

Book reviews

The ethical problems of genetic engineering of human beings

Willem Jacobus Eijk, 313 pages, Urbe, 1990, 25.00 DF. Available from the author at: Seminarie Rolduc, 6464 EP, Kerkrade, Holland

W J Eijk is a Catholic Christian philosopher and he submitted this thesis for the degree of licence in theology in Rome. It is written in rather stilted English and this does detract from the general flow of the text. The references quoted are in various languages, including English, German, Italian, French, Greek and Latin, but a source of translation for some of the Latin references is given.

Two aspects of genetic engineering are considered. Firstly, molecular genetic engineering or DNA recombinant technology, ie modifying cloned genes and returning them to living cells; and secondly cellular genetic engineering or non-molecular ways of altering the genetic material such as cellular fusion and transplantation of complete nuclei.

The first part of the thesis provides a brief explanation of the basic scientific principles involved. In the section on methods of transmission of hereditary diseases, statements which have been oversimplified lead to inaccuracies: for example, 'X-linked recessive gene disorders occur exclusively in males'. Techniques of molecular and cellular genetic engineering are described briefly, followed by a concise and clear statement on the list of conditions which must be fulfilled if somatic gene therapy of hereditary diseases is to be successful. The last part of the scientific introduction reviews methods of genetic engineering of germ line cells and their application in both the

fertilised ovum and in the gametes.

The main part of the thesis addresses two questions. Firstly, is it morally acceptable (and compatible with the philosophy of St Thomas Aquinas) to intervene in human beings on such a fundamental level? The views of various philosophers over the ages are considered, and Eijk discusses the 'creation command' ('God said ... "Be fruitful, multiply, fill the earth and conquer it" ...') which some authors interpret as a theological sanctioning of genetic engineering. He concludes that one cannot entirely reject man's intervention in human DNA on theological or philosophical grounds, because genetic interventions in human DNA done for therapeutic reasons are intrinsically good, as the faithful have always regarded it as their duty to combat evil (including disease). The question then evolves to become 'in what situations is modification of human DNA allowed?'

This section is the one in which the influence of the teachings of the Catholic Church becomes most apparent, particularly because the only acceptable method of procreation is via the conjugal act. Molecular genetic engineering of somatic cells and their subsequent re-introduction into the body (for the treatment of disease) is a form of autotransplantation and therefore acceptable. Germ-line therapy in fertilised human ova is regarded as unacceptable, however, because it is connected with *in vitro* fertilisation. Embryo experiments lacking any possible therapeutic benefit for that embryo are found to be morally objectionable because of the respect owed to the human individual from the moment of conception. For the same reason, the cloning of a series of identical embryos in order for some to be sacrificed for the diagnosis of gene defects is unacceptable. In addition, the view that the fertilised egg is ensouled from the moment of conception means

that the author concludes that genetic engineering in gametes rather than fertilised ova would be preferred, on condition that fertilisation would not be by artificial means.

For Catholics grappling with the various complex issues discussed in this thesis, the extensive references and consideration of statements from the Vatican and the Bible will be useful. For non-Catholics involved in genetic engineering, however, the book will be interesting but rather restricted in its use, because those aspects of genetic engineering which are totally unacceptable to the Catholic Church (for example IVF and cloning) are not discussed in much detail, and other moral viewpoints in these complex fields are not really considered.

FRANCES A FLINTER
Division of Medical and Molecular
Genetics, UMDS, Guy's Hospital

Naming the silences: God, medicine, and the problems of suffering

Stanley Hauerwas, 154 pages + xiv, Grand Rapids, Michigan, 1990, William B Eerdmans Publishing Company, \$9.95

This is a book by a professor of theological ethics which sets out to look at the problem of suffering, especially the suffering of children with leukaemia, from a theological point of view. In doing so, however, it also examines what is going on in the minds of the patients and the attitudes and actions of medical and nursing staff. The book can, therefore, be read at two levels, the theological and the practical.