

Personal Reflections

In August 2004, *Resonance* featured Werner Heisenberg. The issue contained under *Personal Reflections* an article by his son, Jochen Heisenberg. After the issue of *Resonance* reached Professor Heisenberg in Durham, New Hampshire, he responded with a mail expressing his appreciation of the particular number. As a gesture of goodwill, he also attached a letter Werner Heisenberg had written to his parents from Darjeeling, India in October 1929.

Werner Heisenberg was immensely fond of the mountains. In October 1929, when he arrived in India from China, on the last lap of a trip around the world, he wanted to visit the Himalayas. After spending a couple of days in Calcutta he headed for the hills. The Himalayas surely made an indelible impression on Heisenberg, for in December 1929, he wrote in a letter to Dirac: "the best part was the trip to the biggest and best mountains, I had very good luck with the weather just the morning on Tiger Hill. In India itself it was very hot and rather rainy. Once our train went off the rails in the middle of the Jungle and people were afraid of tigers; the tigers probably were pretty afraid too."

We reproduce below both the letters. Werner Heisenberg's letter was in German. We are grateful to Irene Heisenberg for providing us with a free translation in English of this wonderful letter and to Jochen Heisenberg for kindly granting us permission to print it in *Resonance*. Werner Heisenberg's original letter in German is included in the book '*Liebe Eltern*', a collection of letters he wrote to his parents, edited by Anna-Maria Hirsch (né Heisenberg) and published in 2003.

D C V Mallik

Dear Professor Mallik,

It is with considerable regret that my reply to you is so very late. Please forgive the lapse, and the short-cut use of the internet.

But I did want to thank you for sending along those four copies of your August journal issue. They were a pleasure to look at and to read. It seems to me you have quite a high-level format for reaching your audience, and its execution is superb. I was glad to see you include my father on so many different levels. He would have been pleased too, I am sure.

I would like to attach for you an informal letter my father wrote to his parents in 1929, when, among many other countries, he visited India, if only briefly. Perhaps it will give you pleasure, and allow me to convey my own thanks to you and your editorial board as well.

Sincerely,
Jochen Heisenberg



Darjeeling, October 5, 1929

Dear parents,

Two hours ago I sent you a telegram about my arrival in India. I am imagining you must be receiving it just now (it must be about noon there); you will probably be surprised that it is coming from Darjeeling and not from Calcutta. But as I mentioned in my last letter, I arrived in Calcutta two days early; in order not to alarm you, however, I wanted to wait for the designated day to send my telegram.

As of noon today, I am sitting here in this mountain village in the foothills of the Himalayas (2200 meters altitude). It is strange to know that from my window I could see the gigantic mountains of the Himalayas with its glaciers, if only the weather were clear; for right now the rain is pouring, and a thick fog is barely allowing visibility of 100 meters. You can imagine that I am a little impatient; two days from now I will have to leave here again, and if it does not clear up till then, I should say that my entire trip to India was practically in vain. It is these mountains that are dearer to my heart than any old temples. But maybe I will be lucky again as I have been in similar cases often before. Actually, it is very beautiful here even with rain and fog; the air itself is quite different from down there in the heat of the Ganges basin, and makes you feel "at home"; it is so chilly that I had to wear my wool suit. Should the weather clear up, then I will attempt (like every tourist) to rise at 3:00am and climb a mountain named "Tiger Hill" which gives you a view of Mt. Everest; sunrise there is supposed to be so beautiful. There are here, as the name indicates, still tigers around in the forest (called jungle) but they never dare to come close to the traveled paths, but run away from humans for good reason, just like our deer in the woods do.

Yesterday in Calcutta, I spent time with the physicists and had a host of interesting experiences. In the afternoon I was a guest of the Indian poet Rabindranath Tagore. You may recall him from the lectures he gave a few years ago in Munich. Tagore is running a university or school, whatever you want to call it, where young Indians are taught in the arts and sciences, etc. This school is closely connected to the Indian freedom movement under Gandhi. Material power, of course, is with the English - will there ever be a triumph of spirit over might? I have encountered the English colonial economy only in its bad features. Hotels for Europeans, railroads, everything is very poor and very expensive. Obviously, all profits are pocketed by the English, do not stay in the country, and can therefore not be used for infrastructure improvements. For instance, even in the sleeping compartments of the first class one is not provided pillows and



sheets, you have to bring those yourself, and any fourth class compartment in Germany is better than first class here. Yet everything is more expensive than at home. One can easily figure out where the money goes. Any decent person will deem the economy here scandalous. Of course, life in the lower classes here is also shocking for us; and yet the English have not improved this.

Some religious customs in this country appear to us quite terrible and inexplicable, and I have witnessed some things which I would rather wish I could forget. Meanwhile evening has descended, and the servant just started a jolly fire in the fireplace of my room, lest it get too cold. This reminds me a lot of life in our Alpine hut. Outside it also, knock on door, cleared up a little and everywhere there are glimmering lights from the village across the mountains. I hope it will clear up completely during the night.

Sunday morning, 6. October. In the meantime I have had quite a stroke of good luck, more than I had dared hope for at all. When I woke up once at 1:00 am, it was again completely foggy and I really gave up any hope. But already at 2:00 am the servant was knocking at my door: it was clearing up, and did I want some tea? At 2:30, all done getting dressed and having a bite for breakfast, off I went with a Tibetan guide. (The mountain inhabitants here are of Mongolian origin and hail from the north). The sky was now partially lit with stars; especially Orion was spectacularly bright above our trail. At first there was a gentle incline up to a neighboring village where only a few lights were still on, then up through a thick forest; I was glad to have the guide along, otherwise I might have gotten lost.

While we were ascending, the sky was getting visibly clearer and as we reached the summit at 4:30, only a few bands of clouds were up in the sky, and the view all around was totally unobstructed. But it still was all dark, just this wonderful starry sky. We used the time till sunrise to brew some coffee on a wood fire. We were the only people on the summit, since no one else believed weather could change. Then at about a quarter past five, it started getting light in the east, and out of the transparent blue sky, there emerged the snowy mass of the Himalayas, with their whitish gray color, so familiar to me from our own mountains. Directly in front of us (that is: still 50-70 km away) there was the range of the Kanchendjunga completely cloudless, every summit sharply edged. The main summit is 8000m high, - and at such heights mountains are simply gigantic even at a distance of 50 km. Mt Everest, however, is much farther from here - I think about 150km, and thus is appearing less grand. Also it was always a little under cover of clouds, allowing only occasional glimpses of the summits. Between both ranges and east of the Kanchendjunga there stretches a long chain of lower peaks and glaciers, probably



all of them still over 6000m high. Particularly towards the east this view bore a lot of similarity with the one from the Bruennstein towards the range of the Tauern Mountains. (You probably still remember it?) Long before the sun reached our hill, the tallest mountain peaks began to glow, first the Kanchendjunga and Mt. Everest, then the lower summits. But you already know what such a sunrise looks like. We remained up there for a long time, till the mountains were gleaming white and the sun was warming us. Now we are once more sitting under clouds and fog, but that of course doesn't faze us any more.

But I don't want to begin a new page. Therefore many warm greetings,

Yours Werner



Information and Announcements

Refresher Course in Experimental Physics

May 9 – 22, 2005

at Department of Physics, Indian Institute of Technology, Guwahati 781 039

sponsored by Indian Academy of Sciences, Bangalore 560 012

This course is for post-graduate college and University teachers. The aim is to motivate physics teachers to improve their experimental skills and develop an insight for designing and setting up of physics experiments in college/university laboratories.

This two-weeks' course will consist of lectures and laboratory experiments in selected areas of condensed matter physics, optics, general physics and electronics. The course will include project work to design, build and test electronic kits (such as a temperature controller, a constant current source, a lock-in amplifier) which are useful for a physics laboratory.

Teachers (less than 50 years in age) who wish to participate in this Course should send their brief curriculum vitae (including name, date of birth, email and postal addresses, educational qualifications, teaching experience, courses taught, positions held, whether involved in post-graduate teaching, and if so, how?) along with a brief write-up as to why they would like to participate in this course and their expectations from the course, to the Course Coordinator. *Preference would be given to applicants from the North Eastern States of India (including Sikkim).* Selected teachers will be provided local hospitality and round trip actuals of bus fare / train fare (1 Class or 3-Tier AC).

Applications may be sent to: Prof. A Srinivasan, Department of Physics, Indian Institute of Technology, Guwahati 781 039. Tel: 0361-258 2701 (O), 0361-258 4712 (R); Email: asrini@iitg.ernet.in

Last date of receipt of application: 15 February, 2005

