

Rhythm divine

Dr Sharada on Nataraja and metaphysics

By Jon Stock/LONDON

There was an air of genuine excitement when Dr Sharada Srinivasan stepped up to the lectern at the Royal Asiatic Society in London. The organisation has hosted many important events since its inception in 1823, but few could have rivalled Sharada's lecture for its sheer drama.

Throughout her talk on the 'Art and Science of Chola Bronzes', which coincided with an exhibition of Cholas at the Royal Academy of Arts in London, she illustrated her points with poetry and graceful hand movements. She danced for 20 min-

utes after the lecture.

Billed as a dance-lecture, the event kept with the theme of Nataraja as a lyrical synthesis of art and science. It was the late historian Ananda Coomaraswamy who coined the phrase 'the Cosmic Dance of Siva' to describe Nataraja, adding that the icon was poetry, but nonetheless science. Since then, many have continued to explore this theme including Fritjof Capra, who wrote in his *Tao of Physics* that "for modern physicists, Siva's dance is the dance of subatomic particles". Sharada, a Fellow of the National Institute of Advanced Studies, took this approach to an altogether higher level with Dr Nirupama Raghavan, the astrophysicist and former director of the Nehru Planetarium, who died last month.

For the first time, south Asian metal artefacts were subjected to careful micro-drilling to trace element and lead isotope analysis to scientifically date different styles of icons to specific periods. In an article in *THE WEEK* in 2003, Sharada revealed that the metal icon of Nataraja, dancing with his leg extended, had already emerged in the 7th century Pallava period. It had previously been thought of as a 10th century Chola innovation.

Nirupama was clearly intrigued by the article, particularly because Sharada had briefly alluded to

the astrophysicist's own work on Nataraja. At that time, Nirupama was pursuing the theory that some of Siva's imageries in metallic icons were inspired by stars, especially the Orion constellation. "It is as if our ancestors used the star positions as wire frames in the graphic design of the icons," she was quoted as saying.

According to Nirupama, said Sharada, the supernova explosion in the region of the Orion constellation in 1054 may have impacted the religious poetry, rituals and depictions related to Nataraja's cosmic dance. "She thought the processional chariot festival which takes place every December at the Nataraja temple in Chidambaram was directly linked to the dramatic supernova, which would have suddenly appeared in the sky, remaining bright enough to have been seen during daylight for 21 days," she added.

Sharada told the audience that a star chart for Orion dated 800 AD was mapped on to a Nataraja bronze image which she had dated, using lead isotope analysis, to the Pallava period (800-850 AD). "Apart from implying high astronomical competence, it also seems to ratify the Pallava dating, possibly making this the earliest known Nataraja bronze image," she said.

The 'astonishingly good fit', as she calls it, prompted gasps of delight among the audience including Professor Tony Stockwell, president of the Royal Asiatic Society. The ghostly composite image of Nataraja was projected on the wall, a symbol not just of science and art harmoniously joined, but of an extraordinary meeting of minds.

Paying tribute to Nirupama, Sharada said: "It is almost as if Nirupama lingered on until I had at least finished my tour. I have learned life lessons about cosmic creation and destruction—the exhibition opened on my daughter's birthday on November 7 and closed with Nirupama's passing away." She also dedicated a Nataraja poem by M.S. Subbulakshmi to Nirupama. ■

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Erudite: Dr Sharada Srinivasan