According to NationalGeographicNews.Com, in 2003 Chinese scientists at the Shanghai Second Medical University "successfully fused human cells with rabbit eggs." The story also reports that last year in Minnesota, researchers at the Mayo Clinic "created pigs with human blood flowing through their bodies," while at Stanford University an experiment is being contemplated "to create mice with human brains." No wonder, then, that many people are worried about the ethical implications of genetic engineering. They read about cloning or "harvesting" embryos for genetic material, about fusing human with rabbit cells, and they wonder whether we have not started firmly down the path described by Aldous Huxley in Brave New World. Today we cull certain biological material from so-called "dispensable" embryos; tomorrow might we not have factories for the production of children carefully segregated according to genetic endowment?

But if many people worry about what genetic engineering portends, others worry primarily about what misplaced public anxiety about such scientific research will mean for the progress of science. Such people are not necessarily insensitive to ethical issues; but for them the search for scientific truth is ineluctable. Public opinion might delay the march of progress. It will never entirely derail it. So (they argue) it behooves us to pursue science wherever it leads. If we don’t, someone else will, and we in the West are better equipped than anyone to deploy new technologies wisely and humanely than. To oppose the application of genetic engineering (the argument goes) is to be a latter-day Luddite, railing impotently against a technology whose effects might be painful at first but ultimately liberating.

It is a mistake to dismiss out of hand either side of the argument: those who worry about genetic engineering, or those who worry about the worriers. Consider the plus side. The therapeutic promise of genetic engineering is more than enormous: it is staggering. No one who has seen somebody suffer from cancer or Parkinson’s disease or any of the many other horrific ills that the flesh is heir to can be deaf to that promise. Of course, any powerful technology can be put to evil purposes as well as good ones. In this sense, one might say that technology is like fire. It is neither good nor bad in itself. It is good when used appropriately for good purposes, bad when used
inappropriately or for evil purposes.
It would be pleasing to think that we could apply some such calculus to determine the moral complexion of a particular application of genetic engineering. It is not at all clear, however, that the moral quandaries with which genetic engineering confronts us can be solved by such a calculus.
Part of the problem is that the creed--familiar to us from Marxism--that "the end justifies the means" seems particularly barbarous when applied directly to human reality, as it is in genetic engineering. Are all embryos potential candidates for "harvesting," or only certain embryos? And what about newborns, another good source of genetic material? Are certain infants to be regarded as potential "raw material" for genetic experimentation? Which infants?
It is easy to conjure up a nightmare world in which some human beings are raised for spare parts. Already in certain parts of the world, the bodies of executed criminals are raided for kidneys, corneas and other body parts. Why not extend the practice?
My own belief is that humanity is on the threshold of an awesome moral divide. Recent advances in the technologies of genetic engineering--cloning, stem-cell research, and the like--confront us with moral problems for which we have no solution. Perhaps the biggest problem concerns the nature of the technologies involved.
When we look back over the course of technological development, especially in the last couple hundred years, it is easy to be a technological optimist. Science and technology have brought us so many extraordinary advances that one is tempted to close one's eyes take a leap of faith when it comes to technology. No doubt science and technology have brought us many destructive things, but who except the hermits among us would willing do without the conveniences--including life-saving conveniences--they have bequeathed us? It is impossible, I think, for any rational person to say "No" to science and technology. The benefits are simply too compelling.
But can we afford to acquiesce and simply say "Yes"? Are there lines to be drawn, limits to be respected? If so, where do we find the criteria for drawing those lines and limits? There is no simple or pat answer to such questions. Perhaps the one thing that is certain is that we are operating here in a realm beyond certainty. No one will come up with a formula that can be successfully applied to all cases.
There are two dangers. One is the danger of technophobia: retreating from science and technology because of the moral enormities it makes possible. The other, more prevalent danger, is technophilia, best summed up in the belief that "if it can be done, it may be done. There are many things that we can do that we ought not do. As science and technology develop, we find ourselves wielding ever greater power. The dark side of power is the temptation to forget its limitation. Lord Acton was right to warn that "Power corrupts, and absolute power corrupts absolutely." None of us, of course, really commands absolute power. Our mortality assures that for all of us--rich and poor, brilliant and obscure--life will end in the absolute weakness of death.
But the exercise of power can be a like a drug, dulling us to the fact of our ultimate impotence. It is when we forget our impotence that we do most damage with the power we wield. At the end of magisterial book Main Currents of Marxism, the Polish philosopher Lezsek Kolakowski observed that "The self-deification of mankind, to which Marxism gave philosophical expression, has ended in the same way as all such attempts, whether individual or collective: it has revealed itself as the
farcical aspect of human bondage." It would be a mistake to think that Marxism has a monopoly on the project of self-deification. It is a temptation as old as mankind itself. The Greeks called it hubris. And the book of Genesis warns us about such hubris with the story of the serpent’s promise to Eve: "Ye shall be as gods."

But modern technology has upped the ante on hubris. Our amazing technological prowess seduces many people into thinking we are or, with just a bit more tinkering, might become gods. The first step in that process is to believe that one is exempt from normal moral limits: that "if it can be done, it may be done." It is a foolish thought, a dangerous thought. But it is one with which we will all find ourselves having to contend as we continue to surprise ourselves with our strange cleverness.

Roger Kimball is Editor and Publisher of The New Criterion and President and Publisher of Encounter Books. His latest book is The Fortunes of Permanence: Culture and Anarchy in an Age of Amnesia (St. Augustine’s Press).