Special issue: Extinct plants, evolution and Earth's history



Birbal Sahni centenary, 1991

Speech delivered by Jawaharlal Nehru, the then Prime Minister of India and Minister for Scientific Research, on the occasion of the foundation-laying function of the Institute of Palaeobotany, 3 April 1949

Professor Birbal Sahni and Shrimati Savitri Sahni,

At the very outset, I am confronted with the question about the language in which I should speak. Sometimes, the need to speak in two languages arises, but the foremost difficulty before me is, what is the Hindi equivalent for palaeobotany? Perhaps some among our learned scholars will definitely find an extant name for it. Very few people know what palaeobotany is and I believe that it is also not easy to comprehend it. Since this morning, I have been inquisitive to know from quite a few people about the kind of deliberations planned for today, but I found that they were also in the same position, ignorant about the object of the proposed building, whose foundation stone will shortly be laid. I had hoped that several speakers will throw light on this subject. But in spite of a big gathering here, the real subject was hardly touched upon. All of you must have noticed that the contents of Dr Sahni's speech were different from those of the other speakers, which made it clear that we are going to make a maiden effort in this direction.

Dr Birbal Sahni in his speech has mentioned the relationship existing between palaeobotany and geology and palaeontology. I do not know much of these sciences, but I am certainly familiar with the names. Years ago Professor Seward was my teacher at Cambridge and, I believe later, he taught Professor Birbal Sahni also.

I learnt some geology and botany there. Therefore, I am interested to know of these sciences. Of course, Dr Birbal Sahni has specialized in them. In our country he symbolizes in himself the kind of scientist that every scientist should be. A scientist should not only aim for material gains, as his commitment to his work is supreme. Dr Sahni has devoted his life with all the energy at his command to his research and most assuredly he will continue to do so. Such an effort leaves a great impact. If this approach is imbibed and practised by all, the world would start looking brighter. A scientist has got to be such, if nobody else, and he must have this quality. A man who pursues his work in such a devoted manner follows the right path, his work is good, and the man is good. Such dedicated workers must get an opportunity to give of their best. There are several fields of enquiry which need to be attended to. We may claim that tremendous progress has been made in the field of science, but the bare fact is that still we are at its threshold. Obviously, there remains a lot more to accomplish in India. It is felt that politicians administer the whole world, and any negligence on their part is likely to prove detrimental. Sometimes, this feeling creeps into my mind as well. But I feel that there must be some reality in it. As we remain heavily preoccupied in tackling problems of varied nature, the fundamental issues tend to get neglected. In case no attention is paid to them, losses are bound to occur.

People holding higher responsibilities should concentrate on their main objectives, rather than dissipating their time and energy over trivial issues. This would result in quick decisions and their implementation. It is immaterial whether they are ministers, or members of parliament or assembly or any other organization. But in reality they remain so heavily preoccupied that problems of a fundamental nature often remain unattended.

The present is a revolutionary era, but revolution does not mean bloodshed, as some young men believe. It means a change, and a fast change. In this revolutionary period, it is difficult for anyone to keep abreast of the events, with the result that the people cannot adjust their minds to revolutionary ways and, therefore, think in conservative terms. There is need for reconciling and adjusting one's mind to the changing times and thinking in a scientific manner. Science alone can help us all understand our problems, for science means seeking the truth.

The annals of history depicted in geology, in botany and in engravings on rocks reveal the evolution of the human brain. They tell us that primitive man was not much different from other animals. The monkey is still categorized as an animal because of its limited brain power. The progress that mankind took thousands of years to make bears testimony to the improved quality of the human brain, though the results may still be far from perfect.

It is clear enough that change and evolution are complementary to each other. The transitory phase of change may even eclipse the good work, especially so in the present state of affairs in India as well as in the world over.

It is essential to understand the change, which may be for good or for bad. It is only with experience that one can apply one's mind to accept the better side of it. In the present-day democratic set-up, in spite of its many advantages, certain impediments can affect the potential of those who can really perform. It is likely that intelligent persons may be suppressed though they are farsighted. In resolving this dilemma several questions arise. It is of utmost importance to be in harmony with the change and also to adopt a scientific attitude in all walks of life. I have put forward my views before you on this occasion when we are here to lay the foundation stone of a scientific institute. My old association with the University of Lucknow has brought me here and I have expressed my feelings. The effort of Dr Birbal Sahni to create a scientific awareness amongst the people is worth appreciating.

I am afraid that if we do not fully understand the world around us and use the knowledge to our advantage, we are likely to lag behind, for we cannot progress by only imitating others. To exemplify, I would like to say, though we often travel by railway trains or motor cars, how many of us care to understand their working mechanism? Sure enough, their drivers are better informed in this respect. This shows how little we observe and how little we know, with the result that we fail to educate our children on general aspects of day-to-day life.

Understanding of the principles of politics and economics is essential, in order to define the objectives of our new world we cherish. The principles of capitalistic and socialistic economies have also to be understood for their suitability to our plans.

We plan to set up a strong industrial base in our country. Assuredly, I would like to say that the plan outlays will not suffer for want to funds, though they may be delayed. It is our firm commitment to figure as an industrialized country in the world scenario.

It is often argued that we can industrialize India on the capital borrowed from other rich countries, but this does not appeal to my mind. Here I would like to make a point, that the industrial strategy of a country has to be based on scientific grounds to make it a success. A thorough understanding and adoption of modern technology is the need of modern industry. Unfortunately, at this stage, we neither belong to the bullock-cart age nor to the industrial age. To enter the machine age, mere slogan-shouting and passing resolutions are not enough.

I have shared my views with you as I find it difficult to speak much on today's subject. Having varied interests, my prime interest continues to lie in taking science to every doorstep of my countrymen. It is heartening that Dr Sahni has taken a big leap in this direction. I congratulate him and the governors associated with this institute on this auspicious occasion.