

On past form, the budget process will begin in earnest only about then. In the meantime, there is much useful work that can be done. Strategic weapons have no doubt come to stay, but their putative uses are different, more like those of the 1960s than the 1980s. A residual capacity to deliver devastating retaliation should suffice for any superpower's peace of mind, while sophisticated battlefield uses for nuclear weapons have been made positively dangerous by the assertion of independence by Eastern European states. That is why the strategic missile negotiations should now be aimed at lower limits — who needs 5,000 warheads in present circumstances? — while a nuclear-free zone (however narrow) in central Europe has become an urgent need. That is where the US Congress should be looking for relief from the pressures of the military budget.

In the not very long run, it should be possible to dispense with either MX or Midgetman (or even both, because there will still be submarines afloat). Meanwhile, the balance of US strategic interests (like that of the Soviet Union) will be turned from planning for major conflicts to the need to safeguard regional interests whose military connotations are very different. That is where the US Congress should be looking for relief from the pressures of the military budget. □

Scandal upon scandal

Chandigarh University has been complacent about the controversy over Professor V.J. Gupta's Himalayan fossils.

THE article by John Talent on page 405 of this issue is the fifth in a line of long exchanges between the principal disputants in the case of the peripatetic Himalayan fossils, which erupted in this journal last April. (The controversy goes back to 1981, but was marked by a public row at a symposium in Canada in 1987 and by a publication by Talent and three colleagues the following year.) The central figure is Professor Vishwa Jit Gupta of the Punjab (or Panjab) University at Chandigarh, who is accused of deceiving several co-authors in India and elsewhere by falsely attributing, to poorly defined sites in the Himalayas, fossils whose provenance is unknown ("salting") and by using the same fossil specimens in research articles describing finds at different places ("recycling"). What is the non-palaeontologist to make of these exchanges?

The debate hinges on obscure details of Himalayan palaeontology and stratigraphy made no easier by variations in the rendering of place-names where most people never go (and often cannot go because of military security). But close reading of the accusations and the responses leaves the impression that Gupta's defence is flimsy; he has not dealt specifically with issues where the arguments on one side and the other are open to independent verification. That he should have reacted with anger to Talent's first accusations is understandable, but even his more temperate response last week (*Nature* 343, 307;

1990) to his erstwhile co-authors consists largely of the assertion that they are mistaken or misguided. In prudence, Gupta might also have made some of the disputed fossils available for isotope examination by others, so that their provenance might be checked. (At an early stage, he declined an offer to help arrange such an examination on the grounds that he hoped soon to acquire the necessary equipment.) The result is that most of the puzzling anomalies to which Talent originally drew attention remain unexplained.

What will happen next? Palaeontologists are by now sufficiently well seized of the problem of the Himalayan literature to know when judgement on particular research reports should be suspended. The *Journal of the Geological Society of India* published last December an article by John Talent and associates together with a leading article headed "Indian palaeontology under a cloud". The Pander Society, an informal body of people with a special interest in conodonts, has advised its members to discount conodont papers in which Gupta has had a hand and has drummed him out of membership. But it is important that Gupta is not friendless in the dispute; last week, J. B. Waterhouse, a long-standing collaborator of Gupta, chided Talent for his prose (too colourful), for exaggeration (which is conceivable) and for having raised serious accusations without "serious documented research" (which is belied by the weight of evidence now brought to bear). The truth is that there is a solid case to answer, and that Gupta has not answered it.

So what should be done? The greatest disappointment of the past few months is that so little seems to have happened in India to get to the bottom of the Gupta affair. There are some in India who cried "Prejudice!" when Talent's first article appeared, but that is an outrageous charge — and no defence. A. S. Paintal's Independent Society for Scientific Values and the Indian National Science Academy have separately mounted inquiries, but have little progress to report. Yet the prime responsibility rests with the university at Chandigarh, the institution most directly threatened by the accusations that one of its senior members is a fraud. Painful experience elsewhere has shown that a university thus maligned is well advised to mount an independent enquiry into accusations against its members. If Harvard University takes that line, can Chandigarh be wise to hang behind and risk being damned itself? Instead, the university is talking of a fact-finding expedition to the Himalayas, but named outside participants have not yet been invited.

The Gupta business raises a further difficulty. Three of those who have openly criticized Gupta's work are colleagues or associates of his at Chandigarh, and are now in an uncomfortable position. Whistle-blowing is always a dangerous trade, the more so when directed against more powerful colleagues. *Nature* is not in a position to offer protection of any kind to those concerned, but it is in a position vigilantly to report what happens to them in the months ahead. It will be a shame on India if that news is bad. □