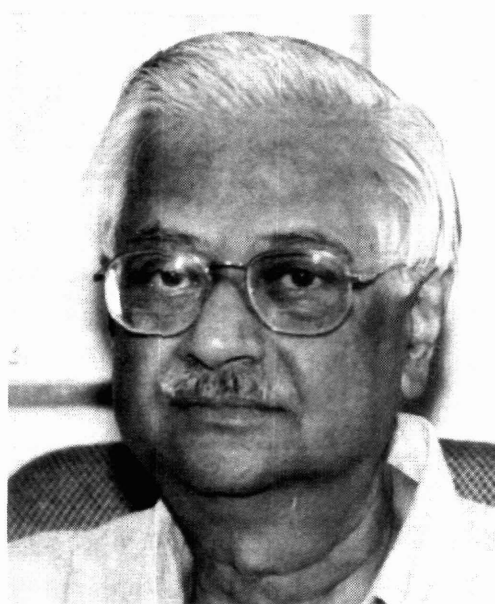


Raja Ramanna

(1925-2004)

It was a bright sunny morning at Hyderabad when I last met Raja Ramanna – we both had gone to attend a symposium on gold, organized by the National Geophysical Research Institute. I was to deliver a keynote address, while he was to inaugurate the Seminar. Both of us were accommodated in adjoining rooms at the guesthouse, and I called on him as a matter of courtesy. He treated me with his usual charm and we chatted on various matters of mutual interest until it was time for the meeting. After descending the stairs, to my surprise,



Ramanna dismissed the vehicle waiting to take him to the venue of the meeting and suggested that we walk there. It was, as I said, a glorious morning and the woods through which we had to pass were dark and lovely. That was the last occasion on which I met Dr. Ramanna. No other opportunity occurred to meet him again and renew our acquaintance.

Raja Ramanna was at the peak of his distinguished career having already held several high positions in the Government of India. He was the Director of the Bhabha Atomic Research Centre, the most prestigious scientific institution in the country, Chairman of the Atomic Energy Commission and a doyen of the Indian nuclear programme. For some time he was the Minister of State for Defence; and, till recently, member of the Rajya Sabha, the upper house of the Indian Parliament. A person holding such high-ranking positions normally

would remain aloof, conscious of his own importance, but not so Dr. Ramanna. He gave the least impression of an important person with the aura of high office surrounding him. I was amazed at his treating me with such familiarity.

It was therefore with deep shock that I learnt of the death in Bombay of this most charming personality, the father of nuclear research in India – the person who had dared to take the responsibility for carrying out the first nuclear explosion at Pokharan. On a visit to his son in Bombay, he complained of some uneasiness, was admitted to the hospital, and within two days was no more. It is given to very few to remain active till the very end and quietly pass away while in a sleep.

In the case of lesser mortals there would have been a great show of sorrow and the crowding of dignitaries round the deceased body with garlands. But with Ramanna there was no keeping the dead body for *darshan* and no attempt at bringing it by air to his home town. Without any fanfare, the body was cremated with only the nearest family members and H.N. Sethna, P.K. Iyengar, S.K. Jain, S.C. Hiremath and B. Bhattacharya, his former colleagues in the Bhabha Atomic Research Center being the chief mourners.

Raja Ramanna was born at Tumkur on 28th June, 1925, his father B. Ramanna, being a district magistrate of that place. Later, the family moved to Mysore and Raja Ramanna had his early education at the Good Shepherd Convent and at the Bishop Cottons School in Bangalore. His college education was at St. Joseph's College, Bangalore and later at the Madras Christian College, Tambaram, where he obtained his BSc (Hons.) degree in Physics. His parents apparently had a high opinion of Convent education and admitted him to schools run by Christian missionaries. His love for piano music, in which he was to hold great proficiency has to be traced to his early education in such schools.

Being a brilliant student he found no difficulty in getting selected as a Tata Scholar for higher education in London. He obtained Ph.D. degree at Kings College, London, and soon after his return to India in 1949 joined the newly started Tata Institute of Fundamental Research, Bombay as a research student. His interest in Nuclear Physics and particularly Reactor physics and design, soon directed his attention to Atomic Research and he became the head of the Bhabha Atomic Research Centre at Trombay, Bombay.

Ramanna was a firm believer in the efficacy of nuclear power for peace and prosperity, and considering it as the cheapest and safest method of producing electricity. Despite one or two accidents which have occurred in developed countries, causing enormous damage, his confidence in nuclear power generation was undiminished. He firmly felt that nuclear power would be the only available source of power in the future and strove his utmost to build

nuclear power plants in India, and collaborating in the design, installation and commissioning of the research reactors, Apsara and Cirus, the variable energy cyclotron at Kolkata and the fast breeder reactor at Kalpakkam.

The success of nuclear power generation in the country demanded availability of atomic minerals and a Rare Minerals unit in the Department of Atomic Energy in 1950 was formed headed by D.N. Wadia, the doyen among Indian geologists. This unit which began in a small way has now grown into full-fledged organization with regional branches in different parts of India. It was primarily due to Ramanna that a magnificent building housing the administrative office and laboratories of the division came up at Nagarbhavi. I recall with pleasure the day when the new building was declared open by Ramanna when I shared the same platform with him and paid rich tributes to him and to the work of the Atomic Minerals Division.

Soon after he retired from service, he decided to settle down in Bangalore and was able to secure a munificent gift from J.R.D. Tata to build a new Institute, the first of its kind in Bangalore – The National Institute of Advanced Studies (NIAS) near the Indian Institute of Science complex. It is a magnificent group of buildings, self contained in every respect, with a large number of guest and study rooms for guests and scholars pursuing advanced studies. Ramanna continued to be associated with the Institute as Director-Emeritus till the end. He also remained Chairman of the Governing Council, Indian Institute of Science, Bangalore. Through the institute (NIAS) he tried to integrate social and natural sciences, his intention being to train scientists for leadership positions to undertake the manifold tasks in the country's development. The Geological Society of India, only a few months ago held an International Seminar on Monsoon Weather Forecasting which was attended by a large number of delegates from different parts of India and a few from overseas. I had hoped to meet Dr. Ramanna on that occasion, but unfortunately he was away at Delhi. If he had been in Bangalore he would have certainly attended the meeting.

Ramanna was a connoisseur of music and an excellent player on the piano. His neighbours in RT Nagar remember him playing on most evenings accompanied by his daughter Nirupama. He gained proficiency in this art and had given several concerts. Apart from his love for science and music he was a philosopher with a deep love for the country and its rich culture.

I must here relate one incident, although it may be open to criticism that I am trying to project myself in relating it. The Society had taken deep interest in identifying the legendary *Saraswati*, described in glowing terms in the *Rig Veda*. As an introduction to the book, I had written a short paper outlining the geological evidence for the existence of a mighty

river in the northwestern part of India on whose banks the Vedic civilization had flourished. I had projected a chronology of possible climatic events which gave birth to the legendary river in the post-glacial period and its desiccation due to diversion of its drainage and to an unprecedented drought which had the effect of converting the evergreen delta into a featureless desert. With great diffidence I sent a reprint to Raja Ramanna in the fond hope that the subject would interest him. Few people have the courtesy to acknowledge, fewer still would read them and give expression to their reaction. Ramanna was not of the tribe, within a week I got a letter from him:

“I have received your most inspiring note on “Holocene Chronology and Indian Prehistory”. In this short paper you have not only explained the advance of civilizations during that period and the special status India has continuously over the centuries I entirely agree with every point that you make ”

Needless to say I was elated at receiving such a letter from a person of his status and eminence. It was characteristic of Ramanna to praise and not to decry any new work. There was nothing narrow or small about him. No wonder with such qualities as these, he was able to build a loyal team to accomplish so much in his lifetime.

I have opened a separate file and labelled it ‘Brickbats and Bouquets’ and file in it letters of abuse along with letters of appreciation like the one I have received from Raja Ramanna. In my moments of depression, a perusal of this file lifts my fagging spirits and gives me courage to go forward avoiding the pitfalls in my path and leaning heavily on the magnanimous support extended to me by friends like Raja Ramanna.

Reading the news of his sudden passing away revived old memories. It is difficult to realize that we can no longer have the pleasure of his physical presence and enjoy his conversation, see his charming smile but his memory will remain with us for a long time to come.

B.P. RADHAKRISHNA