

nature

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When science turns up the unpalatable

THE Presidential Address of Sir Andrew Huxley to the British Association for the Advancement of Science, meeting in Aston, has been hyperbolically described in the press as "the first shot in what could become one of the most crucial and vitriolic scientific battles of the century". It certainly is an unusual, even courageous address.

His line of arguing is this. He asserts that "Science as a whole—the scientific approach to questions of all kinds—has come increasingly under attack . . . it is repeatedly suggested that the speed of scientific discovery should be slowed, and that scientists ought to suppress discoveries that seem capable of being used to the detriment of humanity". In a lengthy aside, he then acknowledges that scientists themselves often rely too much on grand unifying principles which inhibit their collection of evidence. But in a broader context too the collection of scientific evidence may be inhibited if it seems likely to touch on some particularly sensitive nerve in ordinary human affairs. Resistance, he claims, may be based on "Authority" or on the fear of the consequences of accepting the conclusion. Not for nothing does a Huxley hark back to the 1860s and the debate on this very matter occasioned by the publication of *Origin of Species*.

He asks if any topic stirs similar emotions these days. And he sees many features in common between the evolution debate of the last century and the current debate on the extent to which human ability is inherited, although he points out that the analogy would be better had Darwin gone public twenty years earlier when his case would have been weaker, but certainly not hopeless. The resistance these days to research in the field of the heritability of human ability comes from a feeling that our ethics may be undermined because the existence of substantial inherited differences would lead to unjust treatment of the less-well endowed, and that discoveries of below average ability would damage self-respect.

More sinister than anything in the evolution controversy, says Sir Andrew, is that there are actually scientists who regard the assumption of equal inherited ability as "something which does not require experimental evidence to establish it and which it is positively wicked to question because the conclusion might disagree

with their social and political preconceptions". Thus when someone (William Shockley) had the "courage to suggest systematic and scientific investigation" he was repeatedly turned down by the National Academy of Science. Sir Andrew accepts that at the time Shockley was advocating eugenic measures unacceptable to public opinion, but thinks the main reason for refusals was fear that it would be represented as a "commitment to an illiberal point of view unfavourable to American Negroes". He feels that such behaviour is an unjustifiable obstacle to human enquiry and impedes or distorts the advance of science.

Freedom for scientists to investigate whatever they want may be a valid rallying point in some circumstances and under some tyrannies. But scientists are already under some external constraints on their freedom, for ethical and financial reasons, and it is clearly not possible simply to say that everything that is observable and measurable ought, in the name of science, to be observed and measured. The question then revolves around the motives for doing research into heritability. There are, of course, two extremes—those who believe that the world should know that the less well-endowed are going to stay that way and those who believe that the whole thing is both scientifically unsound and an affront to certain people, and should be stopped forthwith.

Is there middle ground? If there is, and many intelligent and thoughtful geneticists believe there is, it needs staking out with immense care. Those who propose that research be stopped have some very human motives behind them, and it is no answer simply to wave freedom of scientific enquiry in their faces. Questions are bound to be asked about motives for doing more research, especially as there is little doubt that inheritance does play at least some and maybe a very significant part in the acquisition of ability. Some who want to do more only want to do so to rub in assumed inferiorities. What Sir Andrew should have done is take his argument further and set forth reasons why more research at this time, with its close proximity to sensitive issues, is desirable. Such a case can probably be made out but it would need a rather more spirited explanation of why we are better off with the knowledge than without it. □