

Indian palaeontology under a cloud

B. P. Radhakrishna

There have been a spate of accusations and counteraccusations aired in national and international journals, in recent months, which have had the effect of placing Indian palaeontology under a cloud. We have refrained from making a comment so far, in the hope that some positive steps would be taken by those in authority in clearing up the mess.

Accusations were levelled by John A. Talent of the Macquarie University of Australia against Viswa Jit Gupta, a professor of geology in the Panjab University, Chandigarh. According to Talent, Gupta has, over the last twenty years, indulged in the questionable practice of recycling, i.e. using the same specimens two or three times as basis for reports from areas far distant from each other, and has also polluted the Himalayan palaeontology database in various ways. In the process Gupta involved several Indian and foreign scientists of repute, who, believing in the genuineness of his fossil collections, unwittingly became partners in the deception. The localities vaguely defined by Gupta have been pointed out to be 'phantom localities', because it is alleged that no subsequent worker has been able to find the reported fossils in these localities. In the ornate style of Talent, 'a whole circus of exotica—mainly invertebrate—was let loose and fossilized seriatim in the Palaeozoic and Mesozoic sequence of the Himalayas'.

These accusations were levelled first in the German journal *Courier Forschungsinstitut Senckenberg* (CFS, 106, pp. 1–57) and later highlighted prominently in *Science* (vol. 244, pp. 277–279) and in *Nature* (vol. 338, pp. 613–615). Talent has now renewed his attack with a further set of damaging evidence contained in a paper submitted to the *Journal of the Geological Society of India* for publication. Normally our practice has been to stay clear of controversial issues and confine ourselves to the main task of highlighting important items of research in different branches of geology relating to India. In the present case, however, a different approach had to be adopted because some of the alleged irregularities had been committed in papers published in this journal. Our denial of an opportunity to publish the accusations could

be construed as acquiescence in the alleged fraud. We have therefore thought it best to publish the paper of Talent *J. Geol. Soc. India*, vol. 34, pp. 575–586.

The charges levelled by Talent are of a serious nature, questioning the integrity of V. J. Gupta and a reflection on the reputation of a department that has earned a name for itself by the excellent record of research in the field of Himalayan geology. What is at stake, therefore, is not just the reputation of an individual scientist, but the credibility of Indian palaeontologists as a whole. The allegations cannot be dismissed as 'minor disagreements over taxonomy among experts', as characterized by Gupta.

Shashi Bhushan Bhatia, a highly respected Indian palaeontologist and a colleague of Gupta at Chandigarh, was the one to react immediately by addressing a letter to the Vice-Chancellor, Panjab University, requesting him to institute an enquiry. The September issue of *Nature* (vol. 341, p. 15) carried a note by Bhatia, which cast doubts on the authenticity of Gupta's research findings, particularly the Devonian ostracodes of Spiti.

Udai K. Bassi, who had participated in the expeditions to the Kinnaur region of the Himalaya points to the impossibility of obtaining Devonian ostracodes from Kurig. A paper by Bassi questions the validity of the earlier fossil reports from Kinnaur basin [*J. Geol. Soc. India*, vol. 34, pp. 587–595].

The foreign collaborators of Gupta—Webster, Janvier, Ziegler and others—have expressed their dismay and after examining the evidence have come to the conclusion that the specimens sent by Gupta to them had come from places other than the Himalaya.

The volume of evidence against Gupta is growing. The extremely poor defence he has put in (*Nature*, vol. 341, pp. 11–12), the evasive way in which he has skirted round the main issues, and failed to provide clear answers to specific charges levelled against him have put Gupta in an unfavourable light. The only way in which he could retrieve his vanishing reputation is by offering to take a group of palaeontologists to some of the controversial

localities and prove the authenticity and reproducibility of his fossil finds. The main issue is not the specific identification of the fossil finds, but the authenticity of the collection itself.

The Geological Survey of India, the premier earth science organization in the country, has the resources to verify the truth of Gupta's findings. If this is not done, the accusations and counteraccusations will continue, causing great damage to Indian science. The international community is also likely to carry the impression that a fraud has been committed and that Indian scientists by their silence and inaction have acquiesced in the deception.

The editors of earth science journals in India have a lesson to learn from this episode. We have been somewhat lax hitherto in not insisting on precision and accuracy of locality data before accepting a paper for publication. Minimum requirements like accurate location data, a measured section, sample collection levels, the name of the person who collected the sample, the time when the trip was undertaken, and other such information, which help in establishing the authenticity of the material being reported, will have to be insisted on, at least hereafter. Scientific bodies in this country must give the matter earnest consideration and come out with guidelines for examining such charges, and indicate the type of action to be taken in cases where the charges are proved and the nature of remedial measures.

We refuse to believe that the whole of Himalayan geology is in disarray because of alleged fraud committed by an individual. If a few drops in the ocean get dirty for one reason or the other, the whole ocean does not become polluted. Surely, much solid work lies behind the build-up of the fascinating story of the evolution of the Himalaya. It should be the endeavour of all right-thinking men to set the record straight and ensure that there have been no malpractices committed in the gathering of data. Allegations have been made. These have to be investigated. The task is not going to be easy. Nevertheless, it has to be undertaken to ensure a better future for Indian stratigraphy and palaeontology.

B. P. Radhakrishna is editor, *Journal of the Geological Society of India*. This article is reprinted with permission of the author.