BOOK REVIEW


A profound shift in the scientific understanding of the organization of life came about with the elucidation of the structure of DNA in the 1950s by Watson and Crick. With dizzying speed the term genetic engineering has entered into popular vocabulary. Genetically modified corn and soybeans are a reality in our grocery stores. Genetically modified bacteria have become living factories producing human insulin that many diabetics rely on in their daily injections. The cloning of mammals, the human genome project, the promise of cures for many human diseases, and the potential to change essential human characteristics are biotechnological realities. In his book Changing Human Nature, James C. Peterson provides a highly readable Christian context for the debate over the manipulation of genes. That human gene modification will likely become a central controversy in religious debates in this century, possibly eclipsing abortion and stem cell research, is the stated motivation for the author in writing the book. In contradistinction to the objections to genetic engineering from many quarters of Christian religious thought, Peterson proposes, as stated in his introduction, “a theological approach, rooted and thriving in the historic Christian tradition, that is nuanced and substantially positive about our calling to shape our environment and ourselves, including our genes.”

The first part of the book entitled “Called to Shape What Is Entrusted to Us” uses the metaphor of sojourning in God’s Garden; we are given qualified dominion as God’s image bearers in this limited physical realm. The model he presents is one of stewardship and not exploitation. The theological argument that
any willful change to God’s creation constitutes a challenge to God’s authority, such as recently reiterated by Cardinal Karol Wojtyla, is carefully considered, and after many citations Peterson brings the reader to the view that they are to be active partners in the world’s repair. Peterson exhorts us to “do our best here . . . to multiply and apply our services to others and our world.” In the course of his explorations, Peterson brings up questions of “Should nature be sacralized?” “What is God’s intent for nature and our lives in it?” and “How can decisions regarding ecological activism be framed?” To give a sense of the depth and breadth that the author brings to bear on the questions and answers discussed, this first chapter of the first part of the book has 91 citations in 30 pages of text. This regard for exploring questions fully and allowing other voices to speak from classic and modern Christian sources as well as scholarly journal articles throughout his discussions, is one of the book’s strengths, especially for the reader interested in delving further into contrary views.

In the chapter entitled “Body and Soul” Peterson explores what it means to be human and within that context explores the extent to which genetics determines facets of human nature. Complexities of molecular biology, population genetics, genetic determinants of personality, and neuroscience are dealt with in broad strokes in order to contextualize the discussion; again the many footnotes enable the reader to delve into these areas further if interested. He argues that genes are simply parts of the physical body. There is no biblical injunction against changing the physical body as exemplified in circumcision as commanded by God. That the resurrected body of Jesus is changed from its pre-crucifixion form is given as another argument that modification of the human body is not contrary to biblical injunctions. He compares arguments that the human form should remain as it is now with arguments that the human form should change. Peterson clearly sides with the view that if genetic intervention can alleviate suffering and make life better for humans, and if this is done with the purpose of becoming fuller, more complete bearers of God’s image, then this is good.

The remainder of the book deals with specific ramifications
of accepting the argument that gene manipulation should be proceeded with. The issue of “cure versus enhancement” is wisely dealt with first, as many prominent organizations including the American Medical Association and the International Council for International Organizations of Medical Sciences, as well as a number of theologians, have placed this as the line that should not be crossed. But the question of what is cure and when does it become enhancement is not an easy one. Consider the almost universally accepted practice of immunization. Does the sensitization of the immune system by an artificially administered agent to ward off specific infective agents fall into the category of cure or enhancement, and is there a difference when the technique is applied to the prevention of polio as opposed to the prevention of genital warts?

Peterson goes to some length in the discussion of “what is disease?” which might be surprising to some, as this might seem to be a straightforward matter. Yet, consider how societal definitions of health have changed and how this impacts disease definition. A short stature child was once just that, short; modern day endocrinology would characterize such a child as deficient in human growth hormone (HCG) and tens of thousands of children in North America receive HCG injections three or four times weekly at an average cost of $80,000 to increase their height by 1.5 to 4 inches. Should this be classified as disease cure or enhancement? Peterson proposes four standards for genetic intervention: that it be safe, a genuine improvement, that it produce an increase in the recipient’s capacity, and that it be the best available use of limited resources. He proceeds to take each standard through the process of “actually thinking through how a wise person in the Christian tradition might address these issues.”

Peterson does not shy away from the issues of eugenics and the pall that this movement placed on the twentieth century. The “perfection” of the human race through forced coercion in marriage partners, forced sterilization of “undesirables,” and blatant racism was part of “respectable” scientific circles for many decades in early twentieth-century Europe and North America. Abhorrent as this seems now, it must be kept in mind that this
was not some Nazi induced nightmare, but the product of “rational” thought in the midst of the most “enlightened” scientific minds of the time, and we must take responsibility for the forces within each of us that can allow such atrocities to surface. The present reality is that the potential for unethical conduct of genetic modification does not come from ideological concerns, but from the imbalanced influence of economics on decisions which should not be driven by their potential for profit.

*Changing Human Nature* is a well written, closely argued, and thought provoking book that should appeal to the person willing to engage in the discussion of the ethics of molecular genetic modification from an in-depth, nuanced, Christian perspective. It will undoubtedly help to further the debate with well-reasoned positions and considerations for opposing perspectives.

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