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Fiction and Reality in Genetics' Brave New World

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An Overture

Fiction and Reality in Genetics' Brave New World

Brave New World was first published in 1932. In its early chapters, Huxley painted a fearsome, though fascinating, sketch of a future world warped and controlled through genetics. Babies are "decanted" from glass tubes after development in mechanical "wombs." Mental and physical talents (or lack thereof) in the new decants have been predetermined by selection of the right combination of egg and sperm from a genetic supermarket. This was all far-fetched fantasizing in 1932, but the science fiction of one generation remarkably becomes scientific reality a generation or two later.

It is now 1982. Human eggs and sperm have been successfully united within glass laboratory containers. Though the embryos that resulted from these unique, artificially induced conceptions were not nurtured in a nonliving "womb," some have been implanted in genuine wombs and eventually were born by the usual biological method.

1982 has biological technology of far greater sophistication than was predicted in 1932. Take the Gene Machine, for instance. For a mere \$50,000 the device can be installed in your laboratory. Resembling a Ford assembly line in its systematics, the Gene Machine takes stock molecular parts and automatically forges strands of DNA. The machine's "brain" is a microprocessor. Selected nucleotide links are conveyed to a reaction chamber (womb?) where they are linked into coded chains and finally spiralled into the famous double helix. At this point, entire genes are not being synthesized, but significant gene fragments are. It is anticipated that fragments will soon be meshed from whole genes. These contrived genes will be used to locate normally occurring genes on strands of DNA found in cells of humans and other organisms. Or, custom-made genes may be inserted into the DNA strands of bacteria, converting these minuscule cells into controlled producers of desirable proteins.

Fiction becomes fact. Dreams become realities. Nightmares become . . . ?

Alan J. McCormack, *editor*