

## Remembering a pioneering palaeoanthropologist of India – S. R. K. Chopra

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The Nobel Prize in Physiology or Medicine to Svante Paabo of the Max the Plank Institute for Evolutionary Anthropology, Leipzig, has highlighted the importance of studying human evolution. Human evolution (along with human variation) is the core subject matter of anthropology. Palaeoanthropology, a sub-field of physical anthropology, is closely related to pre-history. In this context, the history of palaeoanthropology in India would be incomplete without acknowledging the contributions of Shiv Raj Kumar Chopra (SRK), the Founder and Head of the Department of Anthropology at the Panjab University, Chandigarh.

Chopra, a distinguished scholar is known for dedication and commitment to knowledge, erudition and valuing others above self. He is admired for his charisma and ability to fight for the development of Anthropology in India. He had great foresight. His struggle to retain the fossil find of intact mandible of *Gigantopithecus* from Shivalik Hills as a prized possession of Museum of Anthropology at the Panjab University is a legend. He is rightly recognized for putting palaeoanthropological findings from India on the world map.

SRK, as he was fondly addressed, was born in Ludhiana on 8 October 1931, in a family of educators. His grandfather was a tutor to the Royal family of Bilaspur. His father was a Professor of English literature at the Delhi University. SRK earned his B.Sc. Honors in Zoology in 1951 and Masters in Anthropology in 1953 from Delhi University. In 1955, he completed his Ph.D. in Zurich. At Zurich (1953–55) he researched the cranial suture closure in the

old world and new world monkeys. The findings, published in the proceedings of the Zoological Society of London (Volume 128, 1957), provided new information on suture closure in relation to physiological age in monkeys. This contribution gained significance as the data in that paper was compared with corresponding data for anthropoid apes and men. It is widely referred to in the textbooks and in standard works on primates. With a grant from the Wenner-Gren Foundation for Anthropological Research, New York, SRK designed a ‘pelvimeter’ at the University of Birmingham (1955–58) which is used for measuring angle of torsion on the pelvis and other bones in primates, including man.

His academic journey as a university teacher started in the year 1957. From 1957 to 1958, he served as an invited lecturer at the Duckworth Laboratory, University of Cambridge, UK. In 1959, he returned to India and joined as a Reader in Anthropology in the Department of Zoology. Within a year, he successfully established a separate Department of Anthropology. In 1960, he married Krishna Taneja, his lifelong companion and a woman of great strength and resolve. In the same year, he became the youngest Founder and Head of an integrated Department of Anthropology in independent India. His academic and administrative genius started flourishing at the young age of 30.

By this time, he was known as one of the leading palaeoanthropologists in the World. He served as the Chairman of the Department of Anthropology till 1981, a tenure of more than twenty years. The young department blossomed as a centre of research in various domains of biological and social-cultural anthropology. Under his expert guidance, the department emerged as a centre of excellence for palaeoanthropological studies.

In 1967, SRK and his team investigated various hominoids and other fossils from the Shivalik region. To his credit stands the discovery of a new fossil Gibbonoid tooth from the Shivalik Hills. The discovery of fossils like *Gigantopithecus bilaspurensis*, *Pliopithecus krishnaii* (in the Miocene beds) and *Sivasimia* from the Shivaliks attracted world attention. Several collaborative projects funded by different national and

international institutions resulted. Some of the findings from various collaborative projects were presented at the Second International Congress of Primatology held in Atlanta, Georgia, USA, in 1978 and were subsequently published in Proceedings of the Congress.

Funds from the German Research Council (Deutsche Forschung-Gemein Schaft) assisted him in his project at Kiel University on the biological surveys of select Himalayan populations. Between 1964 and 1968, the Punjab government and the CSIR continued to fund the project, which was extended to Lahaul and Spiti regions of Himachal Pradesh. The Indian National Science Academy (INSA) further funded research in this area from 1972 to 1974. In 1974, he presented details of Dryopithecine material from the Shivalik at the 5th International Congress of Primatology held at Nagoya in Japan. This was later published in Contemporary Primatology in 1975. He contended that these fossils refute the belief propounded by Simon and Pilbeam (1972) that the fossil ape species in the Haritalynagar area in India are not diversified. Chopra’s work on human adaptability to varying climatic zones was conducted in association with the Cambridge Himalayan High Altitude Research Expedition in 1979, and the research was supported by the Medical Research Council and the Royal Society, UK. Its report was published in the international compendium by the Cambridge University Press.

In 1980, SRK was invited by A. B. Chiarelli of Florence University, the President of the 8th Congress of the International Primatological Society, to share his findings from the ‘Shivalik Fossils Remains’ along with other experts and participants of the congress. His work on evolution of Early Man is well acclaimed, documented and cited. The Shivalik region may now be considered an area where the earliest primates may have evolved.

Chopra’s intensive and incisive research and experience extended over three decades. More than 150 research papers have been published in various national and international journals and cited in several important books on physical anthropology. The citation of his works speaks volumes about the excellence of his research.

In 1974, SRK proposed building a 'Museum of Man' on the premises of the Department of Anthropology at the Punjab University. The project was aesthetically executed with the help of expert artisans from Kolkata. It was inaugurated by the then Chief Minister of Punjab, Giani Zail Singh. The life-size models of fossil apes, primates, and homo sapiens trace the evolution of humankind. They are configured from the reconstruction of fossil materials collected by him and his team during various field expeditions. Some of these fossils from the Shivalik region date back to 14 million years. The museum also exhibits various ethnographic materials collected from different regions of India. It has been posthumously named the SRK Chopra Museum of Man. It is to his vision that the Department of Anthropology, Panjab University, holds the distinction of being a UGC-funded Centre for Advanced Studies in Anthropology since 2011.

SRK made seminal contributions to palaeoanthropology. He identified and brought talent from different parts of the country to teach in this new department and encouraged them to take up challenging tasks and projects. He supervised 19 Ph.D.s and was an examiner at both international and national universities. He was fluent in both English and German languages.

Students trained in the department were hired with ease by various national and international universities and allied institutions like the Anthropological and Archaeological Survey of India. The Department of Anthropology, Panjab University was one of the first departments in the country to introduce a diploma in Forensic Science and anthropology under his visionary leadership. Ethnographic explorations in remote areas of Himachal Pradesh, Kinnaur and Lahaul Spiti were initiated under his guidance.

He had done several international assignments at various universities across the world. Some prestigious teaching assignments were at universities across the United Kingdom, West Germany and Japan. From 1965 to 1967, he was a Visiting Professor at the Institute of Anthropology at the University of Kiel in West Germany. In 1979 he was invited as a Visiting Professor at the Primate Research Institute at Kyoto University in Inuyama, Japan.

Among several awards SRK received, reference must be made to the Wenner-Gren Foundation Award for Excellence. He was selected for this award twice: once in 1955–1956 and a second time in 1966–67. He

was a Fellow of the Royal Anthropological Institute of Great Britain and Ireland, a Fellow of the Zoological Society of London and a Permanent Council Member of the International Association of Human Biologists. He was also a Member of several reputed national organizations. SRK chaired the session on Palaeo-Biology and Evolution at the 7th Congress of International Primatological Society in 1979.

SRK received a silver plaque from the Ethnographic and Folk Culture Society, Lucknow, in 1976 and delivered the Majumdar Memorial Lecture there. From 1980–81, he served as the UGC National Lecturer. Some other prestigious lectures he delivered in his career include the 1984 M. R. Sahni Memorial lecture to the Palaeontological Society of India and, in 1985–86, the Panchanan Memorial Lecture to the Asiatic Society, Kolkata. He also served as the Editor of *Everyday Science* and as a Member of the Advisory Committee of Anthropological Survey of India and the Indira Gandhi National Museum of Man. Additionally, he held the esteemed position of President of the Indian Association of Physical Anthropology from 1976 to 1978. In 1989, he was bestowed the Excellence Award by the Shiromani Nehru Centenary Committee for enhancing India's prestige and contribution towards National Development.

In 1988, he had to undergo a kidney transplant and received a kidney from his wife. He recovered and returned to the hectic life of an active academician and administrator. In 1988, he spent a year as a Visiting Professor at the United Medical and Dental School at the University of London. His administrative acumen was distinctively visible when he held the office of the Pro Vice Chancellor of Panjabi University, Patiala, from 1983 to 1986 and then as Vice-Chancellor of Kurukshetra University, Haryana, from 1986 to 1989. On his return to his parent University, he was given the prestigious position of Dean of University Instructions at Panjab University till he retired from his formal academic career on 31 October 1991.

In 1989, eminent geologist Ashok Sahni and palaeoanthropologist Rajan Gaur published S. R. K. Chopra's festschrift volume titled *Perspectives in Human Evolution* to honour his immense contributions. In recognition of his research contributions in promoting scientific explorations in the field of fossil primate discoveries, he was nominated as a member of the Explorers Club of the USA. He was the first Indian University don to receive the distinction in

recognition of his astronomical scientific career, most notably fossil primate discoveries. He also featured in *Indo-American Who's Who*. His academic attainments are legendary, and his meteoric rise in the world of palaeo-anthropology is exceptional. He is recognized as one of India's original intrepid explorers who conquered hostile terrain to dig up significant finds that pieced together major anthropological indications of our past.

SRK made not only an exceptional contribution to the growth of the discipline of anthropology but also made generous financial contributions to motivate the students of undergraduate and postgraduate programmes to excel in the discipline. In 1962, his family contributed towards setting up the Rai Bahadur Wali Ram Taneja Medal in memory of his father-in-law, which was to be given to the top-ranking student of M.Sc. (Honours School). In 2005, Panjab University, Chandigarh, formalized the institution of the SRK Chopra Memorial Scholarship to be awarded to the topper in B.Sc. (Hons. School) in Anthropology.

Some of Chopra's significant contributions are given below.

1. Chopra, S. R. K., *J. Hum. Evol.*, 1978, 7, 3–9.
2. Chopra, S. R. K. and Kaul, S., *J. Hum. Evol.*, 1979, 8, 475–477.
3. Chopra, S. R. K., Kaul, S. and Pathak, R. K., *J. Hum. Evol.*, 1982, 11, 105–108.
4. Chopra, S. R. K., Kaul, S. and Vasishat, R. N., *Nature*, 1979, 281, 213–214.
5. Chopra, S. R. K. and Vasishat, R. N., *Nature*, 1979, 281, 214–215.
6. Chopra, S. R. K. and Vasishat, R. N., *J. Hum. Evol.*, 1980, 9, 129–132.
7. Gaur, R. and Chopra, S. R. K., *Palaeogeogra., Palaeoclimatol., Palaeoecol.*, 1983, 43, 313–327.
8. Simons, E. L. and Chopra, S. R. K., *Postilla*, 1969, 138, 1–18.
9. Vasishat, R. N., Gaur, R. and Chopra, S. R. K., *Nature*, 1978, 275, 736–737.
10. Vasishat, R. N., Gaur, R. and Chopra, S. R. K., *Palaeogeogra., Palaeoclimatol., Palaeoecol.*, 1978, 23, 131–140.

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