

[Image]

Online edition of India's National Newspaper on indiaserver.com

Sunday, May 16, 1999

---

---

Lead Stories Entertainment | Next

National

International Wired to rhythm

Regional

Opinion

Sport

Entertainment technology possibly share? Since when do stages

Miscellaneous ``understand'' and ``respond'' to a dancer's physical

Classified movements? How will artists incorporate technology in

Employment to their work in the next century? ANITA RATNAM and

Features MEGAN HARTL on the future of dance.

Front Page

Index

Home

TECHNOLOGY and dance have merged, affording artists and technologists the opportunity to explore interactive stage performance and integrate methods that shift artistic processes. The result is innovative and unparalleled work that fuses art and machine. ``We are past the point of asking questions solely about the appropriateness of technology in dance,'' says Caludia Murphy, chair of the Department of Dance at Arizona State University. ``Our aim is now to challenge those in the field of dance to envision what our future holds and how we train and create as artists in the future.''

Historically the physical space of a theatrical, dancer or musical performance has been an unwidely and peripheral artistic concern. In the West there would exist the stage manager who would observe the performance, then signal one of several technicians to change the lighting, music or staging as the event progresses. In India, most artists work without any of the above personnel, except maybe for one individual who manages the lights and sound. The concept of a lighting plan and feeding the computer with the necessary lighting cues is still considered a great luxury and quite unnecessary to Indian dance.

``When technology allows the dancers to effect changes in the (media) environment through movement, the experience of the dancers' own physicality is heightened, thereby manifesting the intent of the work

while generating new ideas about structure and form,' explains American choreographer Ellen Bromberg about her dance-work ``Falling to Earth.' Working for nine months at Arizona State University's Intelligent Stage (ISA) and with video artist Douglas Rosenberg resulted in a fascinating performance in which the subtle issues of identity and personal doom due to AIDS were illuminated and not overshadowed by the computer mediated ambience. ``Technology should never become privileged over the body but exist at the service of the dancer's content,' says Rosenberg who considers ISA an international crucible to support the holographic environment in which all the elements are equal - text, sound, movement, image and technology.

The first International conference of Dance and Technology (IDAT) held in February 1999 at Arizona State University (ASU) in Tempe, Arizona brought together over 300 dancers, technical experts, educators and scholars from 20 countries on five continents who shared their expertise on the melding of dance and technology in experimental and provocative ways. The IDAT conference featured performance works from 15 countries and challenged the traditional conference format with the installation of a Web Cafe, Electronic Salon and a Dance/Camera installation. New software and equipment for dance and music education from companies like Apple, Proxima, Aerostram, Webcam and Cradle Interactive were displayed. ``If technology has made major inroads into our everyday lives, then the moving human body has also transformed the way we think about technology and its impact on central issues regarding identity, community and nature,' stressed John Mitchell, director of ASU's Multimedia Learning Center.

There were two revolutionary performances at the conference. COMMUNION was the U.S. premiere of a Canadian collaboration between Montreal artistes Isabelle Choiniere, Jimmy Lakatos, Alexandre Burton and Michael David Smith; and American Seth Riskin's world premiere LIGHT DANCE, a distinct, highly innovative and unusual concert performance. Viewing both performances made one realize that the field of dance and technology has grown from a speculative pursuit on the fringe of the dance world to a widespread field of inquiry that embraces education, performance and research in the mainstream dance community in the West.

Canadian photographer Cylla Von Tiedemann supports the use of technology in dance having worked with many Canadian choreographers like Bill James and Danny Grossman including Toronto based Kathak dancer Rina Singha. ``Using the sophisticated intelligence of technology to mediate the ambience of Indian classical dance is a very challenging prospect,' ' says the acclaimed photographer. ``I have visited India and seen how the solo classical dancer can seize the space and make it her or his own, the body itself becoming both the inner and the outer manifestations of the emotion and energy. However, if photography, lighting enter into that same space with mutual respect, the effect can only be heightened allowing the dancer to concentrate on creating the `rasa.' '

In a country short of technology but very long on human resources, the thought of machinery in Indian dance may be a bewildering and totally unnecessary idea. I remember walking into an art gallery in Pittsburgh in 1997 to watch the opening of a ``virtual reality' ' event. Standing on the main space was an ugly, hairy chested man with a pot belly holding several computer wires attached to various parts of his bare body. His head was covered with a strange helmet and all the wires were attached to more than 12 television cameras. As he breathed and moved his arms and legs, strange and wonderful patterns, emerged on the giant screen behind him. My aversion slowly turned to amazement when I tuned off his grotesque image and focused on the dancing patterns on the screen. Bolts of colour dashed across the screen like an inspired dancer doing a `jete.' A purple meteor collided into the white screen and distinegrated into a cascade of writhing swirlla! AT the outer periphery of the gallery space was a row of computer terminals with the human figure translated into computer dots and made available for visitors to manipulate at will thus creating parallel dancing images. The entire experience was totally alien to me and I could not help thinking about this very scene being transplanted to Chennai Sabha or art gallery and the reactions of audiences!

If one thought that the techno-addicted Americans warmly embraced the entry of the computer into their dance studios, history has another story to tell. It was less than a decade ago the pioneering modern dance and choreographer Merce Cunningham participated in a

breakthrough program which created the first computer generated choreographer's tool for modern dance. Called LifeForms, it was a project conceived and executed in Vancouver, Canada and is now available to dance educators and institutions throughout the United States. When it first emerged, dancers in Cunningham's own company were outraged claiming that the 'computer dancer' could execute movements which the human body was incapable of. But persistent and patient exploration opened the dancers to new ways of moving and created a whole new mode of thinking about space and dance. LifeForms was developed by feeding in all the possible movements and positions of classical ballet and modern dance much like the elaborate 'adavu' vocabulary of Indian dance technique. Then the computer dancer would demonstrate how a given movement, traditionally taught in a certain way, could be performed in a variety of ways using space, direction, levels and time dictated by the choreographer.

At the IDAT conference a revolutionary dance group from Berlin called Audio Ballerinas performed in outdoor venues for all days of the event. The performers built costumes called 'electronic clothes' equipped with loudspeakers, amplifiers and rechargeable batteries. Their 'sound clothes' reacted to the area around them using movement, light and space. This new genre intersects at the boundaries of dance, theatre and personal politics and is loosely called 'performance art'. Audiences however, are still bewildered as to what they are watching - a dance, a drama or a slice of sci-fi fantasy!

It is one thing to create computers which react to touch and footsteps on a stage to set off a series of sounds and light patterns, but what about facial expressions? Can a machine be sensitive to a dancer's face and the movement of facial muscles? That is exactly what The Intelligent Stage personnel John Mitchell and Robb Lovell have done at Arizona State University. At first 'triggers' were created and gradually refined as a series of sensor beams laid out by computers across a three dimensional performance area. The performer in motion would trip a trigger that set off a light or sound change. Now, Mitchell and Lovell have developed a trigger that can touch off sound in response to a performer's facial expression. 'For their new work Time in the eye of a needle, they

recorded the dancer's height, and set triggers to respond to variations, When she moved, they heard the theme music; when she sat squatting, she brought on the circles of light which varied speed and tightness based on how low she was vertically. The pressure she exerted on the prison bars set off a number of sound cues, and she could change the whole environment to silence simply by being still.

What would all this mean to an Indian dancer who is so accustomed to a bare stage, an uneven floor and a few bright lights? Renowned Bharatanatyam dancer Chitra Visweswaran acknowledges the enhanced effect of a lighting plan when she performs at international venues. ``Solo Bharatanatyam is very difficult to control for a technical director trained in a strict and rigid way. Every dance performance for me is an individual statement and I would find it impossible to hit the very same mark each time if the cues were programmed in that way. What happens then to the concept of individuality that so permeates Indian classical dance?' ' she claims.

The younger generation of modern dancers have realised that in the growing dialogue of contemporary Indian dance their voices can become more lucid and articulate with the aid of technology. A detailed lighting plan and elaborate sets often dictate the tone and subsequent success of a contemporary dance production like Daksha Sheth's ``Sarpagati'' and ``Fallen Angels''. Painters like Anjolie Ela Menon have used the computer technique of `morphing' where their old works are overlaid with images of their new ones. In Auroville, choreographer Anu Majumdar worked with artist-husband Pierre Legrand to create an installation art event called light matter in which speech, sound and ordinary movement became the multiple co-ordinates for the final performance.

As yet it is not easy to find artistes to embrace technology without many reservations. At The Intelligent Stage, although considerable progress has been made, John Mitchell and Robb Lovell are on an endless quest to advance and diversify. Working also in areas of non-performance, dance teachers are testing whether ISA can help observe and modify their movements to reduce stress and injury. ``An artiste has to rethink the rules of what she can or can't do and get

used to the many levels of artistic choices it offers you. It challenges the preconceptions you have about your art form. That's an exciting, and sometimes scary, situation.''

-----