

Prospect

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Arrogant science?

BRYAN APPELYARD

Arrogant science?

Dear Bryan,

We both agree that genetics is the issue of our age. Reading the human genome, understanding how genes work and how to manipulate them, will feed us massive draughts of new knowledge in the years ahead. This will affect the way we live and think. Where we seem to part company is over whether to be optimistic or pessimistic about the uses to which this knowledge will be put.

I cannot see why you are so pessimistic. You and I are the beneficiaries of past quests for biological knowledge. Thanks to vaccination and penicillin, we need not fear infectious disease; we may have life-saving operations; if we are infertile, we may use in vitro fertilization to bring the joy of parenthood; if we are born unable to grow, we may take genetically-engineered human growth hormone; if we are born with combined immune deficiency, we may cheat death thanks to protein therapy and gene therapy. Famine is ever less frequent as a result of plant breeding. The biological disasters which may yet befall us—from cancer to BSE—are dangerous because we know too little, not too much. In 30 years of genetic engineering there has been not one "genetic accident," not one new virus or pest created, not a single case of bad news from the genetic laboratories.

A safe and beneficial past does not, of course, imply a golden future, which is why, like you, I support caution, regulation and public discussion. But thousands of scientists are beavering away all over the world on genetic issues. Are they pursuing evil, profiteering, racist abuses of science? Are they tampering with dangerous things? No. They are pursuing at least three promising cures for cancer. They are making vaccines for Aids. They are making early diagnostic tests for Alzheimer's disease and breast cancer. Against these gigantic future benefits, we can of course weigh possible disasters. Genetic knowledge might lead to discrimination by employers and life insurers. It might lead to the devaluing of disabled people. It might lead to "racist

vaccines" which make ethnic cleansing easier. It might lead to the ruin of third world agriculture. It might lead to people choosing blue eyes and Y chromosomes for their babies.

But it might not. Indeed, if we tread carefully, it need not. Compared with the tangible benefits of research accumulating all the time, these are very far-fetched dangers. My chief objection to the argument you make in your book *Brave New Worlds* (HarperCollins) is that you fail to weigh the sins of deliberate ignorance against the possible sins of knowledge. Not to pursue research is just as momentous a choice as the alternative. Suppose, on your advice, we banned some kinds of genetic research which caused you unease, and thereby postponed a cure for cancer. Could you look a dying cancer patient in the eye?

I am not saying that we must, therefore, allow all research, regardless of risk. Like you, I want scientists to be subject to popular restraint. I want human cloning to be subject to intense public debate and thorough regulatory scrutiny-as it is already. (Never has a new field of inquiry been so carefully regulated before it is practised-which is proper.) But I do not want to ignore or downplay the risks of deliberately chosen ignorance, either.

Your book is that of a beleaguered man. You feel that a bulldozer of "ideological scientism" is crushing your concerns for humanity, spirituality and proportion. I see your point. From organ transplants to test-tube babies, new biological advances have been greeted with horror when they first arrived, yet they have become commonplace anyway. For those who dislike change, there must seem no way to stop this bulldozer of change.

But is it any comfort to be told that I also feel beleaguered? All my attempts to sing the glories of rationalism, both practical and aesthetic, are met at every turn by the bulldozer of mysticism. The media is dominated not by my point of view, but by yours. Science, you say, should be "the proper object of scepticism"; but it is. If I had £1 for every time I have been told that science is "bleak," I would be rich.

The Spanish inquisition and the gas chambers of Auschwitz seem bleaker to me, yet they owed more to spirituality and humanity than they did to science. Just as science carries risks of abuse, so do religion and politics. But we do not conclude that religious belief or political ambition must be stamped out for fear that they be abused. We do not even regulate them-or not as tightly as research. I imagine that you support the individual's right to his or her own religious belief, even if that belief is the result of a silver-tongued evangelist rather than deep reflection. Yet when the individual is offered choices in the genetic sphere, you call us "passive and manipulated consumers of whatever science and its eager paymasters have to offer." Sauce for the goose.

Best wishes,

Matt

26th January 1999

Dear Matt,

I am pessimistic in the sense that all true conservatives-as opposed to the current swivel-eyed bunch who prefer to employ a capital "C" -are pessimistic. I am sceptical of grand human projects. Genetics is just such a project-perhaps it is the grandest of all, in that it aspires to take control of life itself. Of course I am the beneficiary of science-more than you, probably, because in an earlier age my childhood asthma would have been the death of me. But, equally, I believe in a science which knows its place and this, I think, is where we really part company.

You write of "the glories of rationalism" and say that the media are dominated by my point of view, not yours. These are closely connected errors. The dominant contemporary world view is reductive and mechanistic. There is certainly plenty of pop magic and anti-rationalism around, but it is powerless. Reductive mechanism always wins because it has proved narrowly but spectacularly competent in the past, because it has the money and because its opponents are all too easily-and often justifiably-dismissed as fundamentalists and/or nutters. More importantly, it wins because it is the only language everyone understands. The wildest alternative medicine freak yearns for scientific validation; and no human type carries more authority on daytime television than the doctor or, especially in the US, than the pop scientist with some new slimming or anti-depression scheme.

These things are all about reducing human life to the removal of obstacles to physical health and longevity. They are not about the truly conservative concepts of the good life and the good death-concepts which have all but vanished in the mechanistic and consumerised climate in which we live.

I don't know what you mean by rationalism-it is a word which has been cut loose from its exact philosophical moorings-but I would include the historical awareness of the

individual human destiny as part of something larger than itself and, therefore, larger than purely self-interested decisions. If this is, to the secular mind, irrational, then the secular mind is profoundly handicapped.

Genetics strikes deep into this larger realm; that is why, as we agree, it is so important. It extends the mechanistic view into our most intimate decisions. It is not enough to say that, because of the past successes of science, we should simply trust to the goodness of this invasion. Genetics is different because it invades the spiritual realm from which we were once able to formulate ethical judgements. It requires, therefore, more profound philosophical insight. It is one thing to control my asthma with a Ventolin spray, quite another to accept the seriousness of Richard Dawkins when he says he would like to clone himself "out of curiosity."

Grateful as I am for the benefits of science, I am not convinced that they have made anybody happier or more fulfilled. The current rhetoric-of yourself and others-that a combination of Darwinism and genetics has brought us to the brink of a full understanding of human affairs, is chilling. It threatens new disasters and a form of collective amnesia. It is also highly unlikely to be right. My rhetoric, I know, does not provide any answers. But I hope I make clear the magnitude of the issues. We must draw lines-you agree, otherwise you would not even be according my view the respect that you do. I am simply trying to show that we cannot necessarily leave it to the collective illusions of a "free" market to draw those lines.

Bryan

29th January 1999

Dear Bryan,

I have never understood why reductionism is such a dirty word. As you say, it's spectacularly competent; and I have never found that knowing the details obscures the big picture. I would not want to go to a car mechanic who considered my car holistically and refused to be reductionistic about my broken spark plug; nor would I want a doctor who functioned similarly. Genetic reductionism has brought new understanding of cancer, new understanding of why chemotherapy does not always work and new possibilities for cures. Where's the harm?

Of course, it has brought new puzzles, too. I hope I have never said that Darwinism and genetics have brought us to the brink of a full understanding of human affairs. A better understanding, but not a full one. That's the beauty of science, especially for

grant applicants: it always uncovers more questions than it answers. We know more mysteries thanks to science, as well as more facts. The origin of life, for example, is more thrilling to me than any religious question. It's the mysteries, not the facts, which drive me, and I don't like being told I cannot seek new ones to tussle with, especially if life-saving cures are spun off along the way.

I think we do agree about drawing lines somewhere. What divides us is that I see the dangers in drawing the line too narrowly, because I am inherently distrustful of the judgement of governments. You see the danger in drawing it too widely. You want to ban Dawkins from cloning himself because you do not approve of his flippant reason for doing it. I do not want to clone myself, but I am not convinced that somebody else's decision to clone himself has any implications for me, let alone his reasons for doing so. I doubt I could even tell if Richard had cloned himself, because I never saw him when he was a baby.

Drawing the line, let's be clear, is code for coercion by government on behalf of the anxious majority. That smacks of repeating, in reverse, the mistakes of eugenics: imposing on minorities a majority's preferred decision for the good of what you call individual human destiny. As a true liberal (as opposed to the swivel-eyed bunch who use the capital "L"), I believe, as far as possible, in letting the majority and the minorities each have their own ways, and asking them to tolerate each other. That way, you can steer clear of genetics laboratories and I can try gene therapy when I get cancer. Politicised decisions, even democratic ones, disenfranchise minorities. Individual choice does not.

You call that the collective illusions of a "free" market, but a government-imposed alternative sounds a lot less free to me-and I see no guarantees that it would not be equally illusory. Of course, choice does not work for public goods, including genetically modified crops, where the majority is left with no alternative than to eat them if they are included in processed food-just as minorities cannot refuse to use the light from lighthouses. But you don't base your argument on public safety. If you did, I would agree with you and draw the line at all research which had public implications and carried high risks and low rewards. In those cases, I would reluctantly allow government coercion of a minority.

Instead, you base your argument on the "invasion of the spiritual realm" by genetics, but this is surely a private matter on which you would not claim a monopoly of wisdom for any government, however benign. As it happens, I believe that genetics enriches my spiritual realm. Why don't we just agree that you will ignore it and I will embrace it?

Best wishes,

Matt

1st February 1999

Dear Matt,

"Do I contradict myself?" wrote Walt Whitman, "Very well then, I contradict myself." I am aware that my argument is incomplete, but it is necessarily so. For example, I want lines to be drawn but I distrust, as much as you do, the competence of government to draw them. Equally, however, I cannot bring myself to rely on the idea that freedom of choice will somehow dissolve all these ethical knots. Why? Because, first, we are all implicated in each other and all our choices are of universal significance-I am a Kantian in this respect. Second, because I believe that the key illusion of the free market is that it somehow evades all local, cultural and ethical issues simply by atomising the ethical-by banishing morals to the individual sphere. But you can only do that if you assume that the ethical is in place to start with, which it won't be if the free market idea is pursued to its logical conclusion. The point is that, for lines to be drawn and for ethical issues to exist at all, there must be a language in which spiritual reservations can be expressed-otherwise even your lines will be undrawable. That language barely exists today because scientism has won out in this century, "the worst in human history." The ambitious task I set myself in my new book was to help formulate such a language.

Bryan

2nd February 1999

Dear Bryan,

I agree that we need to find a way of discussing the ethical implications of the new

genetics because the issues are so urgent. I agree that the debate is not happening, at least not in a very constructive form, and therefore technology usually wins-not because it is discussed and agreed to be good, but because it finds individual demands in the market and satisfies them. If people with spiritual reservations feel they cannot express them, that is something we should rectify.

But their freedom should not be at the expense of those who want the technology (unless, of course, the technology has serious public effects). The way to satisfy them both is, in your elegant phrase, to atomise the ethical. Should we have delayed the introduction of test-tube babies, prenatal screening and gene therapy until you and others had found a language to discuss it in, and a good debate had been had? As it was, we went ahead-or rather, those who actually wanted to use in vitro fertilization, prenatal screening and gene therapy went ahead. Those who did not want them were free not to use them-or at least I hope they were. The people who were disenfranchised were those who wanted nobody to use the technologies, but I am prepared to see that view disenfranchised because I believe we should draw the line short of coercion wherever we can (that, to me, is the greatest lesson of this worst century in history). You are now asking me to revise my philosophy before the next round of technologies becomes available-cloning and designer babies, say-and to approve the coercion of pro-technology minorities to satisfy the spiritual minority. That sounds to me too much like the spiritual minority up to its old intolerant tricks again.

Matt

3rd February 1999

Dear Matt,

Tony Blair came out against Glenn Hoddle. Why? Because it fits with a brutal national mood which takes pleasure in kicking people when they are down. The new populism is not about democracy, it is about the rule of the mob, mediated by the phony apparatus of market research. This is why I fear and distrust the atomised ethics of which we speak. Apparently free moral judgements-whether of Hoddle or foetal experimentation-tend, in such a climate, to be callous bandwagon-jumping. You correctly identify the problems of my position, but you cannot, if you believe in drawing lines at all, deny the position itself. Ethics, if they are to be anything, must be about

more than consumer choice. I don't know how that can be, but I simply wish to light one affirming flame to that effect. I don't want people to be coerced, I simply want them to think in ways which acknowledge the full truth of human personality. Your assumption that this must involve coercion is one of the peculiar illusions of our time. There is such a thing as a felt, unspoken and, therefore, unenforced ethical culture. You may say that such a thing cannot be defended. Speaking about it only draws attention to the fact that it has been lost. But this proves my position tragic, not wrong. The point here is my insistence that there must be more to say after we have said we can cure cancer or prolong life. Of course, those can be seen as desirable, but they are narrow. Scientistic propaganda tends to say that they are the only things, the projects we are put on earth to complete. But all they do is improve life physically. They do not, they cannot, be about anything else. You may well agree with this, but read the propaganda through my eyes. The claims are enormous and they tend to drive out other claims-that, for example, the good life is more important than the long and healthy one. The idea of the good life-which comes, I suppose, from Aristotle-is the basis of all ethics. It demands a form of language which we are in danger of losing. Cure cancer, prolong life-fine, but allow us the space and freedom to see ourselves in larger, more generous and human terms. We must not be bribed out of our wider humanity. This, at the end of what we agree has been the worst century in human history, is a matter of some importance.

Yours,

Bryan