## **BOOK REVIEW**

Arun Kumar Biswas (Compl. and Ed.) *Collected Works of Mahendralal Sircar, Eugene Lafont and the Science Movement* (1860-1910), The Asiatic Society, Kolkata, 2003, pages xxviii+620, Price Rs. 1350.

The book under review is a compilation of original sources on one of the most active and regenerative phases in the progress of science in India. It is focused primarily on its two leaders – Mahendralal Sircar and Eugene Lafont – who led a 'Science Movement' during 1860-1910, giving the Indian awakening of the 19th century a palpable renaissance spirit. Unfortunately, these two and many other scientists of the time are yet to be accorded their appropriate place in our national history. From this point of view, the present volume of original sources is, indeed, a most welcome offering. It also contains a wide range of sources on popularization and promotion of science in the period.

The 'Introduction' provides a background setting with information about the events influencing the progress of science in the country, personalities involved, and the nature and location of the sources on them. The biographical details about Sircar and Lafont enlighten us about their signal and unparalleled contribution to the promotion of science in India. Mahendralal Sircar (1833-1904) was born in a poor family of Paikapara near Calcutta. He started his academic career at the Hare School before he joined the Hindu College, which he later left and graduated from the Calcutta Medical College in 1860, becoming the second MD of Calcutta University three years later. Initially he came in limelight because of his interest in, and advocacy of homoeopathy, then a new system of medicine struggling to establish itself. In order to propagate his ideas and popularize science, he published from 1868 the Calcutta Journal of Medicine that became an important forum of intellectual interaction during the period. But his greatest contribution to science and the nation came in the Indian Association for the Cultivation of Science (IACS) which he founded in association with Lafont in Calcutta in 1976 (chap.I).

Father Lafont (1837-1908) was born at Mons in Belgium and joined the Society of Jesus in 1954. After the preliminary training within the Order, he devoted himself to the study of philosophy and natural science at Namur in the Sambre-Muse valley. It was here that he developed interest in atmospheric, terrestrial and experimental physics, which he later nurtured and popularized in India for nearly 43 years until his death. His early training was also useful towards synthesizing the scientific and religious value systems, a task which was espoused by Raja Rammohun Roy and many other reformers of the 19<sup>th</sup> century India (chap. I).

Meanwhile,Father Depelchin had founded, in 1960, the St. Xavier's College in Calcutta, which Lafont joined in 1865. Lafont soon established there a Physical Laboratory that came to be second to none in India, and a meteorological and solar observatory. Apart from his classroom teaching, he delivered public lectures and organised exhibitions to popularize science. No wonder, when Mahendralal Sircar initiated efforts for establishing the IACS, Lafont readily joined him sometime during 1869-70. Together, they led until their death a 'Science Movement' that soon produced great scientists like P C Ray, J C Bose and C V Raman, the last winning the Nobel Prize for his research carried at the Indian Association for the Cultivation of Science (chap. I).

The chapters that follow contain primary sources on the events, individuals and organizations dealing with science and education, such as, establishment and working of the St Xavier's College, initial efforts leading to the foundation of the IACS and its activities up to 1910. The book also contains the proceedings of the annual meetings of the IACS, comments of the press and the public on all of these and many other activities connected with science. There are also original letters and tracts supporting Sircar's efforts (pp. 84-95), list of donors (pp.213-17; 352-55), and, in fact, several original papers on various aspects of the movement, and finally obituaries of Sircar and Lafont. In between, there are articles and tracts, culled from various sources (*The Calcutta Journal of Medicine and Nature*, correspondence, memoirs and personal diaries), on diverse themes related with science, such as Nobel's bequest for the promotion of science (p. 430), and book reviews of contemporary publication like P C Ray's *History of Hindu Chemistry* (pp. 499-502). In short, the sources contained

provide information about a wide range of activities connected with the progress of science in the period.

The book contains also observation records and eyewitness accounts of some of the great natural events of the time, as, for example, Lafont's observations on the hurricane of 2 November 1867 (chap. III) and notes on transit of Venus across the sun's disk on 9 December 1874 (chap. XXIV). For a discerning researcher and a lay reader alike, the eyewitness details presented in the original contemporary accounts and leaves of personal diaries are absorbing and extremely helpful for recreating the history of the time in its full flavours.

While these sources give us a clear picture of the nature and scope of the movement set against its socio-political milieu, they compel on to ask certain questions, too: Was the movement confined to Bengal only, or was it active in other parts of the country as well? For, the task Sircar and Lafont had taken upon themselves was supported actively and shared by a large number of people from the different parts of the country. While numerically the participation of people from Bengal, with colonial capital in Calcutta, was the largest, many of the major monetary donations came from the Rajas of Vizanagaram (Andhra Pradesh), and Darbhanga (Bihar). Interestingly, some of the hefty contributions came from now-little-known donors like the Raja of Bettia in Bihar (see especially pp. 352-55).

This makes one presume that the scientific awakening was more widely spread than generally believed. For, people from outside Bengal not only made financial contributions but probably they also tried to promote science in their native places. We know about the contributions of Baroda State (one of the donors to the IACS) towards promoting science; but what about the States of Vizinagaram, Darbhanga and Bettia, Kashmir, Nizam of Hyderabad and many others who were major subscribers to Sircar's enterprise (pp. 352-55). In course of a recent visit to the museum of the Raja of Banaras, another donor, the present reviewer found interesting collections showing the royal interest in the promotion of science and technology. A huge clock with several functions made by an Indian craftsman under royal patronage attracted attention the most. Surely, this artefact could not have been creation of a day; rather it must have taken decades and generations to perfect the skill.

In that, the information in this volume gives us clues to look at and investigate into developments of considerable significance taking place in other parts of the country. As, for example, a cursory glance at some of the papers in the book encourages one to speculate some connection between the astronomical studies started by Lafont at St. Xaviers College in Calcutta and establishment of astronomical observatories at Bankura in Bengal and, a little later, at Muzaffarpur in Bihar. Likewise, it may be interesting to know that Western science came to India not only through the British who became the sole rulers of the country but also through their other European cousins. In fact, one feels tempted to believe here that probably the non-British Europeans promoted science in India with a more liberal and scholastic intentions. It may be noted that Lafont was a Belgian; and several endeavours to harness and promote modern science in India were made by the German, American, French and Canadian missionaries, especially in the fields of medical science and public health, and agriculture.

Another revealing fact learnt from this compilation is the limited participation of the British in the formation and growth of the IACS if we go by the list of donors. The names of Europeans in the list are very few, and it is intriguing to note that the donation from the Viceroy never crossed Rs. 1000. On the contrary, the larger participation of Indians from the colonial bureaucracy, like the magistrates and judges, is rather baffling. Equally revealing is the active involvement in the movement of many of the contemporary personalities from the fields of art, culture and politics, such as Bankimchandra Chatterjee (chap. XX), Rabindranath Tagore (chap. XXIII) and Pandit Shivnath Shastri (chap. CV).

However, such a rich collection deserved a more careful editing and more rational and standard style. For that, the 'Introduction' could have been streamlined by dropping the list of articles, which appear also in the 'Contents'. Besides, the choice for rather-archaic Roman numerals, instead of the simpler and more widely used Arabic numerals, is stressful for the reader. A wider focus on the socio-economic and political background of the activities of Sircar and Lafont could have made the book a better reading. Likewise, an intact original text of the document could have given more authentic information in their original nuances than an edited version. And finally, an index at the end of

the book could have made it more reader-friendly. However, to point out these flaws is in no way intended to detract the reader from the intrinsic value of the work; rather it is done with the hope that the compiler would try to remove these lacunas in a future edition.

Otherwise, this is a substantial work of immense value. After Professor Biswas's two earlier works on the Period, the present volume forms a trilogy, which appears to be the largest one-volume repository of original sources on Sirkar and Lafont, and, probably, on the entire period under review. It is appropriately prologued with the words of Rammohun Roy (pp. 26-28), the father of modernization of India, and epilogued by Satyen Bose, one of the last stalwarts of the period of scientific efflorescence in India (pp.588-91). Some of the sources in Bengalee and facsimile of others are another interesting feature of this volume.

For his dedication and hard work that has gone into the making of this book, every student of history of science and that of social history in general should be grateful to Professor A. K. Biswas, the compiler and editor; more so, because he has not only brought to the researcher a wealth of information and sources but has, in fact, saved many from loss for ever. The Asiatic Society, Kolkata, is equally entitled for our gratitude for publishing this volume. The rich contents – rare in many cases – apart, the fine production and beautiful getup of the book are sure to attract many a reader. The price of the book is, however, high for an individual pocket. Could we hope it would be brought down with the government subsidy in the future so that individual researchers can afford it?

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