

## COMMENTARY/

**THE HUMAN ELEMENT**

by Bernard Dixon

As recently as 20 years ago, the University of Oxford did not deign to employ a full-time press officer, a professional mediator with the world outside. "And what, pray, is a press officer?" one can imagine Oxford's Chancellor asking, in the manner of an elderly judge boasting ignorance of heavy-metal music. There was simply no requirement for such an animal, when academe in general and Britain's senior universities in particular had little cause to sell their skills beyond the ivory tower. I recall one afternoon when my innocent phone call to Oxford was referred from one assistant registrar to another in the switchboard's ill-tempered and unsuccessful effort to locate *someone* willing to speak to a journalist.

But times have changed. So it was that I switched on television recently, and immediately recognized the face of a former colleague who is now one of several professional mediators employed in Oxford University's busy press office of the 1990s. She was answering questions about the use of animals in laboratories, and doing so uncommonly well. Following threats from animal-rights campaigners, she was explaining cogently and sensitively why there is a continued need for humane work with animals for purposes such as the development and screening of drugs and vaccines.

It was an excellent interview, based on a thorough understanding of the facts concerning animal experimentation, the development of alternative techniques and the arguments that are deployed on opposing sides of the issue. Most impressive of all, however, was not the weight of hard information, but the personable manner in which the arguments were put across. In the simplest human terms, it seemed absurd to imagine that such a transparently sincere and thoughtful person could support the painful and malevolent ill-treatment of animals, as caricatured by some factions of the animal-liberation movement.

I recount this story in answer to the problem which I raised last month—that of recognizing and responding to those elements of public anxiety toward biotechnology that are founded not on factual ignorance but on intuitive mistrust. Far too often, when the public fails to endorse the vigorous development of some novel piece of technology, stalwarts of the scientific community respond by seeing opposition and concern as based on nothing more than deficits in information. They imagine that the answer to all dissent, whether expressed as spirited hostility or introspective apprehension, is to make "the facts" more widely known. On this view, well-designed capsules of information, efficiently despatched, will dispel ignorance and drive out prejudice just as organised religion or organised atheism are supposed to supplant superstition. Spearheading this crusade for rationality is the wave of booklets, videos, and awareness-of-science programs that have been created in recent years.

There is, of course, nothing inherently ill-conceived about efforts of this sort. To take a concrete case, the U.K. Natural

Environment Research Council has produced an excellent video that describes the development of genetically modified baculoviruses as biological control agents. It has been widely shown—often by David Bishop, who is in charge of this work at the Institute of Virology and Environmental Microbiology in Oxford, and who has been tireless in his willingness to discuss the subject with any individual or group, any place, any time. Both the video and Bishop's own efforts have been models of public education and openness in scientific research. I do not join with those who sneer at such initiatives. Provided they are competently planned and executed, they can indeed help to reassure doubters and effectively counter misinformation disseminated by lobby groups wishing to abort new technology.

My complaint is about the failure of the ultra-rationalists to realise that factual information is only part of the story—that even the most seductively packaged information can be wholly ineffective in stilling anxieties that are subjective rather than rational in origin. This is where the human element is so very important. During the past 25 years of growing opposition to civil nuclear power, I have been amazed to see, deliberating on television as spokespersons for the nuclear industry, a most unprepossessing succession of individuals. By turns shifty or sinister, aggressive or merely unpleasant, they must have done more to provoke and reinforce nucleophobia than Chernobyl and Three Mile Island put together. They would certainly be first out of the basket in any normal person's balloon game.

Yet these speakers have not been deficient in "the facts." Their deficiency has been one of simple human appeal. It's a puzzle why an increasingly beleaguered industry should have expected the public to buy an argument or technology from characters from whom they would certainly demur to purchase an insurance policy, second-hand car, or holiday cottage.

Compared with this dismal picture, recent TV interviews in which Robert Winston of London's Hammersmith Hospital has discussed the preimplantation diagnosis of inherited disease have been highly effective. Time and time again, even when sorely provoked by the most bigoted critics, Winston has quietly and patiently explained his work and his belief in the benefits it can bring in the relief of human suffering and misery. For the average viewer, Winston's obvious humanity must have been at least as significant as his factual arguments in putting into perspective the intolerance of those opponents who denounce research into reproductive technology.

Efforts to promote factual understanding of a new technology can certainly encourage public confidence and trust. But these measures are inseparable in their effects from public perceptions of scientists as individuals—which can, indeed, be the more important of the two. There is a forcible message here for the biotechnology industry.