Boycott of South African science

SIR—We are all white scientists and, like Festenstein, Sachs, Hepple and Shall (Nature 328, 570; 1987), three of us were also born and bred in South Africa. However, despite the fact that we abhor apartheid, we choose to live and work in this country. In essence, Festenstein et al. argue that if one sincerely opposes the system, there are only two moral options open to whites in South Africa: imprisonment or emigration. Willingly to choose imprisonment requires a degree of courage we do not profess to have, but, on the other hand, emigration can be (and often is) construed as a purely selfinterested act by black and white alike.

Although we acknowledge that the most fundamental need is to rid this country of apartheid, we feel that we cannot contribute to this cause by leaving and so distancing ourselves from a problem inherited from history. In this connection, we note that the ANC (African National Congress) and the UDF (United Democratic Front) have urged white South Africans to stay and contribute to the elimination of apartheid. Assuming that the majority of people who have left this country since Sharpeville (1961) did so for moral reasons - and not fear for their security or of unpalatable change — then certainly these progressive-minded people could have had only a positive effect on the future of this country if they had remained here. It is one thing to urge the international scientific community, from abroad, to shun "the self-interest of those who enjoy the privileges of white minority science" and quite another to try to face up to the problems of a country in conflict by physical presence.

We work at an institution that unconditionally rejects racial segregation and is committed to nondiscrimination in the selection of both its students and staff, as well as going to some (enough?) lengths to accommodate the less privileged, despite government censure. We accept the fact that in South Africa, neither the individuals nor the academic institutions they represent can live in isolation from the dominant social and political trends in our society; that by working in this country one can distance oneself from apartheid only by attempting to oppose it. But we believe that research and teaching which are not directed towards support of apartheid and, where possible, attack the roots of the system (prejudice, ignorance and economic inequality), have an important role both now and in the future. Surely continued cultural and scientific endeavour will benefit a new South Africa. We believe that part of our aim as scientists in this country should be to help with the advancement and education of the less privileged South Africans. We therefore reject statements questioning our integrity by those who have chosen the option of emigration.

The major issue is that developed countries (and those South Africans now living in them) should not seek to soothe their collective sense of outrage by attempting to destroy legitimate scientific endeavour and teaching in South Africa. That would be a cruel kindness indeed and one from which it might take many generations to recover, after the last vestiges of current discrimination have been removed. Would Festenstein et al. then be willing to return to help rebuild this shattered land?

In reply to the more general debate about the boycott of South African science (J. Maddox Nature 327, 269-276; 1987; J.G. Wilson Nature 328, 288; 1987; W.D. Stein Nature 328, 374; 1987) we would like to raise the following points: (1) It may be naive to think that a scientific boycott would have the 'desired' effect of bringing South African science rapidly to its knees. Rather, we believe that, as has been the case with the sports, cultural and the partial technical boycotts, South African science under pressure of a boycott will 'hang in there' for years to come. Despite what Wilson may think, the boycott will not be the agent of extinction for the 'dinosaurs', but rather one of regressive evolution. (2) The rapid urbanization that is, the downfall of the apartheid ideology - has been brought about by the search for jobs provided by science and technology. We therefore believe, unlike Stein, that a total standstill of South African science for 5-10 years would have a detrimental effect on the living standards of the underprivileged majority of our population.

Frontier technologies, especially in the minerals extraction industry, are the main breadwinners for South Africans. Many of these workers and their dependants need scientific and technical training fully to realize their potential so the current demand in South Africa is therefore for more and better education, not for a destruction of education in general. Additionally, South Africa is, particularly in the rural areas, a developing country in dire need of appropriate development in science and technology, particularly in the fields of water, agricultural and other natural resource management. A halt of advancement in these fields will hurt everyone, but least of all the white communities, whom Stein assumes will be hurt almost exclusively. Wilson has clearly grasped this point, but is wrong in assuming that we necessarily belong to a group of scientists who would secretly welcome an across-the-board scientific boycott.

However, the debate about a potential academic boycott has had very positive

effects within the scientific community. Stein has understood this remarkably well. The very idea of such potential actions has made many scientists, (ourselves included) aware of their vulnerability. Through the internal actions of Academic Staff Associations, at the more liberal universities some of these scientists may soon be forced openly to take a stance on the issues that confront us. Such an enforcement may possibly open the door for a type of selective boycott such as an academic 'Sullivan Code', as visualized by Stein (however, we feel that such a code would have to be applicable to educational and academic rights violations worldwide). Rather than across-theboard boycotts, we ask for the help of our colleagues abroad in establishing more positive ways of eliminating inequality, for example in creating affirmative action programmes at our academic institutions.

This country needs to continue to increase its efforts over the next few decades towards training black scientists and technologists — many of whom will be taking up executive positions in internationally competitive concerns — if it is to develop a reasonable living standard for all its people. An across-the-board scientific boycott would seriously hinder this goal, leading to a massive and irreversible 'brain-drain' (which is already occurring) and setting this country on a further slide towards greater entropy. At that point it will definitely be at the mercy of foreign economic exploiters and human-rights violators for an untold length of time. Apparent political freedom will then be hollow indeed.

Finally, we have discussed the academic boycott issue and the contents of this letter with several of our black colleagues. The absence of their signatures reflects disagreement with some (but not all) the points we have made, as well as a fundamental difference of opinion as to the value of debating academic boycotts. Nevertheless, one positive result of this correspondence is that it has led to an expansion of dialogue with our black colleagues on some of these very fundamental issues.

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• This correspondence is now closed.— Editor, *Nature*.