



PRASU JAIN
PRAKHAR GARG

In a world riddled with algorithms, more than being humans, we have come to be defined as data points, universally categorised according to our data sets. Much like Darwin's Theory of Evolution, which hasn't been contested even by the most brilliant minds in the last two hundred years, we started with a single digit '0', then onto binary, and finally evolved into a myriad of complex mathematical problems, known as 'algorithms'. Should the joke be stretched too far, humans, in the end, are just numbers. But that is not how it always has been

Prasanta Chandra Mahalanobis foresaw decades ahead, beyond these numbers, and influenced the ways of the world by converting us, data sets into able tools of nation building and giving much impetus to India's socio-economic growth at a time when even the idea of it was far-fetched. He once wrote that "data are not just numbers, they speak volumes." His stature needs no introduction but his contributions and legacy must invoke a renewed sense of introspection in this Indian age of digital transformation.

In January 2024, India started its four-year term as a member of the United Nations Statistical Commission, winning 46 out of 53 votes, after a gap of nearly two decades. This has highlighted India's history of statistical prowess and expertise, thus pushing its boundaries in

defining international standards, concepts and methodologies in Official Statistics. China, India's ambitious neighbour, who was also vying for a seat in the Commission, once had keen interest in the Indian Statistical system, which can be highlighted by the visit of their then Prime Minister, Chou En Lai to the ISI, Kolkata, in 1956.

PC Mahalanobis founded the Indian Statistical Institute (ISI) in 1931 which conducted numerous agricultural and socio-economic surveys back in the day. These efforts led to the establishment of the National Sample Survey Office (NSSO), which continues to play a crucial role in nationwide data collection for developmental planning. Mahalanobis's advocacy also led to the creation of the Central Statistical Office, earning him the title of the Father of Statistics in India.

Recently, the Ministry of Statistics and Programme Implementation (MoSPI) released a detailed report on the Household Consumption Expenditure Survey 2022-23 (HCES), designed to collect information on household consumption patterns. The HCES data is crucial for understanding consumption patterns and socio-economic disparities in India but it was Mahalanobis himself who pioneered the use of large-scale sample surveys such as HCES,

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developing methodologies for the objective and representative collection of national-scale data between 1937 and 1944. His innovative use of randomization in selecting units for sampling remains a cornerstone of modern statistical practices. He is also known for developing the Mahalanobis D-square, a statistical measure of distance between two groups of objects, which is widely used in various scientific and industrial domains.

ASSOCIATION WITH TAGORE

Mahalanobis's contributions to statistics extended far beyond his initial work, as he used data in unprecedented ways that remain unmatched to this day. His interest in statistics began almost by chance in 1915 when a delayed voyage from England to India allowed him to explore the subject. However, it was Rabindranath Tagore who played a pivotal role in steering Mahalanobis, then a professor of physics at Calcutta's Presidency College, towards formal statistical activities. In 1917, Tagore introduced him to scholar Brajendranath Seal, who asked Mahalanobis to analyse the examination records of Calcutta University. This marked Mahalanobis's first statistical venture with real-life data.

Although his long association with Tagore is well known, few are aware that Mahalanobis served as Tagore's private secretary during his foreign visits. He wrote a series of essays titled *Rabindra Parichay* for the prestigious Bengali magazine *Probashi* and authored a book, *Rabindranath Tagore's Visit to Canada in 1929*. Notably, Mahalanobis was also present when Tagore met Einstein in 1930.

Mahalanobis once wrote, "Statistics must always have purpose, either in the pursuit of knowledge, or in promotion of human welfare." In 1931, when monsoon floods were common in eastern India, he conducted systematic statistical studies on rainfall and floods in Odisha and Bengal, leading to the construction of the Hirakud Dam in Odisha and the Durgapur Barrage in West Bengal for flood control.

Mahalanobis was instrumental in orchestrating different aspects of planning in newly-independent India, including the Second Five-Year Plan. Recognising the importance of technological advancements, he ensured that the ISI procured India's first electronic digital computer in 1956, followed by the second in 1959. His foresight in embracing technology laid the foundation for the integration of technological tools in statistical analysis.

In today's era of Big Data and AI/ML, where data is considered 'the new oil', Mahalanobis's work is more relevant than ever. His ideas have given birth to an India that is determined to look after its people using data, a public good, as a tool of nation building.

The theme for this year's National Statistics Day is 'Use of data in decision making' which is what he advocated for and worked towards all his life. Mahalanobis was, above all, a great visionary statistician, dedicated to using good data and good intentions to change the world.

Prasu is an officer of the Indian Statistical Service, currently posted as Assistant Director at Price Statistics Division, MoSPI. Prakhhar is Communication Assistant with CEED, at the Gokhale Institute of Politics and Economics, Pune. Views are personal