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Heritage forensics

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Bronze-casting in India is synonymous with major aspects of temple worship. It has its origins from Indus Valley Civilisation (c. 3300–1700 BC), and its glory reached its zenith during the rule of a mighty Sozha (Chola) Dynasty (c. 850 C.E. to 1250 C.E.) in Tamil Nadu (South India). While the main deity in a temple is made of granite, large and spectacular bronze icons of processional deities are created for purposes of taking them out in procession on festive occasions. The icon of Nataraja (Shiva, as the cosmic dancer), is indeed one of the most celebrated and unparalleled depictions on bronze and often assumes greater importance and attraction when considered as works of art and antiquity and command very high prices throughout the world. Fearing desecration during Muslim invasion, bronzes belonging to temples had been buried under the earth and been forgotten. Accidental excavation of or wilful treasure hunt of these burials by miscreants resulted in illegal icon trade. Hundreds of bronzes have also gone to the museums all over the world when the country was under colonial rule.

Still there are thousands of such precious icons in several temples, museums and forgotten burials. In order to save at least the remaining antique bronzes in the country, this author has suggested several scientific methods of indexing and preserving them for future identification. The methods suggested include spectra chemical analysis, radiography, x-ray fluorescence, thermoluminescence, laser holography and photography.

Nevertheless, a detailed study of icon making reveals that final finishes are given by hand engraving which leave a distinct characteristic pattern especially on the minute details of ornamentations, floral designs etc., which would certainly differ from similar ornamentations, floral designs engraved even by the same artisan in all the other icons. Therefore macro-photographing of these engraving details at strategic locations of the icon and creating a file of index for every icon will offer an infallible evidence for future identification.

Biography

P. Chandra Sekharan, MA, M.Sc., Ph.D., BL, DEL, FInstP (Lond) FFSc FAFSc FISC DABFE Chartered Physicist, Fellow, American College of Forensic Examiners Institute is currently Distinguished Honorary Professor of Forensic Sciences, Ambedkar Law University, Chennai and President, Forensics International . Formerly he has been Professor-Director, Forensic Sciences Department Government of Tamil Nadu; Professor of Forensic Engineering, Anna University, Chennai; Emeritus Fellow of Forensic Sciences, University of Madras; Professor of Forensic Sciences, National Law School of India University, Bangalore; Professor-Director, School of Science and Forensic Sciences and Pro Vice Chancellor, National Law University, Jodhpur. He has published 250 research papers and fourteen books.

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