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Renaissance woman

Archaeometallurgist and dancer Sharada Srinivasan explains the significance of Chola bronzes and their possible links with cosmic events

Q&A/SHARADA SRINIVASAN

Photographs by Sanjay Ramchandran

Modern Renaissance woman

IT'S NOT often that people are able to marry their interest in art and science. It's even more rare to find a woman in contemporary Bangalore exploring the past, ruminating about poetry and history, studying metallurgy and discovering that a certain type of bronze sculpture might have actually come from a different period, lecturing about all of this and perform a dance to demonstrate the whole. But like the many-armed Nataraja she talks about, Sharada Srinivasan is a woman of several talents. Her exhibition titled the 'Dance of Siva' has just concluded at the Alliance Francaise, and she thinks Bangalore is a perfect city for an art-science interface. **Sonya Balasubramanyam** unravels this multi-faceted personality through an interview. Excerpts:

Did you enter the field of archaeo-metallurgy because of dance or the other way round?

It's a bit of a chicken and egg situation. I was drawn to science and physics due to my father's influence but I was also exposed to dance, art and culture. After a BTech at IIT Powai in Engineering Physics, I decided that I would like to work in an interface area involving the application of scientific techniques to the study and preservation of art and archaeological objects and material heritage. As a Bharata Natyam dancer the most obvious subject for me to do detailed inter-disciplinary work was the Nataraja bronze from Tamil Nadu since it represents Siva as the Lord of Dance. There was a whole topic to be researched in terms of insights to be gained from scientific and metallurgical

techniques into the history of science and art associated with south Indian and Chola bronzes and the Nataraja and the questions of the finger-printing and authentication. I had an opportunity to do my MA and PhD on this topic at University College London and School of Oriental and African Studies, supported by British Council. That opened up a whole world of possibilities.

Did your childhood in any way influence your professional choices (dance/ metallurgy)?

Of course, childhood plays a seminal role. I was exposed to a melange of activities as a child. My father, Dr MR Srinivasan, is a leading nuclear scientist and has been a role model for me. He would take me to the various nuclear power stations where he was working, such as at Kalpakkam, and explain the processes of fission and fusion, chain reactions, collisions of atoms and molecules etc. and how all that leads to the production of nuclear energy... and at the same time I also had a deeply mystical interest in the universe, not just as a physicist. I was exposed to a lot of art and archaeological sites, also thanks to my mother Geetha Srinivasan and her great love of nature and travel. She does things which Indian mothers in their late 60s rarely do. For example, two months ago she landed in Bangalore after a wildlife trek around Ooty with her legs full of leech bites but she was in high spirits!! My uncle CV Seshadri was a pioneer in terms of using science and technology for rural development. That also inspired in me a love of the outdoors and for examining the plight of traditional craftsmen.

As to why I got drawn to art and Indology at the same time, well my great-grandfather Sir CP Ramaswamy Aiyar, the erstwhile Divan of Travancore, was a renowned figure and former Vice Chancellor, Benares Hindu University, and as a child I was much closer to all that legacy, the ancestral homes, artefacts and photographs of a gracious bygone era. That played a role too in shaping my interests.

What has been the most exciting find/ discovery for you personally?

One of the most exciting discoveries has been the finding from archaeo-metallurgical studies that the Nataraja bronze could have been formulated by the Pallava period (800 AD) rather than 10th century Chola period. This has opened up a whole new world because I have been going back to this very rich and thought provoking body of poetry of the Tamil saints such as Manickavachakar and Appar and re-discovering the magic of their hymns to Siva and re-assessing them in the light of this new historical possibility. I should mention the important work done in collaboration with the late astro-physicist Dr. Nirupama Raghavan. We speculated that the Nataraja imagery may have also been genuinely inspired by a sense of observation of the cosmos whereby it seems to have been related to observations of the Orion constellation. This in a way became a real-time cosmic dance where Dr Nirupama passed away from cancer just as this work came to fruition, and just as she had passed on all these new insights to me.

And shortly thereafter, Guru Narmada from Bangalore, whose Nataraja varnam I presented at the Royal Academy of Arts, also passed away of a heart attack, just after getting the Sangeet Natak Academy

award. So in a way I guess this whole experience rather poignantly epitomised the philosophy of the Nataraja bronze; of creation and one's creativity emerging out of destruction.

How have your lecture-cum-dance performances been received?

These lecture performances have been well received. A great experience was at the China Conservatory of Music at Beijing. I was amazed by the deep level of knowledge and interest in the questions from the Chinese audience. Then the lecture-performance at the International Centre for Theoretical Physics, in Trieste, Italy, was one which literally gave me goosebumps as I was performing in front of this blackboard where famous Nobel Laureates had written notes and lectured. The lecture performance for the Royal Academy of Arts, London for their Chola bronze exhibition in January last year was also a mindblowing experience.

Is there a difference in the way Indian and foreign audiences receive your lectures?

I don't think that there are fundamental differences between Indian or western audiences. It is mainly about the differences between the cognoscenti or the connoisseurs and those who are less cultivated, whichever part of the world they are in. But I feel slightly worried that, whereas it seems that in the west or even in China, there seems to be a serious interest in learning and absorbing information on a range of cultural topics, in India there is so much dumbing down and Bollywoodisation. I mean perhaps there's a tendency to settle for kitsch. With theatre, dance and performance art we have been much more successful in comfortably integrating the traditional and the modern, but this has not happened in the realm of material culture because we haven't established a museum culture. In China they are setting up museums for everything: for their arts and crafts, silk making, pearl making. If Bangalore had a proper museum for displaying and explaining its traditions of silk and sarees, or its jewellery traditions etc. imagine how much more interest it would evoke, apart from kindling the imagination of the youth.

How would you define the Cosmic Dance of Shiva to a lay person?

Well, it was art historian Ananda Coomaraswamy who suggested that the Nataraja imagery evoked the metaphoric or philosophical aspects of cycles of creation and destruction from his readings of 13th century Tamil texts by Saiva saints. This imagery also captured the imagination of scientists like Fritjof Capra and Carl Sagan who saw in it certain metaphors or allegories which were closer to a modern astronomical or quantum mechanical understanding of the universe as being in a dynamic flux of cosmic creation and destruction. But what I was attempting was to explore was whether the creators of this icon had anything approaching a sense of observation of the cosmos itself rather than a broader philosophical sensibility.

In a broader context how can one explain the linkage of art and science?

The link between art, science and aesthetics has existed wherever there was or is high culture. The Chola bronzes and the Nataraja bronze is a powerful example in the era preceding the Renaissance; and you also see it in Mughal art, and in contemporary times. Leonardo da Vinci, the 16th century Renaissance era Italian master painter-scientist, most famously integrated art and science. Closer home Nobel Laureate C V Raman was also a scientist-aesthetician par excellence. I was also inspired by the work of the late Dr. Jon Darius, astronomer and musicologist at the Science Museum, London, who had done an exhibition of astronomical photographs entitled 'Beyond Vision' to show how science can reveal aspects that are beyond vision: this idea also in a way applied to my scientific studies on Chola bronzes/Nataraja to understand aspects beyond the art historian's vision. I think Bangalore with its mix of scientific and cultural institutions has the right innovative ambience to take a lead in activities in this art-science interface. But for that we also need to develop a sense of visual material culture. This is also why I put together this Cosmic Dance of Siva exhibition at the Alliance Francaise so that people who cannot necessarily see objects in the various museums may get a sense not only of the wonderment they evoke but also of the numerous intellectual issues that they raise.

How does one get to be part of an art-science network?

In fact I am co-moderating with space scientist Roger Malina, a free email network for promoting the art-science interface in the Asian region so if anybody would like to be part of this network they are welcome to get in touch at sharadasrinivasa@hotmail.com.