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ARTICLE

Growth of Scholarly Societies and Their Activities in Pre-Independent India: A Reconnaissance

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ABSTRACT

During the pre-independence years, many scientific societies were set up. Their mandate was to promote and popularise science education, research, and communication. The present paper intends to study different scholarly societies which came up in India from 1900 to 1947 and earlier; the parameters of their objectives, extension activities, publications and achievements will be used to study the scholarly societies. The objectives of the study are to highlight the scholarly societies which were set up from 1784 to 1914, their contributions to the Swadeshi Science Movement, activities for promoting science education and research in the country and the scope of their publications and their coverage in citation databases. The study showcases the significant contributions of scholarly societies in promoting science education and research in the country. The study validates that the scholarly societies laid a robust foundation for the country's present scientific institutions and science education.

Keywords: India, Scholarly societies, science education, science communication, Swadeshi Science, Swadeshi Science Movement, Scholarly journals, South Asia, Nineteenth Century, Twentieth Century.

Introduction

Scholarly societies are non-government organisations that promote scholarships and research and focus on the dissemination and sharing of knowledge. They focus on the common good and welfare of society through their initiatives, meetings and publications. The scholarly societies and associations are essential

for the academic and research ecosystem. They play a significant role in the evolution and progression of science in the country. The scientific societies in India originated in 1760 when an organisation by the name of United Brothers, which had Danish missionaries, was set up by the Botanists of Madras. It did not have any constitutions of its own or executive committee.

Further, the Asiatick Society was launched in 1784 by Sir William Jones as a learned society and it undertook research in all the branches of knowledge, focusing on science and nature (Sen, 2014). In India, a society can be legally registered under the Societies Registration Act, 1860. The Indian Societies Registration Act of 1860 was enacted during British rule in India and facilitated the registration of literary, scientific, and charitable societies. The present study highlights the scholarly societies which were set up in India before it gained independence.

Study Objectives

1 To highlight the scholarly societies which were set up during in 1784-1914
2 To highlight their contributions to the Swadeshi Science Movement
3 To highlight their activities for promoting science education and research in the country
4 To highlight the scope of their publications and their coverage in citation database

Methodology

The data for the present study have been collected from different reference materials, websites, and online repositories. The data were analysed and presented in successive sections. To study the publication avenues of the scientific societies in British India, the works of Sen (2002 and 2005) were consulted.

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Results

Table 1 depicts a list of the oldest scientific societies in British India, established from 1784 to 1914 (Sen, 2017). Some of these scientific societies are now continued in the 21st century as autonomous institutions supported by different ministries or departments of the Government of India. In contrast, few others are now continued as non-government societies. Out of twelve societies studied, three societies ceased to exist.

Table 1: Oldest Scientific Societies in British India

Name of the Society	Founded at	Year of Inception	Website, if any	Present Status
Asiatick Society	Calcutta	1784	Asiatic society kolkata.org	Operating under MoC
Literary Society of Bombay	Bombay	1804	Asiatic society. org.in	Now known as the Asiatic Society of Mumbai
Madras Literary Society	Madras	1812	Connemara public Library chennai. com	Facilitated to form the Connemara Public Library
Society for Translating European Sciences (STES)	Calcutta	1825	N.A.	N.A.
Students Literary and Scientific Society	Bombay	1848	SLANDSS.com	Registered Society
The Scientific Society	Ghazipur & Aligarh	1864	AMU.ac.in/about -us/history	Facilitated to form the Aligarh Muslim University
Indian Association for the Cultivation of Science (IACS)	Calcutta	1876	IACS.res.in	Operating under DST
Punjab Science Institute (PSI)	Lahore	1885	N.A.	N.A.
Society for the Promotion of Scientific Knowledge (SPSK)	Lahore	1895	N.A.	N.A.

Indian Institute of Science (IISc)	Bangalore	1909	IISC.ac.in	Operating under MoE
Vigyan Parishad Prayag (VPP)	Allahabad	1913	N.A.	Registered Society
Indian Science Congress Association (ISCA)	Calcutta	1914	Sciencecongress.nic.in	Operating under DST

The Asiatic Society, Calcutta

The Asiatick Society was founded by Sir William Jones in 1784 in Calcutta. The objective was to enquire within the bounds of Asia about Man and Nature, whatever is performed by the one or produced by the other. In 1788, the Society launched a journal titled *Asiatick Researches, or Transactions of the Society*. This journal became the first scholarly journal produced from the Asian region, for inquiring into the history and antiquities, the arts, sciences and literature of the Asian countries. The twenty volumes of the journal were published before it ceased in 1839. The Society then started the *Journal of the Asiatic Society of Bengal* in 1832, now known as the *Journal of the Asiatic Society*, covering interdisciplinary subject areas.

The society also published memoirs series from 1905 till 1933 covering wide areas *viz.* zoology, geography, oceanography, santal medicine, alchemy, tribal life and culture, Tibetology, besides others. It has also published research Monographs on special subjects. The Europeans only were elected as members of the Society till 1828. In 1829, several Indians were elected as members, such as Dwaraka nath Tagore, Shiv Chandra Das, Maharaja Baidya nath Roy, Maharaja Bunwari Govind Roy, Raja Kali krishna Bahadur, Rajchunder Das, Ram Comul Sen and Prasanna Coomar Tagore. In December 1832 Ram Comul Sen was elected 'Native Secretary' of the Society. Raja Rajendralal Mitra, a polymath and a pioneering figure in the Bengali Renaissance, became the first Indian President of the Society in 1885. The Asiatick Society was rechristened as the Asiatic Society and is presently a grant-in-aid society of the Ministry of Culture, Government of India.

Literary Society of Bombay

The Society was founded by Sir James Mackintosh in 1804. In 1835 it became the Bombay Branch of the Royal Asiatic Society of Great Britain and Ireland. The objectives of the Society were to investigate and encourage oriental arts, sciences and literature in relation to Asia, and India in particular. The Society published a journal titled *Transactions of the Literary Society of Bombay* in 3 volumes in the years 1819, 1820 and 1823. It launched the Asiatic Society of Bombay in 1841 which published articles focusing on Indological and Sanskrit studies which continued as *Journal of the Bombay Branch of the Royal Asiatic Society* (1841-1854); continued as *Journal of the Asiatic Society of Bombay* (1855-2001). After Independence, the Society was renamed as the Asiatic Society of Bombay and presently is known as the Asiatic Society of Mumbai. The Society hosts an iconic public library in Mumbai, *viz.*, the State Central Library.

Madras Literary Society

The Madras Literary Society was founded in 1812 and became associated with the Royal Asiatic Society of Great Britain and Ireland in 1830. The objectives of the Society were to establish and maintain a complete public library, to collect and record, and occasionally publish information relating to the physical, political and religious history of South India. The Society published a journal titled *Transactions of the Literary Society of Madras* in 1827, which continued as *Journal of Literature and Science* from 1833 to 1894. The Society facilitated the establishment of a museum and an iconic library in Madras, *viz.* the Government Museum in 1851, and Connemara Public Library in 1896. The Connemara Public Library has become one of the four national depository libraries under the Delivery of Books and Newspapers (Public Libraries) Act, 1954.

Society for Translating European Sciences, Kolkata

The Society for Translating European Sciences was founded in 1825 in Calcutta by students of Hindu College under the guidance of Horace Hayman Wilson (1786-1860). The Society aimed at propagating scientific knowledge in India. The objectives of the Society were to translate scientific books

published in Europe into Bengali and to publish a scientific periodical. Two of its translators were Kashi prasad Ghose and Amala Chandra Ganguli. H.H. Wilson, an English Orientalist, took the initiative to publish the Journal titled *Bigyana Sebadhi* (Treasures of Science), which was published during 1832-34 that incorporated the said translations.

Students Literary and Scientific Society

The Students Literary and Scientific Society was founded in Bombay in 1848, while Dr Bhau Daji Lad was its first President. The Society aimed at setting up schools for imparting education in vernacular languages to the boys and girls. It underlined that education and training in the vernacular languages would lead to faster dissemination of knowledge in society. The founder members of the Society included Parsi entrepreneurs and other respected individuals of Bombay, *viz.*, Dadabhai Naoroji, Naoroji Furdunji, Framji Cowasji Banaji, Balshastri Jambhekar, Jagannath Shankar Shet, Vishvanath Narayan Mandlik, and Sorabji Shapurji Bengali. The Society published a journal titled *Proceedings of the Students' Literary and Scientific Society* (1854-56). The Society supported nine vernacular free schools for girls in and around Bombay.

Scientific Society, Aligarh

The Scientific Society was founded by Sir Syed Ahmad Khan and Principal Sudder Ameen in 1864 in its first meeting held at Ghazipur, Uttar Pradesh. Later the Society office was shifted to Allahabad, and again to Aligarh. The purpose of the Society was to translate the western works into Indian languages as a prelude to prepare the community to accept Western education and to inculcate scientific temperament among the native Indians. The objectives of the Society were to translate into such languages as may be in common use among the people those works on arts and sciences, which being in English and other European languages are not intelligible to the natives; to search for and publish rare and valuable oriental works; to conduct scholarly meetings, lectures on scientific and other useful subjects; and to illustrate the scientific instruments. It published a bilingual periodical titled *Aligarh Institute Gazette* during 1866-1924

published in English and Urdu. Raja Jai kishan Das was elected as the Secretary of the Society in 1867, who played a key role in the development of the Society. The Society became a part of the famous Aligarh Movement to establish a modern system of Western-style scientific education for the Muslim population of British India. Thus, the Society facilitated the establishment of the Muhammadan Anglo-Oriental College in 1875 in Aligarh, which later became Aligarh Muslim University in 1920.

Indian Association for the Cultivation of Science (IACS)

The Indian Association for the Cultivation of Science (IACS) was founded in 1876 by Dr Mahendra Lal Sircar, an eminent physician of Calcutta. The distinction as the country's first research centre in the modern era must be accorded to IACS as pointed out by Balaram (2009). The famous scientific luminaries of the country such as Acharya Sir Prafulla Chandra Ray, Sir Chandrasekhara Venkata Raman, Meghnad Saha, K.S. Krishnan, Sir Jagadish Chandra Bose, and Satyendra Nath Bose were connected with the IACS. The historic discovery of the 'Raman effect' was made at IACS, which led to Raman winning the Nobel Prize in Physics in 1930 "for his work on the scattering of light and the discovery of the effect named after him." The objectives of IACS are to invite, encourage and enable the natives of India to cultivate science throughout the society; to maintain and preserve indigenous knowledge, ancient or modern; and to aim at editing and publishing the ancient records, so replete with interest and wisdom. The Association focuses on the advancement of sciences by undertaking and promoting fundamental research. The Association published a periodical titled *Report of the Indian Association for the Cultivation of Science*, during 1876-1916, which continued as the *Report and Proceedings of Science Convention, Indian Association for the Cultivation of Science* during 1917-21. IACS is now an eminent public university, operating under the Department of Science and Technology, Government of India. IACS produced several awardees of the Shanti Swarup Bhatnagar Prize, and the Fellows of the national science academies.

Punjab Science Institute (PSI)

The Punjab Science Institute (PSI) was founded by Professor Ruchi Ram Sahni in 1885 in Lahore. John Campbell Oman, Sahni's colleague from the Lahore Government College, was another founding member of PSI. The objectives of PSI were to popularise all kinds of scientific knowledge by means of popular lectures, illustrated with experiments and magic lantern slides, in English and the vernacular. Since its inception, PSI was regularly organising popular science lectures throughout the Punjab province of British India. PSI lectures became so popular that Sahni and his team were invited all over the province, to small towns and neighbouring native states. Sahni also lectured on scientific topics in Punjabi to an audience of shopkeepers and other laypersons in Lahore. PSI encouraged technical education and helped it to flourish in the province.

Society for the Promotion of Scientific Knowledge (SPSK)

A new association, the Society for the Promotion of Scientific Knowledge (SPSK) with objectives similar to those of the Punjab Science Institute was established in 1895 in Lahore by some students of the Lahore Medical College with Dr C.C. Caleb as its president. The objective of SPSK was to spread science through popular lectures and actual demonstrations among the general public. SPSK continued the works of PSI across the Punjab province, as Ruchi Ram Sahni got busy with complicated litigation in connection with the Dyal Singh Will case. It was decided to close the PSI and transfer the assets in the form of cash, books and apparatus to the youthful society under the leadership of Dr Caleb, one of the most active members of erstwhile PSI (Sehgal & Mahanti, 1994). As Dr Caleb was at the head of a large scientific department, carrying on the work of the SPSK became easier.

Indian Institute of Science (IISc), Bangalore

The Indian Institute of Science (IISc) was established in 1909 in Bangalore with active support from Jamshed ji Nusserwanji Tata and Krishna Raja Wadiyar IV. When Jamshed ji Tata presented a plan for a research institute of science for India, Swami

Vivekananda wholeheartedly endorsed the idea of having an indigenous research institute. Morris William Travers, an eminent English chemist, became the first Director of IISc. Sir Chandra sekhara Venkata Raman became the first Indian Director of IISc in 1933, after his stints at IACS and the University of Calcutta.

IISc has published its scholarly journal titled *Journal of the Indian Institute of Science* since 1914, which presents the research work carried out by the IISc and other institutions around the world. IISc is now an eminent public university, operating under the Ministry of Education, Government of India. IISc produced several awardees of the Shanti Swarup Bhatnagar Prize, the Fellows of the national science academies, besides other internationally renowned researchers in the STEM fields. IISc has been ranked as a top research university in India by the National Institutional Ranking Framework (NIRF) since 2016. As pointed out by Balaram (2009), the history of IISc is intimately linked with the story of the evolution of higher education, research, and science and technology in India, over the course of the turbulent years of the 20^{th} century.

Vigyan Parishad Prayag

The Vigyan Parishad Prayag (VPP) was set up in 1913 in Allahabad, Uttar Pradesh. VPP has played a pioneering role in the popularisation of science in Hindi since its inception. It started a popular science magazine in Hindi titled *Vijnana* (Science) in 1915, and a scholarly journal in Hindi titled *Vijnana Parishad Anusandhan Patrika* in 1958. These have been continuously published since then. It has published a large number of popular science books. It has organised public lectures and seminars on scientific subjects. Many of the well-known science communicators in Hindi were associated with VPP (Mahanti, 2012). National Award for the Best Effort in Science Popularisation of NCSTC was conferred to VPP. The Parishad was involved in developing a dictionary of 10,000 definitive terms in biotechnology with support from the Department of Biotechnology, Government of India.

Indian Science Congress Association (ISCA)

The Indian Science Congress Association (ISCA) was founded in Calcutta in 1914 by two British Chemists, namely, J.L. Simonsen and P.S. MacMahon. The founders felt that scientific research in India might be stimulated if an annual meeting of research workers on the lines of the British Association for the Advancement of Science could be convened. Accordingly, the first meeting of the Association was held during 15-17 January 1914 at the Asiatic Society, Calcutta, with Sir Ashutosh Mukherjee, the then Vice-Chancellor of the University of Calcutta, as the President. The objectives of ISCA are (i) to advance and promote the cause of science in India, (ii) to hold an annual congress at a suitable place in India, (iii) to publish such proceedings, journals, transactions and other publications as may be considered desirable, (iv) to secure and manage funds and endowments for the promotion of Science, and (v) to do and perform any or all other acts, matters and things as necessary for the other objectives. ISCA holds the Indian Science Congress, an annual mega science event.

Every year, the Indian Science Congress is inaugurated by the Honourable Prime Minister of India, while a few thousand delegates and young scientists present their research work and exchange ideas on the relevant scientific problems with their peers and subject specialists. ISCA brings out an academic Journal titled *Everyman's Science* since 1966 and various other publications, and texts from its eminent lecture series. ISCA has maintained Regional Chapters in different places across India since 1986. Since 1965, ISCA annually confers various Awards and Prizes for eminent Indian Scientists and young scientists.

Conclusion

The scholarly societies in pre-independent India helped form qualitative human capital, knowledge, production of scientific periodicals, and proceedings of scientific meetings in English and the vernacular languages of India. They facilitated the creation of scientific institutions, laboratories, scientific infrastructures, and manpower to advance basic and applied research across the country without any or little support from the colonial British Government. They also helped in disseminating

scientific knowledge contributed by the Indian scholars, which was of high quality, and often supported the indigenous knowledge. The journals published by these scientific societies have been indexed with international abstracting and citation databases. Many of the luminaries of the Indian Renaissance embraced western education and facilitated the advancement of science and scientific temper across the breadths and widths of the country through the scientific societies at the local or provincial levels. The Europeans established a few scientific societies in India, and later native Indians got inducted into them and gradually shared the responsibilities of running the scientific societies. These helped transition from the European leadership to Indian leadership in running the scientific societies across the country. On the other hand, some Indian societies helped in embracing or the formation of Swadeshi science movements across the country. They eventually served the motto of self-reliance through the Swadeshi industries.

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