The sensuous and the sacred

The Cosmic Dance of Siva, or the dancing Nataraja made as a replica of the 10th century Chola prototype, is becoming a 21st century globalised icon

By SHARADA SRINIVASAN

It was Fritjof Capra with his *Tao of Physics* who catapulted the Nataraja, one of the most enduring cultural and religious symbols of India, into a global icon. In the Indian context, the icon has in recent years come to symbolise the resurgence of traditional craft and classical dance, whose revival owes greatly to two women whose birth centenaries are currently being celebrated—Kamaladevi Chattopadhyay who founded the Crafts Council of India and Rukmini Devi Arundale, who brought the Nataraja out of its temple confines into the centre stage of the Bharata Natyam performance.

Capra was certainly not the first in portraying the Nataraja as a universal metaphor for the interface between science, spirituality, dance and art. But he definitely helped the idea to catch on. And celebrating this millennial leap in paradigm as a post-modernist icon of rapprochement between science and society, one of the biggest exhibitions of Chola Bronzes featuring this image among many others from that period is making its way across America, from the Arthur M. Sackler Gallery at the Smithsonian Institution in Washington to the Dallas Art Museum and to the Cleveland Museum of Art, where it is currently on.

Billed as a "serene and sexy show" by Paul Richard of the *Washington Post*, the exhibition showcases the dignified sensuality of Chola deities to a western audience more familiar with the dichotomy between the sensuous and the sacred of the Judaeo-Christian tradition. In the Indian tradition, however, the sacred can often be unapologetically sensuous and even the erotic, sacred.

Over a millennium ago in Tamil Nadu, Siva, who had been generally worshipped in the form of the stone *lingam* within the innermost sanctum of the temple, underwent a spatial transformation to become manifest in a host of movable anthropomorphic forms cast in metal, including the Nataraja. These temple icons known as *utsava murtis* were originally intended only for ritual processions during special festivals or auspicious times.

The late art historian Ananda Coomaraswamy, coined the now famous adage of "The Cosmic Dance of Siva" in the 1920s to describe the Nataraja imagery: whereby Siva with swirlinglocks dances over the dwarf demon of ignorance, *apasmara*, under the right foot, with the left leg extended and with flayed arms holding the drum and fire thought to signify creation and destruction respectively, surrounded by a ring of perpetual fire symbolising cosmic cycles. He hailed the Nataraja metal icon as "poetry but nonetheless science".

In his 1974 book on quantum physics, Capra wrote that "for modern physicists, Siva's dance is the dance of subatomic particles". The Nataraja made it to the cover of *Time* in a 90s article on a changing, reforming India and has even recently been appropriated as the logo of a London-based global environmental movement (GAEA).
a doctoral thesis on the applications of archaeometallurgical investigations and techniques of scientific authentication in exploring metal technology, dates and find spots of images from southern India. Using micro-drilling techniques, I sampled about 130 metal icons from well known collections in India and abroad on which were done compositional and trace element analysis.

For the first time in the study of south Asian metal artefacts, lead isotope ratio investigations—a powerful finger printing method for exploring classifications in metal artefacts—were undertaken on these icons. Thus characteristic chemical profiles were obtained for different stylistic groups of images ranging from the early historic period; i.e. Satavahana or Sangam era (2nd-5th century), Pallava (7th-9th century), Chola (late 9th-11th century), Chalukya (8th-9th century), late Chola (12th-13th century), Vijayanagara (14th-16th century) and Nayaka periods (16th-18th century). This method enables images of uncertain stylistic attributions to be better dated and by which antiques may be authenticated from fakes.

Out of this alchemy popped a surprise: scientific evidence suggested that the metal icon of the Nataraja dancing with leg extended in the dance pose of bhunjangatrasita karana, which was generally thought to have been specifically a 10th century Chola innovation, had already emerged by the Pallava period, when the magnifi-

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The rich symbolism of the existing 12th century temple complex of Chidambaram (chit: consciousness; ambaram: cosmos) seems to celebrate Siva as not only the cosmic dancer but also the cosmic consciousness. Here, in the *chit sabha* or hall of consciousness, Siva is worshipped both as the *akasa lingam*, symbolised by empty space, and as the metal Nataraja icon, while the 108 *karanas* or cadences of Siva's dance are sculpted on the *gopuras* or temple towers. It is tempting to see in the symbolism the basic rudiments, or at least a metaphor, of ideas that have only more recently been grappled with in modern physics such as mass-energy equivalence, or notions put forth by physicist Roger Penrose for a possible grand unified theory of the forces of the universe, encompassing quantum consciousness.

Indeed, the inspiration linking dance and metal sculpture is probably an age-old one in the Indian subcontinent, going back to the Indus Valley/Harappan civilisation with the finds of a few metal figurines from Mohenjodaro of dancing girls with the hand on the hip that is, in a way, reminiscent of the dance form of Bharata Natyam from Tamil Nadu. That metal statues may have also been taken out in procession in antiquity is suggested by a late Harappan hoard from Daimabad in Maharashtra (c. 1500 BC) of an elephant, rhinoceros and bull which either have wheels, or holes below them possibly for poles to carry them around rather like the Pallava and Chola *utsava murtis*.

Curiously, like these Harappan or late Harappan statues, most south In-
From the stars

Nowhere in all the prose and poetry that have been inspired by Nataraja, often described as the "Cosmic Dance" or "Cosmic Consciousness" is there a hint as to how this visualisation took root and evolved. But preliminary work by Dr Nirupama Raghavan, retired director of Nehru Planetarium in Delhi, offers some interesting theories about a truly cosmic inspiration for the idol.

An astrophysicist, Nirupama says there is indirect evidence that the modern constellation Orion was associated with Siva. "It is seen that many of the iconic features associated with Siva do find their counterpart in the sky," she said. For instance, Betelgeuse, the bright star on Orion's shoulder, is Arudra, the star of Siva. The Kailasanatha Temple in Kanchipuram shows a frieze on the west facing wall that shows Gangadhara (the milky way, called Akasha Ganga) which resembles a sky map of Orion and neighbouring constellations!

Preliminary work on placing this qualitative identification on a more objective foundation has thrown up interesting results. The outlines of 2-D images of Ananda Tandava Nataraja in bronze and Siva Nataraja and Kalarimurti in stone show a very high correlation with bright star positions in the constellation of Orion, Nirupama says. "It is as if our ancestors used the star positions as wire frames in the graphic design of the icons." Nirupama's current research is in finding astrological inferences in the Nataraja statue.

The convergence between the sensuous and the sacred is best epitomised by the graceful image known as the Freer Gallery Devi.