

23 August, 2001

The Editor  
Current Science

Dear Sir

## **POLITENESS OR FEAR OF DISSENTING?**

Professor Balaram's editorials are always original, interesting, provocative and elegantly written. Unfortunately, they do not appear to attract sufficient discussion, despite the fact that such discussion would greatly enhance their value. Though I am an avid reader of these editorials, I have been remiss in not reacting to them even when I have felt the urge. I would now like to make amends by commenting on the editorial *The Importance of being impolite* in the 25 May 2001 issue (Volume 80 Number 10).

The editorial starts with J.B.S. Haldane's conclusion that "science in India is developing with disappointing slowness ... because Indians ... are too polite." Without going into an expatriate's conclusion almost half a century ago, the point is that Haldane has attributed to politeness the failure of Indian scientists to voice criticisms of the work of their senior colleagues and their silence even when they differ. Being a fearless person himself, Haldane did not think of ascribing the silence to **fear** of having to pay the price of dissent (impediments to career advancement, loss of funding, privileges and perks, etc.). Most Indian scientists "are polite about one another's work" because they are afraid of being critical. This fear is an inevitable consequence of an environment in which dissent is strongly discouraged and "constructive criticism and debate on science" is virtually absent.

It is only when there is no fear of dissenting that the question arises of how to express the dissent. And can one recommend anything other than the most courteous and civilized forms of expression? Haldane argued that there was a "choice between politeness and efficiency"; instead I submit that there is firstly a choice between silence and efficiency and then a choice between politeness and rudeness. Balaram therefore should not have emphasized *The Importance of being Impolite*; he should have stressed *The Importance of Polite Dissent* where dissent is warranted and required.

Hence, it is not politeness that is a major impediment to the advance of science, but the absence of debate, criticism and dissent. For Indian science to

flourish, what is required is a *community* of *interacting* scientists with the well-established traditions of a peer system. Without the environment of an actively interacting scientific community, there cannot be the natural selection of scientific ideas and data, which alone will ensure that the fittest theories and experiments survive. Natural selection of ideas implies competition and diversity. It cannot arise if there is a monoculture of views. Truth cannot emerge and science cannot advance if there is an absence and/or exclusion of dissent. The standard way of avoiding genuine controversy and peer review is to exclude unorthodox views from seminars, committees, journals and other forums (including the peer-reviewing process). Underlying all this violation of the scientific tradition and its codes of behaviour is the fact "he who pays the piper calls the tune." Government and quasi-government sources are responsible for the overwhelming share of science funding so that scientific activity depends strongly on this funding, and almost all scientists are on the government pay-roll or perk-roll. There are also a number of cash-carrying prizes and awards which act as further inducements to conform, rather than dissent.

The nuclear tests exposed this weakness of Indian science. Faced with a complexity of issues raised by the tests, it would have been natural for the body of intelligent and creative scientists to develop a spectrum of views. Instead, the virtually unanimous euphoria was astonishing. Since, it is statistically unlikely that almost the whole body of scientists had independently arrived at a single view, one cannot help suspecting that it was the fear of dissenting that explained the "unanimity".

Yours truly

Amulya K.N. Reddy