many different roles in biblical texts—sometimes standing as a sign of God’s judgment, sometimes a pretext for miraculous intervention (as in the life-long infertility of Sarah and Elizabeth)—the individual or personal suffering associated with barrenness is clearly visible. Infertility is linked to illness and famine in the promises of Sinai: “You shall worship the LORD your God, and I will bless your bread and your water; and I will take sickness away from among you. No one shall miscarry or be barren in your land; I will fulfill the number of your days” (Exodus 23:25-26). The barren woman is an object of pity, because the inability to

Even if the serious safety concerns could be overcome, it is not obvious that the ends served by reproductive cloning justify the potential social and individual costs of ushering in the practice of asexual reproduction.

conceive and bear children, and in particular, to bear sons, is assumed to lie with her. We get glimpses of the pain of infertility in Rachel's cry to Jacob: "Give me children, or I shall die!" (Genesis 30:1); in Issac's plea to Yahweh on behalf of his wife (Genesis 25:21); and in the psalmist's identification of the barren woman with the poorest of the poor: "[Yahweh] raises the poor from the dust, and lifts the needy from the ash heap, to make

Why do couples dealing with infertility have difficulty finding solace and usable wisdom in religion? One reason is that for all its relative visibility in the Bible, infertility is an invisible reality in most congregations.

them sit with princes.... He gives the barren woman a home, making her the joyous mother of children" (Psalm 113:7-8a, 9a).

The most poignant glimpse is the picture of Hannah in the first book of Samuel. The second wife of Elkanah, she is taunted, year after year, by her rival because "the LORD had

closed her womb" (1 Samuel 1:6). Rising in the temple, she prays to Yahweh "in the bitterness of her soul": "O Lord of Hosts, if only you will look on the misery of your servant, and remember me, and not forget your servant, but will give to your servant a male child, then I will set him before you as a nazirite until the day of his death. He shall drink neither wine nor intoxicants, and no razor shall touch his head" (1 Samuel 1:11). So great is her distress that she is mistaken by the priest Eli for drunk.

It would seem that religious traditions shaped by sacred texts so rich in the imagery of fertility and infertility would provide a natural context in which to come to terms with the suffering occasioned by infertility. But Arthur Greil's study of American infertile couples showed instead that it is extremely difficult for believers to draw on their religious faith in trying to make sense of infertility. Some of the couples he interviewed reported drawing strength from the social relationships they enjoyed within their faith communities, but they were far outnumbered by those couples who viewed religious affiliation as one more obstacle to be overcome in their attempt to deal with their infertility. Overall, he concluded, "religion [did] not provide most couples...with resources upon which they can call to explain to themselves their experience of suffering."⁴

Why do many Christians who are dealing with infertility have difficulty finding solace and usable wisdom in religion? One reason is that for all its relative visibility in the Bible, infertility is an invisible reality in most congregations. I have attended countless liturgical celebrations on Mother's Day, Christmas, and the Feast of the Holy Family in my own Roman Catholic community. I cannot recall a single time in which, during these key

celebrations of parenthood and rededication of family life, the pain of *longing for* parenthood was acknowledged liturgically alongside the joy and struggles of its realization.

Another reason why religion can be more of an obstacle than a pathway to healing for the infertile is the ambiguous and somewhat contradictory character of fertility in religious literature. In the Roman Catholic tradition, for example, procreation is treated as one of the primary goods of marriage. The tradition recognizes what many infertile couples come to believe passionately: that reproduction “completes” or “embodies” an intimate relationship. To bring forth a child who is “flesh of our flesh” symbolizes the joining of their separate lives in a concrete and living way. The act of reproducing moves the relationship to a new level, not only symbolically but practically, as the couple makes the transition to an all-encompassing, necessarily responsible or outwardly-focused intimacy. Despite longstanding disagreements about the ethics of contraception, it is nonetheless assumed in Catholic sexual ethics that reproduction is a primary, “essential” end of sexual expression and that the transmission of life is a central dimension of the vocation of marriage. Parenting is the most celebrated channel through which lay Catholics participate in the ministry of the church. Yet, the inability to have children is readily dismissed as merely a frustrated desire, easily redirected toward adoption or other forms of interaction with children. The problem for infertile believers is not in the suggestion that the longing for children of one’s own can be tapped as an energy for service or fulfilled through adoption. It is in the dissonance between the high value placed on biological reproduction as a gift from God and the assumption that, being surrounded by and having taken in this interpretation of its significance, the infertile can simply reinterpret it.

Yet another reason why, for many people, religion provides little comfort in the journey through infertility is suggested in the brief survey of biblical references to barrenness above. The interwoven symbolisms of judgment, blessing, and mystery yield a confusing answer to the suffering occasioned by infertility. Infertile women, in particular, are tempted to blame themselves because of earlier failures of judgment or volition, or a previous short-sightedness or youthful self-centeredness, for their present inability to conceive or bear a child; some believe that they are being punished by God for their earlier ambivalence about having children. But efforts to levy blame (even self-blame) for conditions such as infertility are ultimately as unsatisfying as they are understandable. The nightly news is full of accounts of unwanted and badly cared for children, born to seemingly “undeserving” mothers and fathers. How is it that these infertile women and men, who understand as well as anyone how precious is the life of a child, are pointedly passed over when the blessing of children is elsewhere so freely and apparently indiscriminately bestowed? What exactly could they have done that warrants such a devastating punishment?

At the same time, to conclude that there is no theological answer for infertility, that we simply must regard it as a mystery to be lived obediently, is not much more helpful. Indeed, such an answer to suffering may play directly into the hands of contemporary “medical” or “scientific” theodicies. From the standpoint of reproductive medicine, impaired reproduction is not a mystery to be pondered but a technical problem in need of a technical solution. In such circumstances, argues Greil,

traditional theodicies which counsel stoicism in the face of the inevitable [or unexplainable] may lose ground to the impatient theodicy implied by the medical model. According to the medical model, suffering is not something to be understood but rather something to be conquered. Explanations that rely on such concepts as ‘God’s will’ cannot be convincing when we believe as strongly as we do in the human ability to pull ourselves out of our condition through technical knowledge.⁵

The difficulties infertile believers encounter in drawing a usable or healing wisdom from faith traditions stem both from how we treat infertility within communities of faith and the way we talk about infertility in theological terms. Constructing a healing spirituality, therefore, includes practical or pastoral strategies as well as theological reconstruction.

CREATING A CONTEXT

If infertile believers find religious services “among the most painful times in their week”⁶ in large part because they feel invisible or marginalized within faith communities that place a great deal of emphasis on families and family life, much could be done to create opportunities for healing simply by “attending to the moment.” With sensitivity on the part of the celebrants, the same liturgical events that we now use for celebrating and supporting families could become opportunities for making the invisible struggle of the infertile visible. By including a prayer for all those who want to be mothers or fathers and are experiencing difficulty, for example, the liturgical celebrations of Mother’s and Father’s Day could be both a “teachable moment” for the congregation and an opportunity for the expression of solidarity.⁷ Simply by acknowledging the varied experiences of family present in any faith community, our observances of the feast of the Holy Family could become occasions for inviting in those who feel on the margins rather than merely retracing the lines of inclusion and exclusion. Attention to the language and symbols we use in the public rituals and sermons marking religiously important moments of family life, such as baptisms, first communions, and confirmations, and an effort to listen from the perspective of those who are currently struggling with some aspect of family could go far in easing the pain of those who experience those events as excruciating.

It is also possible to create moments for reaching out to the infertile within the liturgical year. The Cedar Park Assemblies of God Church in Bothell, Washington, sets aside Presentation Sunday each year for a special blessing for infertile couples. In 1998, twenty parishes in Bothell joined Cedar Park in inviting those who were suffering infertility or pregnancy loss to come together to pray and to experience the support of the community.⁸ Widely publicized, Presentation Sunday calls attention to the reality of infertility within congregations and gives public witness to the possibilities for encountering infertility as a spiritual journey. Although many people come to such a service to pray for a miracle, it also provides a context for exploring the challenge of living faithfully in the absence of miracles.

FROM SPIRITUAL CRISIS TO SPIRITUAL QUEST

Jan Rehner argues that healing from infertility begins with a reconception of the self: "There needs to be, in short, a new story, the creation of an alternate vision of self that is not a negation, but a statement of the wholeness and fulfillment of other equally viable possibilities."⁹ This "new naming" of the self is not a denial of infertility, nor is it merely a matter of throwing oneself into other projects, as infertile couples are often encouraged to do. Those who have resolved the infertility crisis (whether or not they ever became parents) have learned how to tap into the vital energy which all human beings possess and of which the ability to impregnate or give birth is only one small manifestation. They have come in touch with the deep life-giving forces outside themselves and have grown to see the many possibilities for generativity in the lives they are now living. From denying and hating a body

that will not make babies, they come to embrace a body as rich as ever in capacities for love, recreation, passion, and courage, only grown wiser now through suffering. In some sense, those who successfully transcended the loss posed by infertility are those for whom the experience of infertility has become a kind

of "spiritual pregnancy," an occasion for giving birth to a new understanding and appreciation of the self.¹⁰

Self-acceptance is a critical moment in the spiritual journey through infertility. So, too, is coming to a new relationship with God and with God's purposes for one's life. "The faith that will make us well" is not principally a relentless expectation of a miracle. Rather, it is the willingness to be

In the spiritual journey through infertility, "the faith that will make us well" is not principally a relentless expectation of a miracle, but the willingness to be touched in our infirmity by the God who is the source of all life and all energy.

touched in our infirmity by the God who is the source of all life and all energy. Feelings of anger at God are normal and even necessary to the process of healing. But equally necessary is the movement from asking "What is God doing to me/us?" to "Where is God leading me/us?"¹¹

Edmund Pellegrino and David Thomasma argue that the virtue of hope is necessary for genuine healing to take place. Such a hope faces "the realities of the patient's predicament, but directs the mind and heart to something much larger, the reality of God's presence in history, his promises to humanity, and his unfailing love for every one of his creatures."¹² As this description suggests, a transformative spirituality in the face of infertility will not be built on the expectation of miracles (as important as it may be to the infertile not to lose confidence entirely in the possibility of an unexpected blessing) but on awareness of the constant companionship of God in the experience of infirmity, disappointment, or despair. The community of faith is called to embody this transcendent hope, not by piously "denying the realities" of infertility, but by becoming a site where the "something much larger" can be witnessed and the capacity to trust that all things, even our present sufferings, are working to good can be learned.

When hope is grasped as an awareness of God's redeeming work within our experiences of illness or loss or despair, when it is not mistaken simply for a commitment to a certain outcome, it becomes possible for infertility to be the catalyst for a new and deeper relationship with God and the community. It also becomes possible to bring realistic expectations to medicine. Stopping treatment is "abandoning hope" only when success or failure is measured as the achievement of a certain result. When the experience of infertility is lived as an invitation to experience the mystery of God's care for us, God's infinite "motherhood" and "fatherhood," God's desire for our flourishing, it is not necessary to pursue "success" at the expense of the self. Indeed, it does not even make sense.

REFRAMING GENERATIVITY

Finally, we can only hint here at the directions of a theological reconstruction of the place of procreation in a theology of marriage. Three observations are worthy of reflection.

A continued emphasis on procreation as the "fullness" or "flowering" of marital intimacy tends to render the childless marriage "second class." Raising up the theological significance of marriage as first and foremost the site for the mutual self-giving of the partners reflects more accurately the reality of married life and the place of procreation within it, as well as giving rise to a norm for reproduction that respects the conditions for healthy and responsible reproduction.

Second, while privileging the family as the primary place of ministry for laypersons lends valuable support to the work of family life, it has tended to eclipse the more fundamental call to ministry and service which

all Christians share. It has the practical effect of making single Christians and childless couples invisible, not only liturgically, but as a force for effective witness in the world. What is needed is a way of talking seriously about the call to faithfulness and action that follows directly from our baptism, which we all share, and which can be lived out in a variety of equally viable forms of life. What is needed is a theology of lay vocation which treats single life or marriage without children as a unique and valuable context for ministry—not, as we tend to treat them now, simply as “holding patterns.”

Finally, looking hard at what exactly we as Christians value in parenthood is necessary if we are to create a context in which we can commend adoption or other ways of relating to children as attractive paths to resolving the infertility crisis. Christian sexual ethics is in need of a shift from an emphasis on the generation of life, the acquisition of children, to an emphasis on the sustenance of life, the care of children.

What those struggling with infertility need, and what we as communities of faith owe to them, is an inviting witness to the “something more” that lies beyond the limits of their loss. It is only then that we can turn faith or religion from “one more painful obstacle to resolving infertility” to a genuine source and context for healing.¹³

NOTES

1 R. W. Dellinger, “Cloning Can’t Replace Lost Loved Ones, Says Bioethicist,” *Tidings Online* (June 15, 2001) at www.the-tidings.com/2001/0615/cloning.htm. Thomas Murray is a member of the President’s National Bioethics Advisory Commission and the father of a daughter who was abducted from her college dorm room and murdered.

2 Jan Rehner, *Infertility: Old Myths, New Meanings* (Toronto, ON: Second Story Press, 1989), 112.

3 I am using the terms “infertility” and “barrenness” interchangeably here, although, of course, the terms do not have exactly the same meaning. In the biblical texts, for example, it is not always clear whether “barrenness” refers simply to the state of not having borne children (i.e., “infertility”) or also to the state of not having borne sons or descendants in the sense of followers in male lineage. However, both terms connote involuntary childlessness and it is in that sense that I am using them.

4 Arthur L. Greil, *Not Yet Pregnant: Infertile Couples in Contemporary America* (New Brunswick, NJ: Rutgers University Press, 1991), 161 ff.

5 *Ibid.*, 173.

6 See Hannah’s Prayer Ministries at www.hannah.org. This ministry “provides Christian based support and encouragement to couples around the world who are struggling with the pain of ‘fertility challenges’ including infertility, pregnancy loss, or early infant death.”

7 The founders of Hannah’s Prayer make the important point that Mother’s Day and Father’s Day are civic rather than religious holidays and need not be celebrated in church at all. It seems to me that these holidays provide an opportunity to highlight a primary feature of life for most members of the congregation and a valued set of relationships within religious traditions. I would argue that they should be celebrated liturgically, provided they can be celebrated with sensitivity to the various forms of

family life within the congregation.

8 "Having Faith: Service Devoted to Infertile Couples," *Seattle Times* (January 26, 1998), C1.

9 Rehner, *Infertility*, 20-21, quoting Carol Christ, *Diving Deep and Surfacing* (Boston, MA: Beacon Press, 1980), 76.

10 Rehner, *Infertility*, 120.

11 Julie Kelemen, *Dealing With Infertility: A Guide for Catholics* (Liguori, MO: Liguori Publications, 1997), 18.

12 Edmund D. Pellegrino and David C. Thomasma, *The Christian Virtues in Medical Practice* (Washington, DC: Georgetown University Press, 1996), 67-68.

13 An earlier version of this essay appears as chapter six in Maura A. Ryan, *Ethics and Economics of Assisted Reproduction: The Cost of Longing* (Washington, DC: Georgetown University Press, 2001), 150-170.



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Making Difficult Decisions

BY STUART R. SPRAGUE

Not every medical “advance” deserves our unquestioning acceptance. Decisions about whether and how to employ new technologies are deeply personal, yet they raise questions about our common nature as creatures of God. We must draw upon our religious values, and clearness committees can help us do this in a positive and helpful way.

All new technologies, from the capturing of fire to the harnessing of nuclear fusion, have created difficult moral decisions about their development and use. Recent medical technologies are no exception to this rule. And today when scientists give us the option of changing the human body at the cellular level through cloning, the moral stakes seem higher and the way forward is more cloudy and uncertain.

In decisions about whether and how to employ these medical technologies, the issues we face may be deeply personal, yet they also raise questions about our common nature as human beings and creatures of God. Therefore, we must draw upon our religious values. These values arise within and are nurtured by a religious community, so it would seem natural to turn to that community for help in resolving difficult medical decisions. Nevertheless, in my clinical experience, most people do not seek advice from members of their religious communities, especially in a formal way. There is, however, a wonderful precedent for such a practice in the Quaker tradition.

CLEARNESS COMMITTEES

From the earliest days of their movement, Quakers have called special committees together to perform needed services in the community. One

committee might discuss whether a marriage should be performed in the Meeting (the local assembly that is similar to a congregation), while another might ascertain if an individual should be accepted for membership.¹ Committees made their recommendations to the Meeting, where a vote was taken on each request. While these groups did not make the final decision, they did exert significant influence.²

Sometimes they were called “clearness committees” because their task was to determine whether the primary decision-makers—the engaged couple, or prospective member—had reached “clearness” on the matter under consideration. In Quaker theology each person is believed to have the inner light, a source of divine guidance in making important decisions. Yet one can be more or less successful in discerning the direction that the inner light suggests, because a variety of influences, internal and external, can interfere with one’s ability to see the proper course of action. The committee’s role was to assist the person in discerning the proper direction at a particular life juncture—for example, when entering a marriage or joining a Quaker community.

In one stream of Quaker practice, individuals could call a clearness committee to assist in making other decisions—about whether to pursue a certain ministry, or what to do in a morally confusing situation. Or they might go to an elder, a respected member of the community, for clearness.

Though clearness committees’ role in the process of moral discernment has changed over time and varied somewhat from one community to another, they continue to be a vital part of Quaker life. For example, the practice of calling clearness committees was revived in the 1960s, though in a somewhat different form, by young Quakers seeking guidance about conscientious objection to the Vietnam War and participation in the peace movement. In this case the committees dealt with more personal concerns about a secular matter, rather than with issues to be addressed and resolved by the community in public meetings.³

More recently, Penelope Yungblut has described to me how a clearness committee helped her husband, John, make a difficult medical decision. In 1994, his surgeons gave John only five days to decide whether to have a radical operation—the amputation of his hip and what remained of his leg—to remove the cancer which had recurred. He knew the surgery would be a disabling procedure, but the alternative was death from the cancer in a short time. To assist him in making the decision, he called together a clearness committee composed of friends. As a result of this meeting, he decided to have the surgery. John lived about a year after the procedure and, though he was disabled, he felt he had made the right decision.⁴

When believers today face decisions about whether to use medical technologies like in vitro fertilization, reproductive cloning, or stem cell

therapy, and when they consider using extraordinary life-extending measures for loved ones with chronic illnesses, they find themselves in morally puzzling situations just as John Yungblut did. Too often, unfortunately, their congregations do not offer resources for communal discernment analogous to the clearness committees for Quakers.

HOW AND WHY THEY WORK

Could other religious communities use clearness committees, or adapt them within their faith traditions, to help their members make difficult medical decisions? To answer this question, we need to examine how these committees function and the theological foundation for them.

In Quaker history—and according to a recent manual for clearness—there are two distinct types of clearness committees. The first type of committee is asked to form a judgment about whether clearness has been evidenced during the meeting by the person who requested the committee, and to determine what the person's next step should be. The best examples of this type are the clearness committees called to determine whether two individuals are ready for marriage, or whether a person should be recommended to the Meeting for membership. A second type of committee is not asked to make a judgment, but only to serve the person as a resource for a decision he or she must make. The person's decision may be made during the meeting, or it may come with time after further reflection.⁵

John Yungblut's clearness committee followed the latter model, and since I think it is the most appropriate type for helping individuals to make difficult medical decisions,

I will describe its process and comment briefly on its theological grounding here.

Since the goal is to enable the requesting party to discern the inner light, committee members must be practiced in asking helpful questions. Members should not impose their own answers to these questions or give advice to the person, either directly or

indirectly. People who tend to dominate group discussions or cannot withhold their personal conclusions are not good choices for the committee.

One member should be a skilled facilitator. Since confidentiality is essential, all committee members must be trustworthy in exercising that responsibility.

What exactly is this inner light and why should the person submit to its

In helping a person to make a difficult medical decision, the clearness committee is not asked to make a judgment, but only to serve the person as a resource. The person's decision may be made during the meeting, or later after further reflection.

authority? I realize that an entire theological treatise would be needed to address our concerns about the existence of such a light; its grounding in God; how it gives specific direction to a person; and how it interacts with our emotions, rational thoughts, and desires. Religious history, unfortunately, offers many examples of people justifying their horrific actions by appealing to some sort of "inner light." On the other hand, Christians within the free-church tradition (like me) may resonate with how this notion can be adapted to a theology of the Holy Spirit, soul competency, and the priesthood of believers.

Keep in mind that a person does not first *learn* or *develop* the rudiments of moral thinking—the general moral rules or norms, the virtues and vices, the identification of good people whom we can emulate, and the wealth of stories gathered through experience or reading that may be studied with profit—by calling together a clearness committee. Indeed, this process assumes that the person has already developed morally within a faithful community that has been shaped by the reading of Scripture; now the person is seeking, with the assistance of some respected advisors in that community, to *clarify* how these norms, virtues, exemplars, cases, and so on, can guide her or him in the current situation.

The process of decision making in a clearness committee might be described as quite close to the ground: the decision-maker looks intensively at a specific case with the help of trusted friends. While they are surely guided by general moral norms, virtues and vices, exemplars, and stories, the person's decision cannot be derived from these in a simple and mechanical way. The ethicist James Childress, who happens to come from the Quaker tradition, says that in using moral norms we need to avoid two opposite dangers: (1) being inflexibly tied to absolute principles and (2) deciding particular cases with no respect for general norms or boundaries. The middle way, he suggests, requires testing and applying general standards in a variety of contexts and scenarios. Sometimes a norm must be balanced against another norm or further specified according to the details of the case.⁶ (A similar warning could be given for character traits, exemplars, stories, and the other guides for moral decision-making.)

For example, we may agree that we should "do no harm," but how does an infertile couple balance this norm against the opportunity to achieve a significant good, such as starting a family with a genetically related child through in vitro fertilization? The clearness committee might help the couple think more specifically about the nature of the harm involved in creating "extra" embryos, or how this harm relates to the good of family that they desire. Their friends on the committee can also help them identify and overcome any personal biases or prejudices that would distort their understanding of the moral norms and their reflection on the particular case.

The purpose of the committee is to ensure that the process of decision making is not totally subjective and to suggest normative boundaries to complement the purely personal perspectives of the subject of the clearness committee meeting. In the end, though, the decision and the rationale which supports it are in the hands of the decider, led by the inner light.

GETTING STARTED

The clearness committee tradition is enjoying a revival, and not just among the Quakers.⁷ If your congregation is thinking of forming a committee, two ingredients are essential: commitment and competence. Several church members, clergy or laity, must commit themselves to the education and discipline necessary to function in this role. A competent leader should be enlisted to recruit and train committee members and to conduct the committee's work. Before they are called together for clearness, members should establish the boundaries of appropriate practice, learn how to ask questions in a helpful way, and commit themselves to confidentiality and respect for one another and the decision-maker. Feedback and assessment of the group's work will enable the committee to grow in competence over time.

A dedicated and well-trained clearness committee can do much to assist members with difficult moral decisions. Cloning, genetic technologies, and life-extending therapies that are either currently available or on the medical horizon will require that we make hard choices. After hearing the complicated technical details from their physicians, many members will welcome the opportunity to sort through the moral questions with the help of trusted friends.

Not every medical "advance" deserves our unquestioning acceptance. Yet when powerful economic and political forces urge us to make use of these technologies, resisting them can be difficult. Our religious

values should help us to decide whether to embrace a particular medical device or intervention. In some quarters religion has gained, I believe, an undeserved reputation of seeing moral questions in absolute terms and being generally against the progress of science. The issues are more subtle, however, and the questions are more complex. Clearness committees allow faith communities to exercise their values in a positive and helpful way.

Cloning, genetic technologies, and life-extending therapies require that we make hard choices. After hearing the complicated technical details from their physicians, many members will welcome the opportunity to sort through the moral questions with the help of trusted friends.

NOTES

1 Margaret Hope Bacon, *Mothers of Feminism: The Story of Quaker Women in America* (San Francisco, CA: Harper & Row, 1986), 43.

2 Patricia Loring, *Spiritual Discernment: The Context and Goal of Clearness Committees*, Pendle Hill Pamphlet 305 (Wallingford, PA: Pendle Hill Publications, 1992), 20.

3 *Ibid.*, 20-21.

4 Penelope Yungblut told me this story in personal correspondence.

5 Peter Woodrow, *Clearness: Processes for Supporting Individuals and Groups in Decision-Making* (Philadelphia, PA: New Society Publishers, 1984), 5

6 James F. Childress, "Moral Norms in Practical Ethical Reflection," in Lisa S. Cahill and James Childress, eds., *Christian Ethics: Problems and Prospects* (Cleveland, OH: The Pilgrim Press, 1996), 196-217.

7 Recently I entered "clearness committee" in an internet search engine and was rewarded with 26,900 hits! Local congregations like First Presbyterian Church of Norfolk, VA, and St. James Anglican Church in Vancouver, BC, sponsor clearness committees. The Episcopal Church's national website features an article on clearness committees, and the American Psychoanalytic Association uses them in enrichment retreats. Colleges like Lane Community College, Eugene, OR, and University of North Carolina-Ashville have clearness committees for faculty to consult regarding issues in teaching. For an elegant description of clearness committees see Parker Palmer, *The Courage to Teach* (San Francisco, CA: Jossey-Bass, 1998), 152-156.



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Beyond Minimalist Bioethics

BY B. ANDREW LUSTIG

In the 1960s, bioethics was not shy about asking deeper questions of meaning, purpose, and human identity posed by developments in medicine. Today it is simpler to ignore matters of the common good or general human flourishing. By addressing and answering these harder questions, these three books provide insightful correctives to the minimalist tendencies of recent bioethics.

When modern bioethics began in the late 1960s, it was not shy about asking deeper questions of meaning, purpose, and human identity posed by developments in medicine and the life sciences. It is a sign of how much bioethics has changed that these books sound so prophetic compared with what currently passes for conventional wisdom in the field. Given the drift toward moral relativism in the academy and beyond, perhaps that shift in focus has been inevitable. It is far easier, after all, to speak of who has the right to decide than about what constitutes a morally justified decision. It is less troubling to focus on procedures that safeguard individual autonomy than to discuss what a morally responsible freedom requires. It is simpler to celebrate the merits of pluralism than to focus on matters of the common good or general human flourishing. By contrast, in each book under review, harder questions are addressed and answered. They provide insightful correctives to the minimalist tendencies of recent bioethics.

Beyond Therapy: Biotechnology and the Pursuit of Happiness, a recent report of the President's Council on Bioethics (New York: Regan Books, 2003, 327 pp., \$14.95; or available free online at www.bioethics.gov/reports/beyondtherapy), assesses and critiques a number of actual and prospective develop-

ments in biotechnology. In six major sections, the book explores efforts to enhance “natural” functions through biotechnology in various controversial areas. It discusses efforts to make “better children” through genetic screening and embryo testing, and to modify their behavior by using drugs like Ritalin. In a topic of particular salience, given the recent steroid scandals in major league baseball, the report decries efforts to attain superior performance through such drug use, concluding that such practices, by thwarting standards of traditional competition, undercut the development of character traditionally associated with “natural” efforts. The book also raises foundational questions about attempts to extend significantly the human life span or to recast aging as a conquerable disease. It considers the promises and perils of seeking “happy souls” through mood-enhancing drugs, and reflects on the key aspects of human experience that may be undercut or even lost by such interventions.

Unlike the efforts of some earlier commissions, such as the National Bioethics Advisory Commission in the 1990s, the Council here eschews specific policy recommendations, preferring a broad-ranging discussion of the “nature of human nature” in the context of biotechnological enhancement. The Council has been accused of being politically conservative, which, given President George W. Bush’s predilections, hardly seems surprising. But *Beyond Therapy* is literally conservative in two more positive senses than its critics care to admit. First, popular pundits, and the cheerleading scientists on whom they rely, often rush to characterize new possibilities as posing unique dilemmas, as if their merely technical novelty prevents analysis according to traditional moral and political categories. By contrast, the Council resists conflating scientific with moral novelty: the issues the book engages are less about technology than about the status of human nature empowered by technology. Second, the report, while acknowledging a diversity of views about enhancement, seeks to anchor its discussion in shared moral and metaphysical concerns—the nature of human nature, and the social and political implications of unfettered choices in altering the human prospect through biotechnology. In both these commitments—to a “classical” style and an appeal to the common good—the Council’s report may be swimming against the streams of current intellectual fashion, but the effort is bracing.

To be sure, those more cautious about the meaning of biotechnology for the human prospect, including many members of the current Council, are not unsympathetic to the desirability of overcoming genetic diseases or responding to significant suffering. Yet the report provides a broader vantage from which to assess new possibilities. A central problem with the regnant analytic approach in bioethics is that, in the interest of methodological purity and in deference to “pluralism,” it tends to restrict the range of our moral considerations by discounting appeals to imagination and intuition as merely “speculative” musings. Yet imagination is no idle

power when thinking about where we may be headed in our Promethean quest to change human nature. Indeed, the wisdom we seek may be better found by enlisting vision and imagination as crucial to discernment rather than dismissing them. As exemplified by this report, informed speculation may be the better way for society to deliberate about matters of such large moment.

Allen Verhey is perhaps unique among current theological bioethicists for his combination of scholarly expertise in Scriptural exegesis and bioethics. In several earlier books, Verhey has amply demonstrated his excellence in both areas. *Reading the Bible in the Strange World of Medicine* (Grand Rapids, MI: William B. Eerdmans, 2003, 407 pp., \$35.00) reconfirms his status as today's foremost expositor of the ways that a nuanced reading of Scripture can illuminate the dilemmas posed by modern medicine. Verhey situates his analysis of particular topics within the context of the Christian church. The Church is formed by the power and promise of the Spirit, and it is faithful in "remembering Jesus" by bringing to each ostensibly new issue in bioethics the Person and the themes central to the Christian story. Verhey eschews any tendency to read Scripture simplistically, or to confuse Christian allegiance with literalism or fundamentalism. At the same time, he stresses the importance of extending the moral conversation beyond the Church as well, and the theologian's task to be "talking of God with those who would rather not" (p. 27). Of course, moral deliberation and discernment serve the Christian community in its communal reflections. But theologically candid conversation is also a service to the larger secular public. In a secular bioethics that often settles for a procedurally driven moral minimalism, theological candor by Christians "may at least remind the public of richer accounts of morality" and "of neglected wisdom" (p. 27).

In ten chapters, Verhey considers both broad themes and specific topics. He addresses the full range of controversial issues in current bioethics: genetic interventions, abortion, assisted reproductive technologies, neonatal decision-making, end-of-life decisions, assisted suicide, and the allocation of health care resources. In each chapter, particular reflections proceed from and return to the task of "remembering Jesus." Thus one chapter focuses on "Mapping the Human Genome...Biblically." Another is entitled "Judas, Jesus, and Physician Assisted Suicide." A final chapter considers "The Good Samaritan and Scarce Medical Resources." More broadly, the title

In a secular bioethics that often settles for a procedurally driven moral minimalism, theological candor by Christians "may at least remind the public of richer accounts of morality" and "of neglected wisdom."

of the book itself captures the power and prophetic edge of Verhey's discussion. Verhey reads the Bible in what he calls the "strange" world of medicine. Why is medicine strange? In contrast to the richness of the Christian story, much of modern medicine emerges bereft of substantive moral moorings. In an age dominated by the language of individual rights, today's medicine emphasizes the procedural minutiae of informed consent rather than the substance of what is chosen. In its seeming obsession with personal choice, modern medicine tends to reinforce an unbiblical dualism between the naked power to choose and the limiting conditions of our embodiment. Finally, medicine also distorts the virtue of compassion by reducing patients to their pathologies, thus confusing the virtue of compassion with the wielding of mere technique. By so doing, medicine may further alienate patients by treating them as objects of mere manipulation rather than as suffering subjects of far more complex stories, thus requiring more of caregivers than simply technical competence.

Gilbert Meilaender is a widely respected and prolific contributor to theological bioethics. His work is always thoughtful, incisive, extremely well-written, and accessible to both academics and laypersons. He is also something of a rarity these days, the unabashedly religious public intellectual, who is a regular contributor to Richard John Neuhaus's journal *First Things* and invited to testify by the National Bioethics Advisory Commission in its public hearings. Meilaender's writings, much in the spirit of the other two books under review, provide a welcome and prophetic antidote to the moral minimalism at work in much of secular discussion. *Bioethics: A Primer for Christians* (Grand Rapids, MI: Wm. B. Eerdmans, 2005, 126 pp., \$15.00) is the second edition of the volume Meilaender published in 1996. It retains the general thrust and spirit of the original, though it has been updated and includes a notable additional chapter on the use of human embryos in research. In his opening comments, Meilaender observes that recent bioethics, in seeking consensus, has tended toward a policy-driven lowest-common denominator ethic. The result, he suggests, is that the "moral meanings of health and medicine" have become "increasingly secularized—driven by the view that public consensus must exclude the larger questions about human nature and destiny that religious belief raises" (p. x). Meilaender's aim, in express contrast, is robustly religious: "I write," he says, "as a Christian for other Christians who want to think about these issues" (p. x), precisely because "the search for human wisdom and faithful insight requires of us a longer memory and a more expansive vision" (p. xi).

Like Verhey, Meilaender develops a distinctively Christian narrative vision that shapes and informs his conclusions on particular issues. For Meilaender, that vision incorporates distinctive interpretations of individuals in community, finitude and freedom as the "created duality" of our human nature, a holistic view of human embodiment, and an account of

suffering that calls for both compassion in our efforts to alleviate it and redemptive possibilities in suffering that is patiently borne.

Meilaender's twelve chapters range across the standard bioethics issues—assisted reproduction and abortion, genetics, prenatal screening, suicide and euthanasia, withholding and withdrawing life-sustaining treatment, organ donation, and the use of embryos in research. As the "primer" in its title suggests, the book is, before all else, a rich survey of the "first principles" that should illuminate and direct Christians in their judgments on various issues. At the same time, despite the book's brevity and accessibility, Meilaender is masterful in his command of the theoretical and policy literature, and judicious in the cases he analyzes to make larger prophetic points.

Meilaender's discussion is always insightful, but he is perhaps most distinctive in his rejection of capacity-based judgments for defining "personhood" and measuring "quality-of-life." In contrast to a mind-body dualism that "measures" personhood according to the presence or absence of cognitive capacities, Meilaender argues that "to be a member of our community, with a claim for care equal to yours or mine, an individual need not possess these capacities.... Those who never had or who have now lost certain distinctive human capacities should not be described as nonpersons; rather, they are simply the weakest and least advantaged *members* of the human community" (p. 32). Thus, "[p]ersonhood is not a thing we possess only at some moments in [our] history; we are persons throughout it" (p. 32). Meilaender's inclusiveness here has profound implications for his judgments about abortion and about withdrawing life-sustaining treatment. While he allows for limited exceptions, Meilaender sees embryos and fetuses as protectable members of the human community. And while he concludes that useless treatments may be stopped, he also observes that "we need to make certain that we ask of possible treatments: Will they benefit the life this patient has? That is quite different from asking, Is this patient's life a beneficial one, a life worth living?" (p. 70).

A brief review cannot do justice to the wisdom, eloquence, and insight evident in these three books. Each of them deserves a wide audience among scholars and healthcare professionals, and Meilaender's volume would also be quite useful for church-based adult education.



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Are We Asking the Right Questions?

BY MARK J. CHERRY

We should evaluate medical interventions not only by the amelioration of physical suffering from age, injury, and disease, but also in the context of our relationships to others and to God. Do human reproductive cloning and stem cell research reach beyond such important personal goods and include God's intentions for us?

Human beings are created to worship God. If, in our moral analysis, we only inquire after temporal human goods and focus on equality, rights, justice, or fairness, we will fail to appreciate the depth of our humanity. Christian moral life, in other words, must understand human goods—including medical research—within the fuller context of this divine reality.

With rare exception, however, the essays in three challenging and important anthologies reviewed here fail to address this core concern. Instead, they spotlight how research on human embryos and cloning may result in medical developments, cure disease, and alleviate suffering. Yet, we cannot adequately judge medical interventions if we regard only the amelioration of our physical suffering brought on by age, injury, and disease removed from the context of our relationships to others and to God. Christian appreciation of human reproductive cloning and stem cell research must reach beyond such admittedly important personal goods and include God's intentions for us.

Let's begin with two preliminary questions: What is the moral status of the human embryo? and What is the moral status of nature? In each case, we must assess whether there are moral or spiritual constraints on permis-

sible research. These reflections will shed light on the role of medicine in a Christian life, and thereby provide insight into a Christian appreciation of human cloning and embryonic stem cell research.

EMBRYOS

As the authors in *God and the Embryo: Religious Voices on Stem Cells and Cloning* (Washington, DC: Georgetown University Press, 2003, 228 pp., \$26.95) are aware, the stem cell research and human cloning debates are caught up with understanding the moral status of the embryo. Organized into three sections –“moral frameworks,” “the moral status of the embryo,” and “research questions” –together with a set of nine appendices, the volume balances analyses from a spectrum of Christian and Jewish religious perspectives.

The editors, Brent Waters and Ronald Cole-Turner, note that deliberation regarding the status of the embryo typically centers on the moment the child possesses a soul or becomes a person. Waters points out that much ink has been spilt on this topic from at least the work of Thomas Aquinas in the thirteenth century. James Patterson, in turn, considers insights from biblical texts (e.g., Psalm 139:13; Jeremiah 1:5; Exodus 21:22-23; and Job 10:10-11) and the western Christian tradition, finding both sources ambiguous regarding the moral status of embryonic life. These authors argue that biological development is so gradual that there is no clear moment between conception and birth when we can say the embryo has become a person. They believe it is impossible to determine when moral responsibility for killing embryonic life begins, and thus that it is implausible to conclude that it is always wrong to utilize embryos for experimentation. Given this purported moral ambiguity and the hoped for medical benefits, most of the authors in this volume argue in favor of at least limited research on embryos (see e.g., the articles by Ronald Cole-Turner, Brent Waters, and Ted Peters and Gaymon Bennet). There are a couple of notable exceptions who condemn such practices, including Robert Song in a lucidly titled essay, “To Be Willing to Kill What for All One Knows Is a Person Is to be Willing to Kill a Person.”

The useful appendices include statements on embryo research from the President’s Council on Bioethics and a number of Jewish and Christian denominations. Statements from the United Church of Christ and the Presbyterian Church (USA) support research on human embryos. In contrast, statements from the Pontifical Academy for Life, the Southern Baptist Convention, and the Holy Synod of Bishops of the Orthodox Church in America, stand over against the predominate conclusions of the volume and condemn the use of human embryos for research.

Readers who work carefully through the appendices will wonder whether the authors in this volume have muddled the moral understanding of the embryo with their frequently straightforward acceptance of

consequentialist reasoning—where the ends of research outweigh the necessary means of embryo manipulation and destruction. As the statement from the Synod of Bishops of the Orthodox Church in America affirms, the spiritual implication of destroying a human embryo was understood unambiguously in the Christian tradition as murder (pp. 172-176). Some representative voices in the tradition include the *Didache*, a manual of ethical instruction from the first century A.D.: “Do not murder a child by abortion, nor kill it at birth;” the *Epistle of Barnabas*, dated to the first or second century A.D.: “Do not murder a child by abortion, nor, again, destroy that which is born; and Canon 91 of the Quinisext Council (A.D. 691): “Those who give drugs for procuring abortion, and those who receive poisons to kill the fetus, are subjected to the penalty of murder.” Moreover, as St. Basil the Great (A.D. 329-379) made clear, the ensoulment, or state of ‘formation’ of the fetus, is not relevant to this Christian judgment: “The woman who purposely destroys her unborn child is guilty of murder. With us there is no nice enquiry as to its being formed or unformed” (*Letter 188*). St. Basil recognized that even early embryocide possesses the same spiritual effects as murder, without ever committing himself to understanding the embryo as already possessing a soul or as being a small person.

NATURE

How should we understand humanity’s relationship to nature, especially to human nature? Is it morally acceptable for humans to work to overcome and master natural limitations? Or, does nature itself delineate moral limits to human action and investigation? In Ronald Cole-Turner, ed., *Beyond Cloning: Religion and the Remaking of Humanity* (Harrisburg, PA: Trinity Press International, 2001, 152 pp., \$21.95), several authors consider the often-heard criticism that cloning is impermissible because it is “playing God.” Lisa Sowle Cahill frames the concern by citing Reinhold Niebuhr’s definition that “sin is man’s rebellion against God, his effort to usurp the place of God” (p. 103).

Kenneth Culver, a Presbyterian elder and a physician who helped perform the first human trials of gene therapy, sets the stage with an overview of genetic technologies and their implications for treating various diseases. While admitting that “Some people think that applying genetics to human health simply goes too far...,” he concludes, “I disagree, of course, and I continue to pursue genetics research to benefit human health” (p. 16). Dr. Culver remains confident that the goals of genetic therapies are consistent with the compassionate example of Jesus.

Still, what of human reproductive cloning? Here the authors—Catholic, Protestant, and Orthodox Christian scholars—offer a range of answers. Donald Bruce believes reproductive cloning is immoral because it departs from the overall course of sexual reproduction—by making human reproduction an asexual and potentially selfish endeavor. Audrey Chaman raises

the concern that such technology would result in treating children as artifacts, as products that parents genetically design and create (p. 73). Children, Gilbert Meilander argues, might thereby become commodities that we create, modify, and perhaps discard (p. 82). He reminds us that “it took the Scottish researchers who produced Dolly...277 transfers of adult nuclei into enucleated sheep eggs, to get 29 cloned embryos to implant in wombs” (p. 78). From these 29, they managed only one live birth. Cahill addresses similar concerns that cloning will only enhance an obsessive focus on biological parenthood, further degrading non-biological parenting, such as adoption (p. 105). Nancy Duff, however, rejects the standard arguments that cloning impermissibly “plays God.” Try as they might, she argues, “Human beings *cannot* take the place of God the Creator” (p. 93); regardless of the circumstances of the child’s conception and birth it will remain “a child of God” (p. 94). Her primary concern is that cloning technology will exploit the vulnerable and encourage eugenics (p. 96). Clearly, it is overly simplistic rhetorically to condemn cloning as “playing God.”

On the one hand, that something is artificial or otherwise manipulates nature does not necessarily make it immoral; otherwise, nearly all of health care would be blameworthy. Indeed the creation of humankind on the sixth day, along with a divine injunction for them “to subdue” the earth and “have dominion” over the other creatures (Genesis 1:26-29), suggests that nature presents challenges that we should face and perhaps overcome. We would be highly ungrateful to God if we, having been blessed with the wonders of creation including a rational mind, failed to utilize them.

On the other hand, the fact that we can manipulate ourselves and the environment does not automatically legitimate all such endeavors. Medicine and medical technology, as with all aspects of a Christian life, must be placed within the struggle towards salvation. Do such technologies aim us towards love of God and others? Here

Demetri Demopoulos reminds readers that children are ideally the fruit of the union of the love of husband and wife. Cloning and other types of third-party assisted reproduction frustrate that union. Children do not exist simply for our own personal satisfaction and fulfillment, but are part of a therapeutic reordering of our lives; children teach us to be unselfish and to love others more than we love ourselves. Instead of dwelling on our passionate desire to

That we can manipulate ourselves and the environment does not automatically legitimate such endeavors. Medical technologies must be placed within the struggle towards salvation. Do they aim us towards love of God and others?

procreate, or selfishly to recreate ourselves, we should redirect our lives towards God.

MEDICINE

Modern medicine continually offers new and costly diagnostic and therapeutic advancements that are supportive of obvious human goods. For many, it appears that we are obligated to offer people every opportunity to postpone death and reduce suffering. Medicine, however, can become a temptation to hubris and to a consuming passion to place the goods of this life above all else. Here embryonic stem cell research and therapeutic cloning may teach us a larger lesson.

The Human Embryonic Stem Cell Debate: Science, Ethics, and Public Policy, edited by Suzanne Holland, Karen Lebacqz, and Laurie Zoloth (Cambridge, MA: The MIT Press, 2001, 257 pp., \$25.00), begins by reminding us that embryonic stem cell research has been heralded as providing treatments for diabetes, Parkinson's disease, immunodeficiencies, cancer, metabolic and genetic disorders, and a variety of birth defects, as well as generating new tissues and organs (see, for example, the articles by Thomas Okama and James Thomson). Several authors who write from a Christian perspective believe this justifies the research. Margaret Farley argues that Roman Catholic tradition does not definitely rule out the willful destruction of embryos, because, she claims, before development of the primitive streak or implantation, human embryos do not have the inherent potential to become a human being (p. 115). Catholic theologian Michael Mendiola reaches a similar practical conclusion, because people of good will differ regarding the moral status of the embryo and its therapeutic potential seems great (p. 121). Ted Peters urges us to see stem cell research and cloning in terms of "the larger enterprise of dedicated scientific research serving the dignity of persons who will tomorrow benefit..." (p. 138), and Karen Lebacqz says researchers can simultaneously respect embryonic life and engage in embryo research, provided they respect the value of embryonic tissue and set moral limits on its use (p. 160). Unfortunately, little is said regarding the nature of those "moral limits." Much like *God and the Embryo*, a single message dominates this collection of essays: since the basic science of therapeutic cloning may save lives, reduce suffering, and cure disease, it would be immoral for us not to engage in this research.

Gilbert Mileander provides a welcome exception to this one-sided discussion. Raising the concern that embryos are the least advantaged of our fellow human beings, he argues that communities that fail to support them fail to be strong. "In honoring the dignity of even the weakest of living human beings—the embryo—we come to appreciate the mystery of the human person and the mystery of our own individuality" (p. 143).

We may return to Fr. Demopolous's insight that medical advances must be appreciated in terms of reorienting our lives toward God. What would

this look like? Like many of the church fathers, St. Basil believes that medicine is a good to be used to relieve sickness and suffering: “Each of the arts is God’s gift to us, remedying the deficiencies of nature...the medical art was given to us to relieve the sick, in some degree at least” (*The Long Rules*). Of course, we must not treat human beings materialistically, for we are essentially spiritual realities. Yet, properly appreciated and directed, medicine’s role can be both physically and spiritually therapeutic. Sickness and debilitation, if they are used as a means of communion with Christ, can lead to positive spiritual goods. This does not mean that we should seek suffering for its own sake; indeed, St. Basil affirms the appropriateness of analgesics for pain management: “with mandrake doctors give us sleep; with opium they lull violent pain” (*Homily V*). However, when suffering is properly addressed so that it does not lead to despair, it reminds us to seek forgiveness, to love others unselfishly, and to turn to God. We must not permit medicine and medical technology to tempt us into forgoing our struggle towards salvation by making an idol of this life.

CONCLUSION

These insightful anthologies signal a profound shift in moral commitments within the dominant intellectual culture of the West. Where the destruction of human embryos once was understood as the spiritual equivalent of murder, it has become more or less routine. The practices of abortion and in vitro fertilization with embryo wastage are legally protected as a part of a secular understanding of procreative liberty. As these volumes reflect, much of medical research and healthcare decision-making has been divorced from traditional Christian commitments.

We do have moral obligations to safeguard our bodies and preserve our lives. Our significant duties to ourselves as well as to others, such as to spouse and children, generally require that we seek proper medical treatment. Healthcare is a necessary for living a good life for these reasons. Still, medicine only postpones and cannot “cure” death. We must not permit medical procedures to disorder basic human goods, to distort our relationship with others or with God, and thereby lead to spiritual disorientation. When our pursuit of temporal life and the goods of this life becomes an all-absorbing project, medicine dangerously distracts us from the cardinal human goal, which is to seek the Kingdom of God.



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Dedication



JULIE BOLIN

We dedicate this issue to Julie Bolin, who completes five years as Administrative Associate in the Center for Christian Ethics at Baylor University. As Production Assistant for *Christian Reflection*, her attention to detail and concern for beauty have enhanced each issue of this publication since its inception in Fall 2001. As she returns now to her first career of teaching music to public school children, we celebrate her good work, give thanks for her friendship and collegiality, and wish her Godspeed.

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***“George MacDonald and His Children:
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