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# THE FIRST WORD

## WHEN WORLDS COLLIDE

[T]he new technological possibilities which have opened up in the field of biomedicine require the intervention of the political authorities and of the legislator since an uncontrolled application of such techniques could lead to unforeseeable and damaging consequences for civil society. Recourse to the conscience of each individual and to the self-regulation of researchers cannot be sufficient for insuring respect for personal rights and public order. If the legislator responsible for the common good were not watchful, he could be deprived of his prerogatives by researchers claiming to govern humanity in the name of biological discoveries and the alleged "improvement" processes which they would draw from those discoveries. "Eugenism" and forms of discrimination between human beings could come to be legitimized.

Really? We are grateful to discover that biomedical research aspires to oppression, world domination, and Mengelean eugenics. And it is extremely edifying to learn, after all this time, that "unforeseeable and damaging" are the inevitable concomitants of "consequences."

Thus begins the penultimate section of *Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation: Replies to Certain Questions of the Day*, a position paper issued March 10 by the Congregation for the Doctrine of the Faith, the Vatican's theological equivalent of the U.S. Congress's Office of Technology Assessment.

Most of the paper concerns reproductive issues related to the biotechnologies tangentially, if at all: surrogate motherhood, artificial insemination, *in vitro* fertilization, and the like. (In general, the church is against them.) But other sections directly address—and in effect, denounce—researches into human developmental biology, gene therapy, and some possible therapies for central-nervous-system diseases: Among other things, the Vatican white-paper seems to condemn all use of fetal tissue in research or therapy, and any therapy—especially any genetic alteration—not intended expressly and solely to benefit the unborn subject.

These Roman no's contrast sharply with another report from the biomedical researchers themselves. If the Vatican instruction is notable for its 1984-boding, *The Bristol-Myers Report: Medicine in the Next Century*, a poll of scientific opinion released March 4 by Louis Harris and Associates (New York), is disturbing only in its caution. For the most part, the only surprise is the lack of surprises in the responses of the 227 prominent scientists (21 of them "biotechnology scientists") asked to consult their sometimes refractory crystal balls to predict the state of medicine at the turn of the millennium.

True, 90 percent of the 29 neuroscientists interviewed did expect that transplants of fetal brain tissue should be an accepted therapy for certain disorders of the brain. (This is one of those queasy areas that the Congregation for the Doctrine of the Faith's instruction would seem to rule out, and indeed, only 79 percent of the researchers interviewed said that such transplants probably *would* be accepted.)

More remarkable was the researchers' devotion to conventional wisdom. The result is broad, but shallow. For example, a plurality of the 227 interviewees cited cancer therapy as the area most likely to benefit from genetic engineering by the year 2000, while the subset of "biotechnology scientists" was bullish about genetically engineered vaccines (88 percent expected a "much" or "moderate" impact on treatment), t-PA (64 percent), and Factor VIII (67 percent). Even here, though, caution was the watchword. For example, although recombinant vaccines for hepatitis, malaria, and cholera are pretty much in hand, some two-thirds of the biotechnologists expected these new tools to yield only moderate or slight improvement in preventing or treating these diseases.

Both reports deserve study. The Vatican position paper is profound but narrow; it dances on the head of a pin and touches biotechnology as if by accident. The Bristol-Myers report is broad but shallow. Yet, in their small overlapping volume, the two views of biomedical research conflict sharply.

Can we reconcile such differences, each with its own large, ready-made following? Or are the research establishment and the religious establishment irreconcilable juggernauts, bound for collision as the new millennium begins, a little over thirteen years from now?

—Douglas McCormick