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Michael P. Orsi

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Setting Parameters for Biotechnology

by

The Rev. Michael P. Orsi, Ed.D.

The author is Assistant Chancellor of the Diocese of Camden, New Jersey.

In a special edition, *Time* reported in an article, "Keys to the Kingdom" that "the discovery and manipulation of human genes – together with the use of special new drugs – are unlocking a future in which the human body promises to confound and defeat its ancient enemies" (Jaroff, L., 1996, p. 25). In February, 1997, a scientist in Scotland announced that an adult sheep had been cloned, and a few months later doctors in California reported that a sixty-three year old woman had given birth via in vitro fertilization.

No doubt the astounding advances of biotechnology are a source of hope because of the potential good that they will incur for humanity in the areas of human knowledge and health. Nevertheless, after the initial euphoria that comes with every breakthrough, more sober voices caution that our ethics policies are woefully behind technology and that these new discoveries will invade our privacy in unprotected ways, challenge our legal protections, social values, personal values, and religious beliefs.

In a culture based on free enterprise and economic growth, can anyone seriously propose limits on technology? From our experience, Western thinkers and institutions have always rejected limits on knowledge of any kind as unfounded and stultifying. Coupled with the engine of capitalism many wonder how, if any, constraints can be put on science and technology. In light of this, Peter Steinfels opines that "these forces create a powerful machine that will not be subject to ethical constraints unless faced by an equally powerful sense that crossing certain lines would be

morally abhorrent" (*The New York Times*, 1997, p. 29).

In order to engage the ethical challenges that biotechnology presents to us there is one basic principle that should assuage our fears while at the same time provide a caveat: "man is basically good with a tendency toward evil." The following facts bolster this assertion: first, although scientists have often been depicted as amoral positivists and capitalist business is said to be driven by unbridled materialism only, there is sufficient evidence that in both fields there are persons of goodwill who sincerely want to do what is right. As a matter of fact, the British scientific journal *Nature* recently surveyed scientists and found that 40% profess some type of religious belief (Larson, E.J. & Witham, L., 1997 pp. 435-6). At the same time recent polls have found 90% of Americans believe in God. One can only presume that this includes a good number of entrepreneurs. Second, the sense of social responsibility that has been part and parcel of democratic societies permits a marketplace of ideas through various intermediary institutions that shape public opinion as well as legislation that reflects the boundaries of acceptability and, therefore, marketability. The recent government constraints on tobacco, the blocking of plans to market RU-486 in the United States, as well as the present ban on federal funding for research on human embryos attest to the public persuasion that present a moral sense to any possible affront to human dignity. Third, our present post-Enlightenment mentality, while respectful of technology, is increasingly skeptical that science holds all the answers.

To discern whether a procedure or a policy is ethical it must "integrally and adequately" take into account all the characteristics of human persons as individuals, as well as in their various relationships, i.e., familial, social, political, and religious, that are necessary for human well-being. To facilitate the discussion the following five areas provide a context and a forum for the debate.

Religion

The first area of focus is the role that religion plays in shaping cultural attitudes. Ever since Stephen Carter published *Culture of Disbelief* (1993), which emphasized the importance of religion in forming a truly liberal society, theology is once again finding its place at the table of public debate. Its power is unquestionably attested to by such groups as The Christian Coalition, which wields a strong voice in many cultural issues, as well as the religious representation on the National Bioethics Advisory Council, impeded by the President, to discuss the issue of human cloning (Vendatum, S., 1997, p. A4).

The recognized wisdom embedded in religious stories that are

formed by special revelation, communal practice and institutional authority provide a context for interpreting life. The great American philosopher, John Dewey, contended that putatively religious concerns may well be metaphorical ways of expressing social moral concerns for which no other ready language exists (Rollins, 1995, p. 6). Religion's different moral anthropologies, i.e., interpretation of the human and human activities, affect how the moral life is to be lived and what is needed to restrain immorality. With this in mind, Kevin Fitzgerald, S.J., a research professor in molecular genetics at Loyola University, Chicago, states that the Judeo-Christian narrative can offer three important contributions to the discussion since "it brings careful and thoughtful convictions concerning the nature and purpose of human existence, a long history of practical care for the needs of the global human family and a strong appreciation for the contributions of science" (Fitzgerald, 1997, p. 3). In *The Pastoral Constitution of the Church in the Modern World* the Fathers of the Second Vatican Council encouraged just this sort of dialogue and called the Church to be as it were, leaven...and the soul of human society (#40).

Philosophy

The second area which helps to frame the moral context of the debate is philosophy. Since science is not value free, the philosophical premises about human nature, the personal good, as well as the social good of the species must be carefully examined. We must carefully note that Western society has a long history of using philosophy as a vehicle for promoting its values by adapting its moral tradition to various philosophical systems. This is aptly demonstrated by Christianity's use of Neo-Platonism, Aristotelianism-Thomism, Existentialism and Process Theology. It is, therefore, reasonable to believe that this inculturation will continue in contemporary philosophical thought.

There are four main schools contending for hegemony in the United States: Darwinian Reductionism, American Pragmatism, the various "schools of suspicion" born of Deconstructionism, and the Classicist view. Of the four schools, only the Darwinism's genetic determinism fails to take into consideration what it means to be a person beyond one's genes. In *The DNA Mystique: The Gene as a Cultural Icon*, (1995), Dorothy Nelkin and M. Susan Lindee critique how this mechanistic explanation for personality, crime, individual success and failure is being used in political discourse, social debates and institutional decisions. The April 21st cover of *U.S. News and World Report* presents a picture of this philosophy that is worth a thousand words: a baby in a prison uniform with the caption "Born Bad?" With the completion of the mapping of the genome predicted by the year

2003, this reductionist approach would commodify human life and lead to unrestrained Utilitarianism in biotechnology; its only contribution is a "caveat emptor". To this end, in reaction to reductionism, a growing number of scientists called theoretical biologists have developed a more wholist approach to the question of "what is life?" "Wholists believe that the whole is greater than the sum of its parts; even if you know all the properties of each part, you will still not understand the whole because something is missing. They further believe that life is not just a commodity but has an intrinsic value, having worth in and of themselves (i.e., organisms), like works of art" (Blakeslee, S. 1997, p. C8).

The second major school is American Pragmatism. It is radically different from the above insofar as it recognizes the potential for persons to make free choices. More so these choices are of necessity made in a social setting. It holds that truth arises from the life of ideas as they are debated within the community (McGee, G., 1997 p. 50). The pragmatic environment here is never viewed in monist categories but as one of interaction between technology and persons (in all dimensions, including the mystical) who decide which tools are valuable for the extension and improvement of life. Truth arises not from theory but from ongoing lived experience. The present litigation against tobacco companies and the emerging consensus that partial birth abortion is morally repugnant provide two contemporary examples of the pragmatic process.

The third philosophy, which sees all systems as expressions of oppression by dominant groups, is Deconstructionism. Under this broad designation are many groups that practice what has become known as "schools of suspicion." A Feminist perspective, for example, investigates certain cultural assumptions and structures attempting to uncover patriarchal ideologies which masquerade as truths. In line with this, there are some radical feminists who view reproductive technology as a male conspiracy to control and manipulate women's bodies (Young, C. 1997, p. A19). Deconstructionists view all truths as illusion. Therefore its strength lies in its critique of all systems of power which may enslave human freedom (Rabinow, P., 1996, p. 35). Because of this, it can provide an invaluable challenge to the strong cultural hold that the Darwinian narrative now holds over the Western mind.

The fourth and final major philosophy is the Classicist view which has its roots in Aristotelianism. Here objective truth is paramount and obvious from the laws of nature itself. It is both deductive, stemming from certain observable principles, and inductive, coming from innate common sense conclusions. It offers concrete guides for evaluating moral action and can serve, if its basic premises are accepted, as common ground and a moral compass to weigh the pros and cons of the developing technologies

and their ethical viability for human subjects (John Paul II, *Splendor of Truth*, 1993).

Education

Our democratic social experiment is based on the premise of an informed citizenry. Because of this rapidly developing and complicated field of biotechnology, more education and greater public understanding are vital for people to make good decisions and to protect their rights and freedoms. Too often people place their trust in "experts". It must be kept in mind that neither "regulatory agencies" nor "scientists" make decisions that are purely factual as we have demonstrated in our discussion of philosophy. They, too, are making value judgments and, no matter how well-reasoned, they have no special right to moral expertise over the general public. A term such as safety, for example, "is not an entirely technical issue..." because it does not remove other possible legitimate reasons why people should feel concern about a product or a process and believe that it ought not to be offered or developed (Reiss, M.J. & Straughn, P., 1996, p. 231).

Education must then be offered on all levels from grammar school through colleges, universities, and ongoing adult programs. This does not simply mean the imparting of technical information. Good education should include the religious, moral, political and economic questions that impinge on human life and well-being. Successful education should affect how people make decisions and how they act. It should enable people to ask the right questions (Reiss, M.J. & Straughn, R., 1996, p. 255).

Literature

An important adjunct to education is the reading of newspapers, popular magazines, journals, and the classics which provide a public forum to sensitize, educate and help the public to understand biotechnological breakthroughs and their desirability. In a recent "Sound Off: On Fertility Treatments for Older Women" readers were reminded, by those who submitted opinions, of privacy rights, possibilities of government intervention, gender equality, population issues and family concerns, as well as some of the moral and ethical issues that the question involved (*Atlantic City Press*, 1997, p. A10). In a similar vein, *The Wall Street Journal* published the insights of a group of theologians and members of the sciences and humanities regarding what they thought about cloning animals (*Wall Street Journal*, 1997, p. A14).

In an outstanding book, *Forbidden Knowledge: From Prometheus*

to *Pornography*, Roger Shattuck traces how, through literature, humans have grappled with their desire for knowledge in order to exceed the limits of the human condition, while almost simultaneously recognizing the need for a moral context to control the new freedoms knowledge and technology bring (p. 74). Such works as Milton's *Paradise Lost*, Goethe's *Faust*, Shelley's *Frankenstein*, and Stevenson's *The Strange Case of Dr. Jekyll and Mr. Hyde*, challenge the reader with questions of the sacred, human freedom, the role of government, philosophy and politics. These works remind us of human greatness and human weakness. Literature, Shattuck says, "reminds us that humility has so hard a time restraining hubris. It also encourages the need for our present institutions to help us adapt to new forms of human greatness in freedom within bounds" (p. 107).

The Law

Finally, law usually reflects the attitude of the culture which legislates it into existence. Social scientists are quick to point out that law only becomes necessary when ethics and morality on the local level of family, school, and Church, etc. become weakened or totally break down. This being the case, with experience as our guide, we know that "law cannot force people to make good choices. It can, however, encourage people to develop new ways of thinking, seeing, and feeling" (Pendleton, D.A., 1997, p. 19). Therefore, the process of legislating and the agreed upon statutes, though perhaps unenforceable in all circumstances, contribute to the marketplace of supply and demand. The change in attitude regarding race relations, since the 1960s, for example, has been enormously helped by the Civil Rights legislation. Indeed, over time law can help people grow morally. Therefore, law too is part of shaping the culture of a market-based morality. We must exercise our vote judiciously since ethical legislators are vital for capitalism to work effectively.

Conclusion

Since we believe that most people want to do the right thing it is the job of a society such as ours to help us do it. We know that American culture is always at its best when we engage one another in a grassroots and thoughtful exchange of ideas which forms consensus, public opinion and, of course, consumer demand. Francis Fukuyama's book *Trust: The Social Virtues and the Creation of Prosperity* (1995) demonstrates how nations with these strong intermediary agencies establish social capital which leads to economic growth. Because science, technology and the free market are so entwined in Western Capitalism it stands to reason that good ethics will

also make for good business. By engaging the five areas of religion, philosophy, education, literature and law, humans will be able to maintain an authentic sense of a transcendent personhood freed from the slavery and false identities that are imposed by pure rationalism, demeaning technologies and unbridled greed. Within these contexts and caveats the 21st Century, already dubbed the Century of Biology, can be an era which will enhance the dignity of persons and the quality of life.

References

- Blakeslee, S., (1997, Sept. 2), "Some Biologists Ask 'Are Genes Everything?' ", *New York Times*, pp. C 1-8.
- Carter, S. L., (1993), *The Culture of Disbelief*, NY: Basic Books.
- Fitzgerald, K., S.J., (1997, March 29), *Little Lamb Who Made Thee?*.
- Fukuyama, F., (1995), *Trust: the Social Virtues and the Creation of Prosperity*, NY: The Free Press.
- Jaroff, Leon, (Fall, 1996 Special Edition), "Keys to the Kingdom", *Time*, pp. 24-29.
- John Paul II, "The Splendor of Truth" (1993), *Origins* 23 (18). 298-336.
- Larson, E.J. & Witham, L ; (1997), "Scientists Are Still Keeping the Faith", *Nature*, pp. 386, 435-436.
- Kass, L.R., (1997, June 2), "The Wisdom of Repugnance", *The New Republic*, pp. 17-26.
- McGee, G., (1997), *The Perfect Baby: A Pragmatic Approach to Genetics*, Lanham, M.D., Rowman & Littlefield Publishers, Inc.
- Nelkin, D. & Lindee, M.S.; (1995), *The DNA Mystique: the Gene as a Cultural Icon*, NY: W.H. Freeman and Company.
- "Pastoral Constitution on the Church in the Modern World" (1996), in A. Flannery, O.P. (Ed.), *Vatican Council II: the Conciliar and Post-Conciliar Documents*, pp. 943-1001. Wilmington, DE: Scholarship Resources, Inc.

- Pendelton, D.A., (1998, February 21), "Good Laws and the Good Society", *America*, pp. 19-20.
- Rabinow, P., (1996), *Essays on the Anthropology of Reason*, NJ: Princeton University Press.
- Reiss, M.J. & Straughen, R. (1996), *Improving Nature: the Science and Ethics of Genetic Engineering*, Cambridge, England: Cambridge University Press .
- Rollin, B.E., (1995), *The Frankenstein Syndrome: Ethical and Social Issues in the Genetic Engineering of Animals*, Cambridge, England: Cambridge University Press.
- Shattuck, R., (1996), *Forbidden Knowledge from Prometheus to Pornography*, NY: St. Martin's Press.
- Silver, L.M., (1997), *Remaking Eden: Cloning and Beyond in a Brave New World*, NY: Simon and Schuster.
- "Sound Off: Fertility Treatments for Older Women", (1997, May 10), *The Atlantic City Press*, p. A10.
- Steinfels, P., (1997, March 8), "Beliefs", *The New York Times*, p. 29.
- "Will Cloning Beget Disaster? (1997, May 2), *The Wall Street Journal*, p. A14.
- Wray, H. (1997, April 24), "How the Politics of Biology Shapes Opinion, Policy, and Our Self Image", *U.S. News and World Report*.
- Young, C. (1997, May 6), "In the Beginning, Humans Created Biotechnology and It Was Confusing", *The Philadelphia Inquirer*, p. A19.