

## **Biotechnology and the Creation of Ethics**

Written by Raymond R. Coletta's

Review By Daniel Erskine

Professor Coletta attempts to articulate an objective ethical theory governing the promulgation of biotechnology in the American and global context. His focus is on the impact of genes on human behavior. The speed of biotechnology contributes to the rush to commercialize genetic material and to the deterioration of normative ethics and law. The development of biotechnology is controlled primarily by biologists and secondly by bio-technocrats and scientists. With the domination of scientific ideology, biological exploration plunges ethics into a bottomless chasm. The result is the swift development of the biotech industry and the commercialization of the processes creating genetic patterns and the procedures manipulating human genes.

These concurrent events foster a lack of perspective concerning the ethical import of biotechnological actions. Businessmen, researchers, and scientists, as well as market forces contribute to the lack of reasoned ethical consideration by pushing for frequent and rapid scientific advances while time alone allows humans an opportunity to gain the necessary perspective to participate in ethical reasoning. As such, the poignant questions posed by biotechnology are addressed without the proper perspective essential to counterbalancing the speed of science. Therefore, the answers to those questions are unfettered by ethical and legal considered judgment. As a result, the author contends that human beings will become a race of utopian individuals whose ethical behavior and pure thought is predetermined by the biologist who doubles as deity—or the wizard behind the curtain.

The professor then looks toward the capability of geneticists to engineer human emotions, ethical perspectives, and a sense of justice. Human ethics, thus, are predetermined by genes. Human genetic makeup resulted through the evolutionary process of natural selection, and the brain itself is a result of this process of natural selection. Rather than a product of environmental influences, the professor asserts our behavior is in large part implanted by our genetic code. Our brain is the repository for our ethical and moral thought. Emotions are also seated in the brain, and are subject to manipulation just as the brain itself is. Through genetic manipulation of the brain, an individual's sense of ethics is created. The possibility therefore arises of choosing ethical norms, implanting them, and ultimately creating an idea of ethics that is the same for every human individual.

In manufacturing the human ethical norm, man's belief system is altered by the skilled precision of a genetic engineer. The same engineer will help parents choose the color of their daughter's eyes and her behavior. Provided of course with the choice between Armani or Polo designer genes, parents construct a complete rational, ethical individual tailored to the exact specifications of their own master blueprint. All this occurs against the backdrop of the free market of genetic material.

Professor Coletta then asserts that law, as it shapes the behavior of man, will no longer be necessary. Expertly created genes will govern human conduct. Socially beneficial behavior enforced by law will give way to genetically constructed behavioral norms. These legal norms are implanted, so the need for law making diminishes with the promulgation of genetic engineered human beings. The correct utilization of biotechnology, the professor argues, is to address and construct new legal norms

responsive to empirical data collected through scientific evaluation of human responses to environmental stimuli.

Professor Coletta concludes that current ethical thinking does not address biotechnological concerns. The failure to do so leaves the sector unrestrained. The lack of restraint could produce an extinction of the human race as much as an enhancement of the human persona.

Can ethical behavior be implanted within the human mind? A philosopher of the Middle Ages spoke of virtues infused by God. Thomas Aquinas, though, asserted infused virtue does not make one virtuous per se. Rather rational deliberation leads to a choice, which in turn created a virtuous action. Virtuous habits resulted from the repeated deliberative choice of man through reason of the same conduct. The existence of sin proved man was capable of choosing a different path than the one implanted within him. If God can not force men to think or act a certain way, then how may the geneticist do what the Divine will can not?

The professor contends not only ethics, but also laws, arise from a human's genetic code. He holds fast to the idea that man is simply a biological golem whose characteristics are infused through his DNA. Law is external to man, or to qualify the statement more precisely, human law is the imposition of certain rights by the sovereign upon the individual. Professor Coletta assumes scientists may, in the words of the Old Testament, write law upon the hearts of men. With the law and ethical action preinstalled, the human mind engineered with the precision of a German automobile will cease imagining and run in conformity with the cogs and pistons implanted within it.

Externalities shape our attributes as much as our interior genetic makeup. Sociologists and physiologists are quick to admit that surroundings contribute in large part to the development of the individual. Take the example of the farmer who is trained by party members in the tenets of communism, and the farmer in the American Midwest exposed to democratic liberalism. Likely their views of politics will be greatly different, but their conceptions of how to farm similar. Conditions fashion our personality and mode of thinking about particular issues.

Man is a construct of emotions and experiences. Genetics strives too high to reach the zenith of human capacity to structure life, without need for experience. Circumscribing human action has obsessed rulers for millennium. In the end Professor Coletta proposes a present day Platonic myth of metals where genes supplant bronze, silver, and gold. Ethics is subjective, and therefore represents the sum of all the inputs absorbed by the human mind. As much as man believes in the fallacy of his own omnipotence, his reason confines him to his limited capability. As a result of this fallacy, Professor Coletta proposes a paradigm illustrating the ability of genetics to mold man into a perfect virtuous being from conception with law as only an imprint upon an individual's genetic code. As Madison stated in an oft quoted Federalist paper "If men were Angels they would need no law." This seems exactly what the professor claims.