Reviewing a review

'The criticisms are legion, and need endless repetition: I believe in the imperative need for communication and understanding.' This endless list of charges forms the basis of an extraordinarily harsh assessment of science in this country, that appeared in the 17 September 1998 issue of the British journal, Nature (395, 233-234). The author, Pushpa M. Bhargava, former Director of the Centre for Cellular and Molecular Biology, Hyderabad and a prominent biochemist used the occasion of a review of a book entitled Nonsense in Indian Science by Dilip Salwi, to launch a wide ranging indictment of the Indian science establishment. To an unfamiliar reader (and I suspect the Nature review targets a particularly susceptible section of readers abroad) it would appear that science in India is really in a parlous state, ruled by a 'mafia' completely lacking in intellectual and personal integrity. If one takes Bhargava literally, then plagiarism is the order of the day, science managers border on the scientifically illiterate ('they hardly ever read serious science') and the Academies elect to their fellowship scientists 'who do not have even an independent paper representing their work in a journal indexed in Current Contents' (Alas, Bhargava too is in the grip of ISI, Philadelphia). Bhargava's ire is also directed at all three of our national science academies (Indian National Science Academy, Delhi, Indian Academy of Sciences, Bangalore and the National Academy of Sciences, Allahabad), from all of which he resigned some years ago.

How much truth is there in Bhargava's scathing attack? Is it merely the case of difficulties in adjusting to an uncomfortable situation, where an once influential scientist finds himself on the sidelines (a not uncommon phenomenon in other spheres of activity). Indeed there are other scientists in retirement, who suddenly discover that after their departure from centre stage, all is crumbling. They fall prey to the all too common, 'after me the deluge' syndrome. Bhargava did indeed build one of our most modern laboratories in molecular biology at Hyderabad and successfully translated a vision he had held for years. That would hardly have been possible if there was not a broad consensus on the need for excellence in modern biology and if the venture had not been fully supported by the science managers of that time. The journal Nature, in the characteristically mischievous manner of a successful magazine (which, of course, makes for good reading) has provided ample and visible space for Bhargava to publicly display his sense of frustration. I did not however, quite understand the title - 'The cowboys in Indian science'. It did take me back to a misspent childhood and visions of the Wild West as seen through comics, where the cowboys were always the good guys while the Indians (red, of course) were the screaming villains.

The first reactions of those who now constitute the scientific 'establishment' have been angry, but some reflection might, in fact, bring temperatures back to near normal. Bhargava is not the first person to be sharply critical of the rising mediocrity and lack of accountability. Previous laments have, of course, appeared in less noticeable journals. Bhargava has admitted that we do have centres of 'excellence' (whatever the word signifies) and gently chides Salwi for not recognizing this fact. He proceeds to name the Tata Institute of Fundamental Research in Mumbai, the Centre for Cellular and Molecular Biology in Hyderabad, the Centre for Development of Telecommunications in Delhi and the Centre for Development of Advanced Computing in Pune. Somewhat, parochially, I did notice that the Indian Institute of Science was not mentioned, but this could, of course, have been a Freudian slip. Bhargava attributes much of what is wrong to the absence of 'democratization' of our science management. It seems almost inevitable that the virtues of democratic processes are most evident to the once powerful when they no longer command authority. But Bhargava is hopeful. He says, 'those who uphold excellence must act in concert to
throw out mediocrity and corruption—intellectual, moral and financial. This is beginning to happen and, therefore, there is hope.'

Interestingly, plagiarism, cronyism, fraud and dishonesty exist everywhere. Bhargava admits this but argues that 'nowhere is it on the same scale and so endemic as in India'. Here he caters to a Western gallery and overstates his case. The publicized investigations of scientific misconduct in the United States and Europe are fresh in everyone’s memory. In science, as in all other professions, there are those who transgress acceptable norms of behaviour. Bhargava ignores the fact that there have been debates and discussions on the state of science in India and that many serious scientists have been concerned about some of the issues that he raises. In a peculiar throwback to a colonial age, Bhargava, a once prominent member of the establishment, seeks to present his case to a predominantly Western audience. It is precisely this weakness that has bedevilled our science for so long. A mindless desire for approbation from overseas has dominated the attitudes of many leaders of the scientific establishment. Self confidence and self esteem have been conspicuously missing and Bhargava’s tirade publicly displays an attitude that is undoubtedly shared by others. The path of science in India over the last century has been rocky, but it has been brightly illuminated by many shining stars. There have been men and women of brilliant achievement, institution builders to whom we owe a debt of gratitude (ironically, Bhargava is among them) and of course legions of teachers and researchers, who in their modest ways have ensured that science occupies an important place in modern India; in marked contrast to many countries of the Third World. Reading and rereading Bhargava’s essay I could not but help being saddened, but then I was reminded of the end of Robert Browning’s lament about William Wordsworth in his poem ‘The Lost Leader’:

‘Best fight on well, for we taught him—strike gallantly
Menace our heart ere we master his own
Then let him receive the new knowledge and wait us
Pardoned in Heaven, the first by the throne’

P. Balaram