

Boycott of South Africa

SIR—The article on the academic boycott of South Africa (*Nature* 327, 259; 1987) contained various views, but nevertheless evidenced the value of even limited insight into South Africa's socio-scientific problems; but as a South African, I find the subsequent letters by Wilson, Stein and Wallis (*Nature* 328, 288 & 374; 1987) shortsighted and misinformed.

Wilson's letter is filled with vague assumptions and innuendos, for example ". . . some white South African scientists . . . secretly welcome the boycott . . .". Nobody I know supports this nonsense, and I challenge Wilson to prove this statement. Wilson's likening of the South African scientific and social scene to a war shows a total lack of insight into local conditions. The international media's lust for portraying necklace murders should provide sufficient evidence of who is doing what to whom. While African countries such as Ethiopia, Chad, Mozambique and Angola, where wars are raging, experience large dislocation of people and endless refugee problems, South Africa experiences an influx of foreign Africans wanting security and employment. How can Wilson say ". . . 17 million black South Africans are denied the possibility of a scientific education and career" when there are more South African black children in primary schools than there are white people in this country? Wilson refers to ". . . the people seeking to establish a non-racial democracy. . .". The track record of most previous colonies show that the number of democracies that emerged after the independence wave hit Africa in the 1960s can be counted on one hand. I would sincerely like to know whether Wilson has equally simplistic views on the situation in Northern Ireland.

Both Wilson and Stein refer to the possibility of scientists resettling during or after the so-called "change-over". After the string of broken international promises to whites in pre-independent Zimbabwe, the last thing many South African scientists will do is to accept promises of resettlement. In fact, we have come to see little good in "international" promises of any kind.

It is appropriate briefly to dwell on the possible future structure of South African science. I disagree strongly with the view that local science would be "dead" if isolated from the international scientific community. South Africa has so much going for it that the Jonahs of this world are bound to be disappointed.

First, I recall similar statements of imminent doom when South Africa left the British Commonwealth, or was barred from the United Nations plenary sessions, or when military or limited economic

sanctions were applied, or even when sporting ties were severed. None of the predictions materialized, simply because sanctions do not work. I believe that South Africans are faced with a similar challenge in the scientific field and that the international community can similarly prepare itself for disappointment. I also believe that communication (whether scientific or otherwise) has benefits to all concerned. Foreign scientists visiting this country normally leave with a new perspective of the problems facing us, and they succeed in creating a similarly widening view among the local fraternity. Understanding is already a significant step on the road to solutions. To challenge the writers' seemingly naive approach, I would like to ask whether you would change under threats of boycotts and isolation?

Second, the South African environment (unlike that in many industrialized and developed countries) contains many fields that have been virtually untouched by local science. A few examples will suffice: South Africa has largely unexplored deep-ocean features off its coasts such as the Agulhas current, eddies and fronts. It has an important fisheries zone in the Benguela region, much of which is still unknown. There is no local expertise to evaluate and prepare for predicted sea-level rise of the next century. We have only a rudimentary understanding of the role oceans play in local and global climate and weather. Many problems surround the occurrence of the giant waves in the Agulhas current that have caused considerable financial and other losses to international shipping. We have to grapple with an increasing demand on the coastal environment in terms of recreation and pollution. These are all features that can be or are being tackled with little international involvement, but in which there can be an extremely fruitful collaboration.

Obviously, the thoughts expressed here are my personal views. But I do challenge Wilson, Stein and Wallis to name one other country where problems (scientific, social and other) such as those in South Africa have been solved successfully. Until then, South African science will be well advised to concentrate on its own affairs, rather than become yet another misconstrued and discarded experiment on the road of international pseudoscience.

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SIR—I would like to make the following points about the recent correspondence on South Africa.

(1) The concept of a scientific boycott for political reasons is dangerous, because

anybody could easily become an 'outlaw'. It generates manicheist 'holier than thou' reactions. If it is acceptable for South Africa and apartheid, why not boycott the scientists of the many countries where apartheid is applied to the whole population, where nobody votes and unions and strikes are unheard of, where machine guns at the border are turned inwards to prevent people from voting with their feet and leaving?

(2) Attempts to strike at individuals, for example by boycott, on the basis of nationality, race or belief smack of precisely the attitude that generates apartheid.

(3) More fundamentally, scientists do not represent their government or their country; they represent themselves — individual scholars in search of the truth and dedicated to sharing their feelings.

Let us not make science the object of political football that sport has become.

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Doom and gloom

SIR—Efraim Racker¹ enlivens the scene by arguing with Chargaff in a collision of optimism versus pessimism, and ends by joining Chargaff's familiar lament for what's wrong with the world. Racker does not comment, however, on Chargaff's ghoulish prophecy of "a gigantic slaughter-house, a molecular Auschwitz, in which valuable enzymes, hormones and so on will be extracted instead of gold teeth"². Chargaff has worked himself into a fine lather, but, it seems, over nothing. Surely he must have heard that recombinant DNA technology, his *petit-enfant terrible*, supplies us with enzymes and hormones, thus doing away with the need to extract them from animal tissues? But perhaps he has not: he usually appears to reject his grandchild, the double helix, for its misbehaviour in escaping from the quiet serenity of his biochemical laboratory, first into the hands of its foster parents ("two pitchmen in search of a helix"³), next into a "publicity carnival"³ and now, into the market-place.

Elsewhere in his Commentary, Chargaff might have acknowledged (but didn't) that his description of "mass production and industrial exploitation of human embryos" was developed in much more detail by Aldous Huxley⁴, in a book first published in 1935.

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1. Racker, E. *Nature* 329, 100 (1987).
2. Chargaff, E. *Nature* 327, 199–200 (1987).
3. Chargaff, E. *Nature* 248, 776–779 (1974).
4. Huxley, A. *Brave New World* (Harper, New York, 1946).