

has remained more as a competitive rather complimentary effort. They work independently with hardly any timely exchange of data with one another.

7. The bulk of the geophysical research is related to phenomena at unverifiable depths and therefore the day-to-day problems of drilling during mineral exploration remain unattended to or unresolved. Hence there is no incentive to strive for excellence in geophysical exploration.
8. Basic geological mapping has been completed for almost the entire country. New refinements in the form of second generation mapping or thematic mapping require, besides aerial photos and satellite imagery, a lot of geophysical inputs from ground as well as from the air. This again calls for collective wisdom, which apparently is a detestable word.
9. In the teaching institutions, the irresistible charm of the research projects, grants, committee meetings etc. may be responsible to a large extent for the decline in quality of teaching, which is unable to inspire an unenthusiastic or reluctant student, whose career prospects are apparently dismal. While information technology is taking a big toll of even conventional engineering streams, poor earth sciences are returning to the Earth.
10. Priority for down-to-earth problems and their effective solutions will not only save us from the present crisis, but will also make us popular. Unless a day comes when both the visible and invisible boundaries between the allied branches vanish and all of them work as if their life is in peril, one cannot expect a better future for earth sciences.

"The Anomaly"

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DISCUSSION

ANCIENT GEOGRAPHY OF INDIA by B.P. Radhakrishna.
Jour. Geol. Soc. India, v.56, 2000, pp.233-234.

D.N. Avasthi, C-190, Sarita Vihar, New Delhi - 110 044 comments:

This is with reference to the comment by Dr. B.P. Radhakrishna against the use of the word "Ghat" while referring to the magnificent mountain range of Sahyadri in the leader of the September issue of your prestigious journal. "Ghat" literally means "reduction", from which is derived the Hindi word for the arithmetical operation of subtraction. Reference to the down slope of any land leading to the lower level is made by the word "ghat" (i.e. *reduction in the elevation*), and it may or may not lead to any river or sea. The slopes on the sides of the Vindhyan or Satpura mountains are also described as Ghats, and while travelling along roads at the beginning and at the end of these slopes, one often sees the signs of the local highway department putting up warning boards for the drivers with words "Ghat section begins" and "Ghat section ends". "Ghat" is, therefore, neither any landing place nor steps. And many people often mistake the steps constructed to facilitate reaching the banks of holy rivers in India with "ghats". Places of cremation or burning dead bodies is known as "Shmashan Bhumi". Only when it happens to be

located by the side of the river, the "ghat" leading to such a "shmathan bhumi" is commonly referred to as "burning ghat". Similarly, all public or private bathing places, whether at a roadside water tap or the jacuzzi-fitted bathtubs in the luxurious toilets of posh bungalows, do not qualify to be called "bathing ghats". It is only where people have to go down the slope from a higher ground to the bank of a river or sea for taking bath, the slope is called the "bathing ghat"; but often such river banks are mistakenly called "bathing ghats". I may assure Dr. Radhakrishna that reference to the mountains on the eastern and western coasts as Eastern Ghats and Western Ghats has not diminished the interests of either our earth scientists in the active age group, or of nature-loving people of India, which can be seen by the papers being published by the earth scientists, or the tourists and pilgrims flocking to the picturesque locations and places of worship of these "ghats".

Landforms like Sahyadri and even the geography of the sea bed of the adjacent Arabian Sea (referred to as Ratnakar in ancient Indian literature) have fascinated inquisitive minds from the time of Parashurama to the present day and will continue to beacon such minds in future also, although what an individual can find on exploration, will always be "a few pebbles from the vast ocean of knowledge lying before him". The insatiable hunger to know more will forever continue to drive people in pursuit of exploration of different aspects of nature.

B.P. Radhakrishna, Geological Society of India, Bangalore, replies:

The dictionary meaning of 'ghat' is (1) Flight of steps leading to river (2) Mountain pass, defile. The term is commonly used by Civil Engineers to denote a mountain pass e.g. *Bisle Ghat*, *Charmadi Ghat*, *Dimban Ghat* etc. The extension of the name 'ghat' to a magnificent mountain range like the Sahyadri is erroneous.

Geologists have not given much thought to the origin of this great escarpment fringing the west coast of India. Plume activity, continental rifting, magmatism on grand scale, creation of the sea-facing scarp, its retreat, transfer of enormous amounts of weathered material to the offshore basins upsetting of isostatic equilibrium leading to elevation of the mountains are all connected events giving rise to the great escarpment, emphasizing its youth. There is no scenery more beautiful than that of the mountainous terrain fringing the west coast of India. Geomorphologically it has remained virgin ground deserving of the most careful study. As one British geographer has lamented that "the spectacular attractions of the Himalayas have led to many Peninsular problems being left to the future agenda of Indian geology." (O.H.K. Spate in India and Pakistan, 1963, p.11). The proposed volume on 'Sahyadri' which we are planning to publish shortly will highlight many of the aspects which makes this great escarpment erroneously labelled as Western Ghats, a unique physiographic feature. My note should be viewed in this light.

ERRATA

In the Notes section under the item 'Workshop on Isotope Geochemistry and Radiochemistry in the Marine Environment' May 22-30, 2000, published in Jour. Geol. Soc. India, v.56(3), Sept. 2000, on page 341, the address of R. Shankar ought to have been *Ocean Science Technology Cell* instead of the *Department of Marine Geology and Geophysics*. The error is regretted.