

Moon Vehicle: creating new culture from the Chandrayaan Mission

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In October 2007 the Bangalore Space and Culture Symposium was held at the National Institute of Advanced Studies (NIAS) in Bangalore, which aimed to bring scientists and artists together to share their common interest¹. There was an agreement at this symposium, at least amongst the art and culture section², that there should be projects pursued in relation to the upcoming launch of Chandrayaan-1, India's first moon mission.

'Moon Vehicle' became the project title and is a translation of the name Chandrayaan. At that time, Moon Vehicle was described as 'a method of transmitting the cultural and philosophical meanings of the moon in India's culture and will initiate a dialogue about the public perception of space exploration in an Indian context'. It is a vehicle for change, dialogue, happenings, creativity and learning.

In January 2008, I received an email, at my desk in Dun Laoghaire, where I was teaching at IADT on the Visual Arts Programme. I printed it out. It said could I come to India for a week to do a workshop for the project 'Moon Vehicle' at Srishti School. I've been there nearly a year now. Srishti is an independent art school, which I would describe as pursuing design ecologies, design for real situations where the student can make a difference, which might link design with systems of sustainability, compassion, economy or craft. The students' love working together, as do the staff and there's a great ability, very native to India, of following a flow, believing in its progress and using the natural responses of people to guide the creation of a product or situation.

Geetha Narayanan, the Founder and Director of Srishti has an innate sense of where to place people in the organisation so that teaching, making, flexibility, ideas and

¹ <http://cema.srishti.ac.in/space/>

² People from Srishti School of Art, Design and Technology and its Centre for Experimental Media Arts in Bangalore, The Arts Catalyst in the UK, the Leonardo network and the National Institute for Advanced Studies which hosted the Symposium.

external collaborations can all be generated and used in different aspects of the Srishti curriculum. I was asked to mentor the Moon Vehicle project and came to Srishti as an Artist-in-Residence at the Centre for Experimental Media Art. I'm there because I need people to work with. People have become my artistic medium. I'm not Indian and I need to work through and with other people, to learn the culture and be sensitive to what is wanted and needed; so the group flow and pattern of working collectively that I've now adopted was a very natural result of circumstances.

I was invited because I'd spent the previous few years researching satellite networks in Europe and North America, creating collaborative, participative events and had just finished a number of projects with children. During an Arts Council England International Fellowship at UC Berkeley Space Science Lab I was able to learn, close up, about the process and people of science satellites. Before that I was Artist-in-Residence at the University of British Columbia where I was mapping satellites to the campus and had a weekly radio show, 'The Satellite Investigations'. In the UK I worked on projects with The Arts Catalyst; one was a storytelling event at the UCL Mullard Space Science Lab, and others have been collaborative projects in schools - Mulberry School's 'Universe Gallery' is one.



Installation of the light box "Satellites to Measure the Time and Space of My Universe" in the "Universe Gallery", Mulberry School for Girls, London, UK

Here in Bangalore, I've been given the time to make a long-term project happen that forges new and lasting connections, which enable change. It is essentially an activism through art making and through gentle and persistent nudging.

Initial strategies

The first project of Moon Vehicle was the Microsoft Design Expo competition entry, the 'Bombatsat', a learning tool for 12 year-old children that allows messages to be recorded onto a toy-like Chandrayaan, after which children can hide the Bombatsat for others to find, listen to their messages and record more. The Design team presented this concept in Seattle in July 2008 and it was well received, with interest from Microsoft and ISRO in pursuing the idea.

I worked with five students at the very beginning of their project. Our first visit was to Rakesh Sharma, India's first astronaut. He said it was important for India to be part of the conversation of space exploration, but that ultimately going into space is about representing humanity and not a nation. We discovered that most of the mission operation was coming out of Bangalore itself and Chandrayaan was being built at Satellite Centre, on the road to the airport. The students went to visit and saw the spacecraft being put together in the clean room. No photos can be taken and as a foreigner I was not allowed in. They came back telling me about the security guards, the enthusiasm and laughter of the scientists they met and gave contradictory descriptions of the incomplete satellite being put together in the clean room³. On another ISRO visit we met Dr Jayati Dutta who had been put in charge of 'outreach'. She liked the sound of our project, but let us know that the position of outreach officer, as in many space science organisations, was not a particularly honourable or prestigious position. Outreach and education, interfacing with the public, was a new thing for ISRO and the formal programme has mainly been focused on the launch. Informally there is another story.

We put on a couple of workshops for children. Projecting the moon on the ground, cutting out a piece of paper and asking the children to paint. I can't remember what we asked them to paint. I remember being really surprised how many children can sit round the moon, the wonderful anarchy of noise and pleasure in destroying the whiteness with football pitches, monsters and Bollywood stars. I videoed and took pictures because the image was so beautiful. Children's hands and faces caught in the light at the edges of the moon.

³ <http://www.aconnectiontoaremotepiece.net/?p=122>



Children from Aditi School painting the moon

Right from the start, the Moon Vehicle project has been driven by conversations and experimental participative events. The fieldwork and face-to-face meetings with people across the city, together with the events that gather people to interact, are the architecture, the artistic form of the project. Our objective is to distribute the story of Chandrayaan into the culture of the city and that happens a little bit through every conversation. Gradually but constantly, things shift.

Grounding the moon

The image of the moon on the ground has been the visual focus of the project. A perspective altering exercise: we can look down on the moon and this helps us collect our thoughts about it. There is a ritual in Hindu culture in which a woman looks for the reflection of the moon in a bowl of water and then drinks, breaking a fast taken to honour her husband⁴. My mother use to live in a house called 'Silvermere', which is the path of silver across water between you and the moon at night. The moon on the ground, or as a reflection on water, is a poetics of connection.

The rooftops of Bangalore have also become a repeated motif to the project. '100 Days of CHN-01' was an event we held on the rooftop of the Centre for Experimental Media Art. We thought of it as a 'fairground' event where different activities would be

⁴ This is the ritual Karwa Chauth, which is performed with a number of local variations.

happening simultaneously and visitors could choose what to do and be involved in ways that suited them. We served food, so that it was a sociable event. We had a projection of the moon on the floor and asked people to sit on the moon and say what they would put on there to make it meaningful to them from a distance. People were able to pick up and play the guitar, a group of students staged a read through of a section of the Apollo scripts, there were drawings being made and the Visvesvaraya Industrial and Technological Museum came to do sky watching with their telescope.



Children playing guitar on the moon at '100 Days of CHN-01'

A second event, 'Moon Stories', was a public, participative event staged on the roof terrace of the Visvesvaraya Museum and in collaboration with them. Sunil Kumar, the Museum curator was interested in working with us because we 'think differently'. The Museum and its staff are very much within the Technological and Engineering spheres and not familiar with creative approaches but they were happy to try out something new. The event was held on full moon night. We worked with the Museum staff to attach a camera to their telescope and fix this to a projector so that the projected image could be seen by a group of people instead of one at a time through the telescope.



V. Lekshmanan adjusting the camera fixed onto the telescope viewer

We then devised a way to suspend the projector so that the image fell on the roof top floor and we put mats and cushions around this live image of the moon so that people could gather around it and exchange their perspectives of stories, songs and knowledge of the moon. We invited people from different backgrounds, an ISRO scientist, a former NASA scientist, a writer, a psychologist and made it open for anyone to participate. Many people from the Museum were there, including the education team, security guards and workshop staff⁵.

⁵ A podcast of this event can be downloaded by subscribing through iTunes to http://www.aconnectiontoaremotepace.net/world_tour/podcast_wt.xml



Shyama Narendranath, a scientist from ISRO, with her daughter talking about Chandrayaan's orbit round the moon

The educators

During the preparations for Moon Stories, while I was arranging mats and cushions in a circle around the projection, I noticed the Museum staff moving quantities of chairs into rows about twenty feet further back. The clash in expectations as to how people should participate in a public event was immense. For the Museum it was about presenting knowledge, for us it was about drawing out knowledge from the people who came along.

Besides encouraging ISRO to experiment with participative forms of distributing knowledge, we are trying to work with the space science educators of the city – at the Visvesvaraya Museum, the Jawaharlal Nehru Planetarium and the Institute of Astrophysics - to shift the way these people do their education, or at least give out other ideas. I felt that the messy informality of Moon Stories had probably been too radical a step to stage at the Museum and I had no idea for a long time of what anyone there thought about it. However, they said they would use the grounded image of the moon in their education programme and later I heard that they put on a forty eight hour sky watching event for which the education staff camped out on the roof and I thought that perhaps we had helped them come to that.

Children and stories

Next week the Summer School starts for children at Drishya Kallika Kendra, a school in a slum near to ISRO Satellite Centre where children speak mainly the local language of Kannada. I will be working with the dancer Anitha Sunthanam and language specialist Babita Harry to explore cultural stories of the moon and the new science stories of Chandrayaan, weaving investigative fieldwork, installation and movement together. They will visit ISRO Satellite Centre and the landscape with its vast, white receiving dishes, of the Indian Deep Space Network (IDSN). Amongst other things, I will ask the children to make portraits of the people they meet to see how technology is really lots of people. We will ask the children what they think of the Indian space programme and the relevance of space science and exploration to their lives. They can say if and how they want to pass on the stories they have learnt to their community. The memories and current debate for the moon and humans - can find ways to distribute through communities and the people at ISRO, who are local to this community of Byapanahalli - and will have a means to find out their responses and interpretations, by coming to visit the children in their school.

The shift in ISRO

At the time we put on the first event, '100 Days of CHN-01', I had been *reading The Little Prince* and there is a bit when he looks at the sky, where somewhere his home planet is and the flower he looked after and loved. He says, 'Les étoiles sont belles, à cause d'une fleur que l'on ne voit pas...', the stars are beautiful because of a flower one cannot see. I had hoped people would put on the moon something to make it have direct personal meaning for them, to give that meaningful connection to something distant, that the Little Prince described. Nobody brought anything. They only wanted the nothingness of it.

During our research time we went to ISTRAC to visit Dr Shivakumar. ISTRAC is the tracking wing of ISRO, tracking Chandrayaan. The five of us were a little intimidated in his office when he asked us if we were science students, well no we were artists, designers. So what would we want with scientific data? We felt our project was lost. Then he surprised us, he said that when he looked at the moon now, he knew his spacecraft was there and that looking at the moon had changed for him, and the people of the mission.

It had really happened, the meaning of the moon had changed for a group of people, it had a new poetics, and it had happened for scientists. They had transfigured their connection to the moon through technology, through instrumentation, orbital dynamics, liquid propulsion, radio telemetry, thermal blankets and circuit boards. Now the scientists of ISRO are talking with us. Not in a formal, institutionalised way, but case-by-case, as individuals. 'Thank you for giving us the opportunity to work with children', one of the scientists emailed, and there are plans for a ten-day public event - a collaboration between ISRO, the Planetarium, the Museum and us - the idea of

Sreekumar, Head of Space Astronomy and Instrumentation at Satellite Centre. Maybe we are doing something right with our process of casual, imaginative engagement. But I feel somehow it has nothing to do with us and the Moon Vehicle project, that it is something that is coming from within the organisation and we just happen to be here to help it come out. I think that the people who work at ISRO are transformed, moved and emotionally tied to their experience of launching a spacecraft that now is circling the moon. There is a surging wish to communicate to other people what they have done and how they feel about it, the pride of it all and the ineffable sublimity.