The Himalayan Fossil Controversy

Readers of the Journal are aware of the serious allegations made against V. J. Gupta, of indulging in questionable practices like recycling of fossils, plagiarism and other forms of scientific misconduct. Some of the papers in question have been published in the Journal of the Society. As a first exercise, as per the direction of the Council, an evaluation of all the papers published by V. J. Gupta in the Journal of the Society during the period 1969 to 1988 has been carried out with the help of stratigraphers and palaeontologists with experience in Himalayan geology. Brief notes about each of these contributions are appended at the end. This detailed scrutiny has brought to light several discrepancies lending support to the accusations levelled against V. J. Gupta.

The most glaring deficiency noticed in nearly all the papers is the absence of precise locality information. Subsequent field checks by officers of the Geological Survey of India and some of Gupta's own colleagues have failed to reveal not only the fossils, but also rock formations stated to have been present in the area. No confidence, therefore, can be placed on the locality information furnished.

It is a matter of concern to the Society as to how papers lacking in certain essential locality and stratigraphic data and poor documentation have come to be published. Most of the contributions are just a single page or two-page notes. It is this fact which appears to have made both the referee and editor to pass them as preliminary notes without subjecting them to strict scrutiny. Unfortunately, none of these preliminary notes have been followed with detailed accounts either in the Journal of the Society or elsewhere.

V. J. Gupta's response, so far, has been evasive giving no clear-cut replies to the charges. He has failed to produce the originals of the recycled fossils with their registration number, date of collection, field description as entered in Field Note Books and Laboratory Registers and such other evidences which could confirm the genuineness of his fossil collections.

It is obvious from the volume of evidence that has now been collected that the fossil finds of V. J. Gupta are not reliable, that there are internal inconsistencies, that the data is incomplete bordering on disinformation. The fossil records should, therefore, be ignored till such time when more reliable and reproducible evidence is forthcoming.

The evaluation report was circulated among the Members of the Council of the Society and some of the leading stratigraphers and palaeontologists in India and abroad and their advice sought on the course of action proposed to be taken. Barring two, the rest have all accorded their approval to the action proposed.

The Council took note of the views expressed and decided that before publishing the evaluation report, one more opportunity should be given to V. J. Gupta. Accordingly, the Secretary of the Society addressed a letter to V. J. Gupta enclosing a copy of the evaluation report with a request to make his collections available for independent examination and also provide full details of the fossil localities, and stratigraphic horizons for independent check. There has been no response from V. J. Gupta to this letter.

The Society has no other alternative but to publish the evaluation report with the recommendation that the incomplete and doubtful fossil records as published in the Journal and listed in the enclosed report be ignored till such time that independent proof is forthcoming of the in situ existence of the fossils—Editor.

Evaluation Report

1. Stratigraphy of the Muth Quartzite of the Himalayas. V. J. Gupta (1969) Jour. Geol. Soc. India, v. 10(1), pp. 88-94.

This is a review paper on the Muth Quartzite. The author assigns a 'Lower or Middle Devonian Age' to the base of the Muth Quartzite and touches upon its broad environment of sedimentation.

The age assignment is based on *Psilophyton princeps*, Givetian conodonts and *Calceola sandalina* from the Muth Quartzite and graptolites from the underlying rocks.

The validity of *Psilophyton princeps*, and *Calceola sandalina* in the Kashmir Himalaya is doubted by Talent *et al.* (1988). Neither *Calceola sandalina* nor graptolites could be located by any subsequent workers despite careful search (Srikantia and Bhargava, 1983; Talent *et al.* 1988).

The detailed maps of the Lidder Valley (Srikantia and Bhargava, 1983; Spiti (Fuchs, 1982; and Kinnaur (Bassi et al. 1983) are available.

While describing the fossils, Gupta neither shows their exact locality on map nor in a lithostratigraphical column. This renders the entire palaeontological data vague and of doubtful utility.

2. Permian Fusulinids from the Himalayas. V. J. Gupta, P. C. Bisaria, D. K. Chadha, G. Mahajan, S. Kumar, S. R. Kashyap, N. Kochhar and N. S. Virdi (1970) Jour. Geol. Soc. India, v. 11 (4), pp.1393-396.

The paper claims first record of fusulinids from India. The fusulinids are reported to have been collected from the *left bank of the Yunnam near Sarchu bridge*.

Repository CAS G F/81 to F/92.

The lithological description given in this paper is at variance with that given in another paper (Jour. Geol. Soc. India, v. 15(3), 1974, p. 338) dealing with Permian conodonts from the same locality yielding Permian fusulinids. For example, in the 1970 paper (p. 394), the authors state that the strata yielding fusulinids are overlain by an enormous thickness of limestone, and is underlain by siliceous limestone containing brachiopods and bryozoans of late Carboniferous age, the contact being a thrust. In the 1974 paper, the fusulinids horizon is shown to be overlain by pale brown limestone, grey shales and sandstones containing conodonts. The contact with the underlying horizon (here shown to be of Middle Carboniferous age comprising black carbonaceous shales) is marked by an unconformity.

These serious discrepancies show that the work is fictitious and based on spurious fossil finds. No rocks of Permian age exist at Sarchu (Srikantia *et al.* 1978) and no limestone is known in the Permian of the Spiti-Zanskar basin excepting for some calcarenites.

The paper, besides claiming collection from '*in situ*' rocks, also mentions collection of fossil-bearing samples from the river bed. The dimensions of fossils as given in Figure 1 are at variance with those given in the text. As per scale furnished in Figure 1, the length of the fusulinids measures between 15 cm and 40 cm !!

Incidentally, neither the 1970 paper nor the 1974 paper gives reference of the paper published by Gupta *et al.* 1970, *Publ. Centre, Advanced Study Geology, Panjab University*, v. 7, pp. 77-84 on the Geology along the Manali-Leh road and the Traverse taken by the author (Bhatia *per. communication*).

3. Silurian – Devonian Boundary in the Indian Subcontinent. V. J. Gupta, 1971, Jour. Geol. Soc. India, v. 12(3), pp. 274-279.

Gupta has attempted to define the Silurian-Devonian boundary in the Himalaya in this review paper based on certain fossil discoveries.

Gupta attempts the correlation of well-defined Nowshera Formation of Pakistan with his Naubag Beds of Kashmir on the basis of long-ranging fossils identified up to generic level only.

In this paper also he uses *Calceola sandalina* and some Givetian conodonts. Talent *et al.* (1988) have pointed out that the conodonts are from North Evans Limestone, New York (Gupta has not given any specific answer to this charge in his response).

The Chart I showing correlation is imperfect in the sense it does not precisely define the sections and stratigraphic levels at which various fossils have been recovered. Only in Nowshera and Sind valley some lithologic details are shown, whereas in the remaining sections, the details are sketchy and of no value.

In Chart II lithology shown in Ladakh/Lahaul and Spiti/Kinnaur, (e.g., a conglomerate bed in Ladakh, a thick shale sequence in Spiti-Kinnaur) does not exist in the field (Srikantia, 1981; Bhargava, *et al.* 1984, Bassi, 1989).

The above shortcomings make this paper of no scientific value.

4. On the Stratigraphic Position of the Tandi Limestone, Lahaul, Himalaya, India. V. J. Gupta, 1974, Jour. Geol. Soc. India, v. 15, pp. 99-100.

The paper records Lower Triassic conodonts from the Tandi Limestone, which are claimed to have been commented upon by W. C. Sweet.

No repository or registration number is mentioned. The paper gives neither specific locality nor the stratigraphic horizon from where the fossil yielding sample was collected. Since the conodonts have not been illustrated, no comments upon their authenticity and identification are, therefore, possible.

W. C. Sweet, who has been acknowledged in this paper, in a communication (dated 22nd November, 1974) to J. W. Picket (in Talent *et al*, 1988) has denied seeing the material under reference. In the absence of specific locality, stratigraphic level of fossils, and photographs of conodonts, the paper cannot be used for any scientific work.

5. Permian Conodonts from Ladakh. V. J. Gupta, 1974, Jour. Geol. Soc. India, v. 15(3), p. 338.

This half-page note claims first record of Permian conodonts from the Himalaya !

HIMALAYAN FOSSIL CONTROVERSY

No repository or registration number of fossils is mentioned.

The coordinates of Sarchu furnished up to seconds level are off at least by 14.5 km. No specific stratigraphic level or location from where the fossils had been collected is mentioned in the text. There are no illustrations of the conodonts.

6. The Stratigraphic Position of the Kioto Limestone of Himalaya. V. J. Gupta, Jour. Geol. Soc. India, v. 17(3), pp. 346-352.

The contribution redefines the age of the Kioto Limestone between the middle upper Noric and the Dogger on the basis of field and palaeontological studies.

The paper mentions important fossils without illustrations, repository, precise location or position in a measured stratigraphic column, indicating a casual approach to an important stratigraphic problem.

The quartzite referred by Gupta near Amarnath cave is non-existent. Similarly, no Kioto Limestone, contrary to his claim, is exposed at Hanse (Srikantia, 1981; Bhargava, 1987).

In Nepal, the fossils lying immediately below the Kioto Limestone are suggestive of Rhaetic age as per Gupta's own admission. This obviously makes the Kioto Limestone Rhaetic or younger in age, This observation is contradictory to his main theme.

The lack of exact geographic location and stratigraphic position of fossils together with inaccurate lithology, location and contradiction in age assignment make the entire exercise of refixing the age of the Kioto Limestone futile.

7. 'Melocrinites' from the Godavari Series of the Kathmandu Valley, Nepal. V. J. Gupta and G. D. Webster, 1976. Jour. Geol. Soc. India, v. 17 (3), pp. 413-414.

It is a report of *Melocrinites sp.* from Lower Devonian rocks of the Phulchauki Hill. It provides only a sketch of fossils, but no photographs. Repository No. CAS GF 451.

This fossil has been documented from North America, Europe and Russia (Webster. per. communication). The genuineness of the stratigraphic and locality data were questioned by Talent et al. 1988 with which Webster (per. communication) now concurs.

Till proved otherwise, this report, thus cannot be taken as authentic.

8. Triassic Conodonts from Nepal. V. J. Gupta, 1976, Jour. Geol. Soc. India, v. 17 (4), p. 562.

The paper records Middle Triassic conodonts from a sample stated to have been collected by G. Fuchs from west of Popa, Dolpo, Nepal.

No repository is mentioned.

The figures IB and IC are of the same specimen reproduced at different magnifications as revealed by an identical extraneous material sticking in both the photographs.

Unless duplicated by fresh maceration, the paper has to be viewed with suspicion.

9. Jurassic Ammonites from Chharap Valley, Himachal Pradesh, India. V. J. 1979, Jour. Geol. India, v. 20 (7), pp. 361-363.

The paper records Jurassic ammonites from the Chharap valley.

Repository number given as CASG F/865 and 866.

The locality coordinates $(32^{\circ}32' \text{ to } 33^{\circ}00N : 77^{\circ}35' \text{ to } 78^{\circ}00^{\circ}E)$ cover a distance of more than I20 km !

The identification of the Laptal Formation in the Chharap valley is without basis. There is a contradiction in the thickness of sediments in text (80m) and the Table (36m) reproduced after Raina and Bhattacharyya (1977). The map published by Gupta *et al.* (1970) of the Manali-Leh road leaves the Chharap valley part as blank indicating that these authors probably never visited this area.

That these ammonites could be from the Himalaya has been doubted by Talent, et al. (1988).

In view of vague locality and palaeogeographic incompatibility of the fossils (Talent *et al*, 1989) this report has to be viewed with suspicion.

10. Early Permian Fossils from Southern Tibet, Like Faunas from Peninsular India and Lesser Himalayas of Garhwal. J. B. Waterhouse and V. J. Gupta, 1979, Jour. Geol. Soc. India, v. 20 (9), pp. 461-464.

The paper compares fauna from southern Tibet with that of the Umaria section in a generalised manner.

No degree of equivalence is established between various faunal elements. The paper also includes fauna from Garhwal, which does not come from a measured section.

The paper is of limited scientific value.

11. A note on the Stratigraphic Position of the Chandragiri Limestone, Nepal. V. J. Gupta, 1980, Jour. Geol. Soc. India, v. 21 (3), p. 141.

The paper reports cystoids from the Chandragiri Limestone and assigns a Middle Cambrian to Middle Ordovician age.

No repository or illustrations of fossils in this one-page note are furnished. The paper lacks a lithological column. Without defining the level of the upper horizon, the author refers to lower horizon '20 m below the upper level'. A small thickness of chalk sometimes may span many million years.

The paper should be viewed with suspicion till reproducibility of fossils is confirmed in the field.

The section is along the road-side and can be visited by an independent investigator.

12. 'Deltoblastus' Palaeontologic Data for Plate Tectonic Relationship of India and Timor. V. J. Gupta and G. D. Webster, 1980, Jour. Geol. Soc. India, v. 21 (7), pp. 362-364.

Based on the occurrence of *Deltoblastus* in Kashmir and Timor, closer proximity of these two areas during Permian has been concluded.

Webster (per. communication) considers the Kashmir locality as definitely fraudulent and that the specimens reported as coming from Kashmir are actually from Timor.

13. Carnian Conodonts from Tidong Valley, Kinnaur District, Himachal Pradesh. V. J. Gupta, 1983, Jour. Geol. Soc. India, v. 24(3), pp. 156-158.

The paper reports Carnian conodonts from the Khimokul La.

No repository of fossils is mentioned.

Though no map is furnished, the coordinates up to second level have been provided. Three taxa are illustrated in fourteen photographs.

According to Bassi (1989, 1990), who mapped this area in 1:50,000 scale, no Carnian rocks are exposed at the Khimokul La. Though Gupta (1990) asserts his visiting the Tidong valley in 1974, his claim is questioned (Bassi, 1990). These observations make the scientific utility of this paper dubious.

14. Middle Devonian Corals from Central Bhutan. V. J. Gupta and G. Termier, 1983, Jour. Geol. Soc. India, v. 24 (4), pp. 212-214.

The paper records coral *Metriophyllum* of Middle Devonian age. No repository is mentioned.

The map shows two localities almost at the same stratigraphic levels along strike from where fossils have been collected. In section, however, fossils are shown to have been collected from three different stratigraphic levels.

The identification of Metriophyllum has been doubted by Talent.

The paper omits references of Gupta (1971), Singh, P. (1973) and Gupta and Termier (1981).

The contradiction in fossil localities in map and litho column combined with doubtful fossil identification considerably reduces the value of this paper.

15. Early Lower Carboniferous Conodonts from the Lipak Formation of Spiti, Himalaya, India. V. J. Gupta, 1983, Jour. Geol. Soc. India, v. 24 (9), pp. 482-483.

The paper records five conodont taxa of Tournaisian age. No repository is mentioned.

The locality description of fossils is vague. The paper describes the occurrence of conodonts in the lower part of the Lipak Formation exposed near Losar. It provides coordinates of Losar and not of the locality from where the samples were collected.

Though five taxa are reported, only two are illustrated. No lithocolumn or map showing location of the conodont yielding sample has been provided.

These fossils could not be located by subsequent workers. This locality is easily accessible and can be resampled.

Ahluwalia (1989) is certain that the Carboniferous conodonts reported by Gupta from Losar in Spiti are actually from elsewhere.

16. On the Age of the Sulcacutus Beds of Spiti, Himachal Pradesh, Based on Bajocian-Bathonian Brachiopods. V. J. Gupta, 1984, Jour. Geol. Soc. India, v. 25 (5), pp. 305-306.

The paper records *Arcythyris* from two stratigraphic levels, on the basis of which Upper Bajocian to Callovian age has been assigned to the Sulcacutus Beds. No repository is mentioned.

The locality given for the fossils is 'near Kibber', without mentioning the direction and distance from Kibber.

The unconformity marked between the 'Kioto Limestone succession—Upper Norian to Liassic' and the 'Horizon 1' has not been substantiated by detailed work (Srikantia, 1981). No thickness of 'Horizon 1' is given, thus, making the delineation of 'Horizon 2' difficult.

The vague locality and inadequate lithostratigraphic detail preclude using this paper for further correlative work. This section being along the road, for which detailed map also exists (Bhargava, 1987; can be re-examined. Till confirmed, the unconformity above the Kioto and also the fossils report are to be viewed with utmost caution.

17. Lower Carboniferous Rugose Corals from Lahaul, Himachal Pradesh. V. J. Gupta, 1986, Jour. Geol. Soc. India, v. 27 (2), pp. 223-224.

The paper records two corals from the Lipak Formation in the Baralacha Ban. No repository, specific locality or stratigraphic level are furnished.

These corals have been alleged to have been not only stolen from Aberystwyth collection, but also recycled (Talent *et al.* 1989, 1990; Wyatt, 1990).

18. Lower Carboniferous Conodonts from Spiti. V. J. Gupta, 1986. Jour. Geol. Soc. India, v. 28 (6), pp. 467-472.

The paper reports Lower Carboniferous Conodonts from the Takche Nala section, implying a Lower Carboniferous age (Tournaisian-Visean). Repository is not mentioned.

The paper uses a lithology and description of Ahluwalia *et al.* (1983). The lithocolumn published in this paper carries no scale, thus nullifying its utility. Tournaisian to Visean is equivalent to Mississippian or Lower Carboniferous. A sample from Tournaisian-Visean boundary region may not cover many million years.

In subsequent macerations, all the samples of this section were found to be barren of conodonts.

It is accused that the conodonts illustrated here were gifted to Gupta by G. D. Webster for teaching purposes and are certainly not of Himalayan provenance. Seven of these very conodonts were also published by Gupta and Kachroo (1977) from Luneak Valley (Talent *et al.* 1990).

19. 'Spinocyrtia' from Kinnaur, Himachal Pradesh. V. J. Gupta, 1987, Jour. Geol. Soc. India, v. 30(4), pp. 315-316.

'Spinocyrtia' of Devonian age is reported from the Yulang River in Kinnaur. No repository, specific locality or stratigraphic horizon of fossil is given. The lithologic description of this area as given by Gupta is imaginary and far from ground truth (Bassi, 1989), casting doubts if he really visited this locality.

The identification of the form 'Spinocyrtia' is questionable and also palaeobiogeographically bizarre (Talent et al. 1989).

References

- AHLUWALIA, A. D. (1989) The peripatetic fossils: Part 3. The Upper Palaeozoic in Lahul-Spiti. Nature, v. 4.341, pp. 13-15.
- AHLUWALIA, A. D., GUPTA, V. J., BUDUROV, K. J. and KANWAR, S. S. (1983) Devonian conodonts from Spiti, Himalaya, India. Riv. Ital. Palaeont., v. 89 (2), pp. 169-180.
- BASSI, U. K. (1989) The stratigraphy of the Kinnaur Tethyan basin—A reappraisal. Jour. Geol. Soc. India, v. 34(6), pp. 587-595.
 - ----- (1990) Reply and Comments by V. J. Gupta on paper 'The stratigraphy of the Kinnaur, Tcthyan Basin-A reappraisal. Jour. Geol. Soc. India, v. 35(6), pp. 661-664.
- BASSI, U. K., CHOPRA, S. and DUTTA, B. M. (1983) A new Phanerozoic basin in Kinnaur, Himachal Himalaya. Jour. Geol. Soc. India, v. 24(6), pp. 282-290.
- BHARGAVA, O. N., BASSI, U. K. and CHOPRA, S. (1984) Trace fossils from the Ordo-Silurian rocks of Kinnaur, Himachal Pradesh. Jour. Geol. Soc. India, v. 25, pp. 175-176.
- BHARGAVA, O. N. (1987) Stratigraphy, Microfacies and Palacoenvironments of the Lilang Group (Scythian-Dogger); Spiti valley, Himachal Himalaya, India. Jour. Pal. Soc. India, v. 32, pp. 92-107.
- FUCHS, G. (1982) The geology of the Pin Valley in Spiti, Himachal Pradesh, India. Jour. Geol. Bund., v. 124 (2), pp. 325-359.
- GUPTA, V. J. (1971) Devonian fossils from the Lesser Himalayan Zone of Central Bhutan. Curr. Sci., v. 40, p. 490.

(1990) Comments on the paper 'The stratigraphy of Kinnaur Tethyan Basina reappraisal' by U. K. Bassi. Jour. Geol. Soc. India, v. 35(6), pp. 652-655.

- GUPTA, V. J., MAHAJAN, G., KUMAR, S., CHADHA, D. K., BISARIA, P. C., VIRDI, N. S., KOCHHAR, N. and KASHYAP, S. R. (1970) Stratigraphy along the Manali-Leh road. Centre Adv. Stud. Geol., Pb. Univ., v. 7, pp. 77-84.
- GUPTA, V. J. and KACHROO, R. K. (1977) Carboniferous and Triassic conodonts from the Himalaya, Centre Adv. Stud. Geol. Publ. Panjab Univ. (Chandigarh), v. 11, pp. 118-129.
- GUPTA, V. J. and TERMIER, G. (1981) Devonian fossils from Tangchu, Central Bhutan, Himalaya. Geological and Ecological Studies of Qinghai-Xizang Plateau, v. 1, pp. 275-276. Science Press, Beijing.
- RAINA, V. K. and BHATTACHARYYA, D. P. (1977) The Jurassic of the Chharap valley, Himachal Pradesh and its bearing on reclassification of the Jurassic of the Himalaya. Publ. Centre, Adv. Stud. Geol., Panj. Univ., v. 11, pp. 47-58.
- SINGH, P. (1973) A note on the fossiliferous formations in the Lesser Himalaya of Nepal and Bhutan. Him. Geol., v. 3, pp. 373-380.
- SRIKANTIA, S. V. (1981) The lithostratigraphy, sedimentation and structure of Proterozoic-Phanerozoic Formations of Spiti Basin in the Higher Himalaya of Himachal Pradesh. In: A. K. Sinha (ed.). Contemporary Geosci., Res. Himalaya, v. 1, pp. 31-48. Bishen Singh Mahendranath Pal Singh, Dehra Dun.
- SRIKANTIA, S. V., BHARGAVA, O. N. and KAPOOR, H. M. (1978) A note on the occurrence of *Eurydesma* and *Deltopecten* assemblage from Kuling Formation (Permian), Baralacha Ban area, Lahaul valley, Himachal Himalaya. Jour. Geol. Soc. India, v. 19(1), pp. 73-78.

4**

- SRIKANTIA, S. V., GANESAN, T. M., SINHA, P. K. and TIRKEY, B. (1980) Geology of the Zanskar area, Ladakh Himalaya. Him. Geol., v. 8 (2), pp. 1009-1033.
- SRIKANTIA, S. V. and BHARGAVA, O. N. (1983) Geology of the Palaeozoic sequence of the Kashmir Tethys Himalayan Basin in the Lidder valley, Jammu and Kashmir. Jour. Geol. Soc. India, v. 24 (7), pp. 363-377.
- TALENT, J. A., GOEL, R. K., JAIN, A. K. and PICKETT, J. W. (1988) Silurian and Devonian of India, Nepal and Bhutan: Biostratigraphic and Palaeogeographic anomalies. Cour. Forsch. Inst., Senckenberg, v. 106, pp. 1-57.
- TALENT, J. A., BROCK, G. A., ENGELBRETSEN, M. J., KATO, M., MORANTE, R. and TALENT, R. C. (1989) Himalayan Palaeontologic Data Base polluted by recycling and other anomalies. Jour. Geol. Soc. India, v. 34 (6), pp. 575-586.
- TALENT, J. A., BROCK. G. A., ENGELBRETSEN, M. J., GAETANI, M., JELL, P. A., MAWSON, R., TALENT, R. and WEBSTER, G. D. (1990) Himalayan Palaeontologic database polluted: Plagiarism and other anomalies. Jour. Geol. Soc. India, v. 35 (6), pp. 569-585.
- WYATT, A. R. (1990) V. J. Gupta and the Aberystwyth Fossil Collections. Jour. Geol. Soc. India, v. 35 (6), pp. 587-592.