

Exceptionally, there may be strategic arguments that weigh in the other direction. The fear that imports will rob domestic economies of jobs is relevant only if nobody can think how those who may be displaced might be better employed. It is of no concern, in the calculation of whether a Japanese dot-matrix printer is a bargain or a threat to economic survival, to ask whether Japan will "reciprocate" by buying US beef or Scottish whisky (two other fashionable bones of contention). The lesson is that free trade is worthwhile even if the policy is unilaterally applied. If that were more generally understood, there would be a better chance that the half-way house called GATT would survive the enforced changes it now suffers.

Himalayan hoax

The palaeontology of the Himalayas has been corrupted by an apparently systematic misplacing of fossils.

PALAEONTOLOGY is renowned for spectacular deceptions, among which 'Piltdown man' is generally the best-known, but the trouble caused in the Himalayas by the activities of Professor Viswa Jit Gupta of the Punjab University of Chandigarh will cast a longer shadow, as Dr John Talent shows (see page 613). For there was only one Piltdown skull which many, from the outset, believed to be a hoax. Gupta's cumulative joke, going back over a quarter of a century, will be excised from the record only with much greater difficulty.

Talent tells an extraordinary tale. In one series of published papers, specimens from a well-known and apparently unique conodont fauna recovered from a quarry in New York State were reported to have been found in a quartzite formation spanning north-east India and Nepal. Ammonoids with all the characteristics of specimens well-known from Morocco were similarly reported from nearby in the same formation, implying that biostratigraphical time must at some stage have stood still. On at least one occasion, the same specimens were described as having been found in two places. The general effect of these misplaced fossil finds is to argue for a Late Silurian or Devonian rather than Early Silurian age for the Muth quartzite.

Palaeontologists now have two tasks: to clean up the mess and to prevent it happening again. Sadly, it will not suffice simply to discard all the information in Gupta's published papers, estimated to number more than 300. Who can tell how many other studies have been falsely founded on his disinformation? Moreover, there is little chance of being able to check the accuracy of the reports in the field; the region is not easily accessible, while the locations from which fossils have been reported are inadequately defined. The now improved understanding of the Himalayan region provided by plate tectonics (which may have helped to throw light on the inconsistencies suggested by Gupta's work) may simplify the task of dating rock formations in the region, but that will put the

cart before the horse, denying biostratigraphy the opportunity to test the theory of plate tectonics.

Nor will prevention be easy. To the extent that many of Gupta's misplaced specimens appear to have come from teaching collections, some enterprising group of palaeontologists might think of authenticating indelibly marked specimens for the commercial trade, hoping that unmarked fossils would then become less desirable. But that is a mere technical fix. Journals have a part to play, especially in insisting on adequate locations of fossil finds. But the only durable remedy is to create an intellectual climate in which people's willingness to hazard colleagues' trust is diminished to zero. (To that end, palaeontologists should, on this occasion, have been quicker to voice their doubts.) The rewards of a copious bibliography are still excessive. □

Cold fusion in print

The appearance next week of one, not two, papers on cold fusion should not be misunderstood.

NEXT week's issue will include an article by Dr S.E. Jones and his colleagues at Brigham Young University and the University of Arizona on which the group has based its claim to have observed nuclear fusion in an electrolytic cell, but next week's issue will not include the article by M. Fleischmann (Southampton) and S. Pons (Utah) which the authors have said publicly that they had submitted for publication. That requires an explanation.

The articles were received on 23 and 27 March respectively and, following standard practice, were sent to referees. In each case, several questions requiring clarification and even amendment of the texts were raised. Jones *et al.* have been able to amend their text in a way that satisfies the referees, but Fleischmann and Pons have taken the view that they could not at the same time satisfy the referees and get on with other urgent work. No doubt a relevant consideration was the early publication in the *Journal of Electroanalytical Chemistry* of an extended version of the article sent to *Nature*.

It is important that these events should not be misunderstood. It is entirely within the gift of authors to decide whether it is worthwhile to reply to referees' comments. The peer-review process is not, after all, a court of law (and should not be mistaken for such). It follows that the non-appearance of the article must not be taken to imply that the experiments described elsewhere by Fleischmann and Pons are inherently less believable than those of Jones *et al.* It is also important that the appearance (next week) of the article from the Brigham Young group should not be taken to imply that all those who have seen it are persuaded to its chief conclusion. Rather, on the advice of the referees, the authors have produced an article which answers questions that would otherwise spring to readers' minds. That, all honour to them, is what referees are for. □