

ETHICS & MEDICS

A Commentary of The National Catholic Bioethics Center on Health Care and the Life Sciences

THE CORRUPTION OF SCIENCE BY IDEOLOGY

The scientist, we like to think, dedicates himself to objective truth. He examines the facts and follows them wherever they lead—no matter what the consequences. Galileo supposedly serves as the prime example of this heroic stance, though the main difficulties he faced were not due to ecclesiastical prejudice, as is so often claimed, but to the fact that there was not, at that time, convincing proof of the heliocentric theory. What got Galileo into difficult straits was that he pressed his case in a belligerent and impolitic manner, despite the lack of evidence. The Church did not take Galileo to task because he had apparently contradicted the Bible (though that added fuel to the fire), but because he claimed that he could prove scientifically what in fact he could not.

Proof of the heliocentric theory appeared only well after the seventeenth century. In 1820, Benedetto Olivieri, O.P., Commissary of the Holy Office, reported to Pope Pius VII that conclusive demonstrations of the earth's motion had finally been made. Two experiments, he said, had been done by researchers that showed the truth of the Copernican theory: objects dropped from a high tower showed a deviation to the east; and there was a measurable parallax for the star Alpha in the constellation Lyra. These experimental findings appeared prior to Friedrich Bessel's parallax measurement in 1838 and to Leon Foucault's experiments with the pendulum in 1851, though it is these two events that are (incorrectly) remembered as the decisive moments of discovery.¹

No one denies that Galileo was a man of scientific genius—or that he was treated very harshly—but the Church was right to demand a strict scientific demonstration of his theory before accepting it as fact. No one is obliged to simply take someone else at his word. Scientists, after all, are just like the rest of us. They have their personal biases, their preferences, and their prejudices. At a recent conference on stem cell research, I heard a scientist describe the progress that he had been making in the promising field of adult stem cells, only to have the next speaker, also a scientist, stand up and say that adult stem cell research was basically a fraud in which no progress had been made at all. When I asked the first man to explain how the second could so completely ignore what he had said only a few minutes earlier, he expressed no surprise. Scientists have their own systems of belief, he said, and can turn a blind eye toward any theory that does not agree with their own pre-established convictions.

This type of hard-headedness is not necessarily bad. Some scientists have pursued avenues of research that others had long ago abandoned as worthless, and then made important discoveries—despite the naysayers. But what we see today is not the lone scientist, struggling against the blindness of those around him, and working toward some ground-breaking new discovery. What we see instead is the scourge of political ideology creeping into science and corrupting it from within.

Denying the ABC Link

The most recent example of this problem is the denial of the abortion-breast cancer link. In the November 2004 issue of *Ethics & Medics*, Angela Lanfranchi, M.D., carefully examined the recent claims of Valerie Beral and others whose article in *The Lancet* denied that there was any increased risk for breast cancer among women who have had an abortion.² There clearly is, but before proceeding, let us look briefly once again at the facts.

The hypothesis that abortion leads to an increased risk of breast cancer makes perfect sense to any educated mind. The sudden removal of a child from a mother's womb certainly must have some effect upon her physical condition. Or shall we suppose that such a sudden change makes no impression at all? The body of a woman who has become pregnant undergoes certain physiological changes in preparation for the birth of her child. Some of these involve changes in her breasts, which undergo a development that prepares them for nursing. When a pregnancy is terminated, that process is abruptly ended, and it is perfectly reasonable to suppose that the developing tissues suffer some loss of direction. Following the removal of the child, all of the physiological processes alter, due to abrupt changes in hormone levels in the mother. Specifically, human chorionic gonadotropin, which is responsible for full and protective breast maturity, is eliminated by the termination, leaving the breast cells immature and susceptible to carcinogens. It should not be surprising that some of these cells should become cancerous.

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THE ABORTION-BREAST CANCER DENIAL

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INVESTING IN A HIGH-TECH WORLD

HOW TO AVOID THE MORAL PITFALLS

Charles Neubecker

The hypothesis appeals to common sense, but we must also see whether there is any scientific evidence to support it. What we find when we look at the available studies, as Dr. Lanfranchi has pointed out, is that there is a great deal of support in the literature.³ In fact, the majority of the scientific studies that have examined the possible connection between abortion and breast cancer have shown a definite link. Not all of them, of course, but the preponderance of evidence points in that direction. Cancers tend to develop in those types of breast tissue that appear in early and mid-pregnancy. These are the immature Type 1 and 2 lobules, as Dr. Lanfranchi explained. When a pregnancy ends early, it is these tissues that remain undeveloped, thus becoming a potential site for the ravages of cancer.

But we are told by some that this reasoning is incorrect, and that when one looks carefully at the studies so far published, there is no appreciable evidence of a connection between abortion and breast cancer at all! Such a claim might have been believable if the analysis carried out by Beral and her colleagues had held up to scientific inspection, but that is not the case. The published study in the *Lancet*, purportedly one of the most definitive “meta-analyses” yet carried out, was seriously flawed. Specifically, it omitted many studies that showed a link between abortion and breast cancer—and as Dr. Lanfranchi showed in our November 2004 issue, Beral and company could give no good reasons for those omissions. Also, the authors chose an inappropriate control group for their comparison. Obviously, one must compare women who have ended pregnancies with abortion to those who carried their pregnancies to term, and not to those who have never been pregnant.

The Influence of Ideology

Would it be cynical to think that the issue that causes this unwillingness to confront the facts squarely is abortion? There is no topic that is more divisive or that carries with it more ideological freight. In another day and age, the commitment of the scientist to the ideals of research might have assured us of the objectivity of any study published in *The Lancet*, but we can no longer be so confident. Secular society has its own dogmas, and these cannot be challenged without incurring the wrath of new inquisitors who know how to use tools that are as effective at silencing dissent as those wielded against Galileo. Professional ostracism means not only social isolation, but also exclusion from the major grants, speaking engagements, and other professional opportunities that make for a successful career.

Jacques Derrida died in October of this year. For those who do not know of him, he made his name by denying that there is any objective truth. This thesis won him great fame in America, especially in the humanities. Texts, Derrida said, do not have any inherent meaning, not even that supposedly given to them by their authors, but each of us brings our own interpretive understandings to the text and imbues it with our own subjective understanding. Derrida’s deconstructionism has seriously corrupted the study of the humanities in America. The field now lies in rubble, but the sciences were supposed to be immune from this kind of debilitating attack.

The Beral study is therefore cause for alarm. When a leading scientific journal allows its pages to be used as a political platform, and sets aside objective standards of scientific research, we must begin to wonder whether the spirit of Derrida has infected even scientific discourse. Scientific papers should arrive at conclusions based on a review of the facts. Picking conclusions ahead of time, and arranging the evidence to support them, will only serve to undermine the respect that scientific inquiry deserves. All of this would seem to be obvious, but the fact is it must be said.

The ideal of the scientist who has set aside all preconceptions, dogmas, and political agendas, and who is willing to pursue the truth wherever it leads, no matter what the consequences, remains the standard—yes, even in politically volatile times such as our own. Such times, in fact, are the only ones that matter. The unwillingness of scientists to speak out against the shoddy research that is being advanced by those who deny the abortion-breast cancer link is a very serious breach. The lives and health of millions of women are put at risk.

There is a great deal at stake here. When the public learns that a causal link between abortion and breast cancer has been downplayed by the scientific community—for reasons that are ideological rather than factual—the feeling of betrayal will be strong. Science needs to stand as an independent discipline, one that follows its own set of principles and that does not suffer interference from those outside its field. But when it abandons its commitment to the truth and makes itself a party to political aims, the scientist, like any other, must be called to account.

To speak against the secular dogmas attending abortion is to suffer public censure, but those who seek to protect such outdated dogmas against the advance of science are now the scientists themselves. When Galileo was forced to abjure the theory that the Earth revolves around the Sun, he reportedly said in an audible mutter, “And yet, it moves.” Today, in view of the denial of any link between abortion and breast cancer, we can say, with Galileo, “And yet, it is there.”

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Notes

¹William A. Wallace, O.P., “*Fides et Ratio*: the Compatibility of Science and Religion,” in *What Is Man, O Lord? The Human Person in a Biotech Age*, ed. Edward Furton and Louise Mitchell (Boston: The National Catholic Bioethics Center, 2002), 159–161.

²Angela Lanfranchi, M.D., “The Abortion-Breast Cancer Link Revisited,” *Ethics & Medics* 29.11 (November 2004): 1–4. Dr. Lanfranchi responds to Valerie Beral et al., “Breast Cancer and Abortion: Collaborative Reanalysis of Data from 53 Epidemiological Studies, Including 83,000 Women with Breast Cancer from 16 Countries,” *Lancet* 363.9414 (March 27, 2004):1007–1016.

³Angela Lanfranchi, M.D., “The Abortion-Breast Cancer Link,” *Ethics & Medics* 28.1 (January 2003): 1–4.

INVESTING IN A HIGH-TECH WORLD

Making stock market investment decisions in today's world is becoming far more complicated than judging suitability by traditional financial analysis—scrutiny of balance sheets, profit and loss statements, and investigating recommendations from the financial media.

A Company with Promising Research

I am retired from the international oil business and spend considerable time analyzing stock investments to assure the financial future of my family and most importantly to ensure not having to return to full-time work at an advanced age! In my retirement I am very active in many volunteer activities, including being a volunteer teacher at a re-established Catholic university in Ukraine, pro-life work, and Knights of Columbus activities. So I depend on my investments to pay the family bills.

For many years I had an investment in Novo Nordisk, a European-based pharmaceutical company specializing in supplies for diabetics. This is of great personal interest because my college-aged daughter has had type 1 diabetes since she was ten years old. I might mention that this corporation has been an excellent investment during the years I have held the shares of stock. Recently, I was reviewing its annual report and saw a reference to promising work on cell research without being more specific. That raised my antennae because I do volunteer work with the Catholic Pro-Life Committee of North Texas and know about some of the moral issues involved in embryonic stem-cell research. This research destroys the embryo, a human life, by tearing it apart in order to remove the inner cells. Because medical science has proven that human life begins at conception, we know that an embryo is a human life, despite its small size, and must be protected from harm. In contrast, research on adult stem cells or umbilical cords does not destroy human life and has no such related ethical issues.

The *Catechism of the Catholic Church* (Collegeville, MN: Liturgical Press, 1994) says the following when discussing abortion, which also applies to embryonic stem cell research:

Human life must be respected and protected absolutely from the moment of conception. From the first moment of his existence, a human being must be recognized as having the rights of a person—among which is the inviolable right of every innocent being to life. (n. 2270)

The *Catechism* also says with regard to the human embryo: "Since it must be treated from conception as a person, the embryo must be defended in its integrity, cared for, and healed, as far as possible, like any other human being" (n. 2274).

A Decision Needed

I promptly sent an e-mail to Novo Nordisk asking for further information on what type of cell research they were contemplating, hoping their answer would be research on adult stem cells. Its North America Investor Relations manager was very courteous and quick to get back to me. His reply referred me to their website: (http://www.novonordisk.com/sustainability/positions/stem_cell_research_uk.asp). Here is a summary of Novo Nordisk's activities and policy positions from that website (with my comments in parentheses): Their research efforts so far have been on mouse embryonic stem cells (no problem). They believe it essential to proceed with research on adult stem cells (no problem) and embryonic stem cells (big problem). They will not use embryonic stem cells when the same results can be found with adult stem cells. The company does not see any need for therapeutic cloning "in the foreseeable future." (Their qualification concerns me. Why not an outright dismissal?) They believe reproductive cloning is unethical and they support a global ban (excellent). The manager also pointed out that the Juvenile Diabetes Research Foundation had a similar position on embryonic stem cell research (no comfort there).

I replied that I was very much against any kind of research that was destructive to human life and also that my diabetic daughter was likewise. We do not accept that the oft-proclaimed utilitarian objectives in research or actual medical developments trump the intrinsic value of human life. My daughter rejects medical developments that potentially would help people like her if the means to those ends are ethically immoral or questionable.

After some additional exchanges of correspondence with Novo Nordisk and discussions with my daughter, I told them that I could not accept their research and possible product development, even if my involvement is indirect because I am a small shareholder. I subsequently sold the stock.

I regret that an otherwise admirable company may get involved in such research. Looking back over the annual report, Novo Nordisk is doing some great work for people with serious diseases—diabetes, cystic fibrosis, and asthma. It is an issue of the ends not justifying the means.

Principles

What is an investor to do? I propose some modest steps:

1. Know what you already own. Examine annual reports. See what they are doing on research and development or what products they sell. For example, do you know if a company makes birth control pills? Some contraceptives may also act as abortifacients. If the company makes vaccines, are the vaccines sourced from ethical tissue? A major American pharmaceutical company, in which I owned shares, makes a vaccine sourced from the tissue of abortions. After I found that out and received an unsatisfactory letter from the company, I sold my shares.

2. Investigate potential stocks vigorously with regard to ethical issues as well as the traditional financial analysis. Recently, a financial magazine recommended a foreign



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biotech company. The financials of the company looked great—a promising, profitable biotech company at an attractive price. However, something made me think they may be involved with in vitro fertilization, a process which discards embryos. I e-mailed them and their Investor Relations Manager promptly replied that in fact they did such work. Other examples of improper products are RU-486 (“the morning after pill”) and the intrauterine device (IUD), which prevents implantation of the embryo in the uterus, leading to its destruction.

3. If something looks questionable, send the company’s Investor Relations Manager an e-mail with your questions or concerns. They are usually very prompt in answering current or potential shareholders. If they do not answer, that probably also has some meaning.

4. Do the same with mutual fund investments. Recently I realized that one of my mutual funds had investments in a radio network under fire for broadcasting indecent programs. I sent the fund company an e-mail, asking information about it. They replied that the information had just come out so they were not sure if they would sell their position in the radio network or not. Mutual funds should do a thorough financial and business review of a company before making a decision to buy its shares—in this case the fund company was located in the same city where the indecent broadcasting was coming from! Needless to say, I sold the mutual fund shares. Tell them when you sell and give them the reasons.

5. Watch what your companies are doing on charitable contributions. Are they funding nonprofit organizations that are doing bad things—part of the “culture of death” about which John Paul II has warned us? This information can sometimes be found on company websites or on the websites of the recipient organizations. There are a number of websites that keep track of corporations making

contributions to charities whose activities are contrary to Catholic doctrine.

6. Once you have done your research and made your investment decision to sell a stock or not invest in a stock, let them know about it, but do so in a Christian way. Let them know that you care about them and wish to draw their attention to ethical lapses. Corporations are not monolithic; the person you correspond with may agree with you, especially if you make your case in a reasoned, polite, Christian manner. Having worked in business for thirty-two years, I know that companies pay great attention to correspondence from investors and customers—current or potential. It is often assumed that one letter means a hundred or that a thousand people believe the way you do but have not bothered to write. Do not just sell your shares—thousands do so every day and a company has no way to find out why shareholders are selling unless they are told.

7. Also pay attention to where you shop. If you discover that the company markets ethically questionable things, send them a polite e-mail message with your concerns.

Summary

Investing today is much more complicated than in the past because the world has become more complex and many businessmen are prepared to do whatever makes money—ethical issues discarded. On the other hand, ethically minded investors have many more tools: company information available via the Internet, wide distribution of papers on medical research, and other information on ethical issues. (You usually cannot count on the major media for judgments on ethical issues). Use all the tools available so investing can be part of an ethics-based behavior.

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