

REPORT

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CAPTURING AJANTA DIGITALLY

IGNCA, as part of its programme of applying the most modern technology for the preservation, conservation and promotion of culture in India, has undertaken a project on Ajanata. A team of IGNCA scholars and technicians had visited Ajanta recently and had taken digital images of the world-famous cave-paintings./ A selection of these images was presented in a slide-show by R.K. Singh, Asst. Archivist and Veerpal, Graphic Designer on 2nd June, 2003. The 260 digital images shown were selected from a collection of over 1,500 photographs.

The images are to be part of IGNCA's CD-ROM project on Ajanta in multimedia and virtual walkthrough mode. The image capturing team comprised R.K. Singh, Veerpal and G. Chamundeswaran.

After Ajanata was rediscovered in 1819 by Captain John Smith, it aroused a great curiosity world over. James Ferguson took a major initiative to persuade the British government for making copies of Ajanta paintings. A noted painter Robert Gill, whose grave lies in Bhusawal, was sent to All ndia in 1844. He prepared thirty copies, which were exhibited at the Crystal Palace, England. unfortunately, these copies were burnt in a fire in 1866.

Subsequently, between 1872 and 1875 John Griffiths, the then Principal of Bombay School of Art, got several copies made of the Ajanta paintings by deploying his student to the task. Griffiths also managed to publish the same in two volumes, which still enjoy popularity among readers. These copies too were gutted in a fire but for a few, which are now housed in the collection of Elbert Museum of South Kensington, London.

Around 1910 Lady Haringham came to India and had a fresh bunch of copies prepared with the help of Nand Lal Bose, Asit Kumar Haldar, K. Venkatappa, etc. These were published by the India Society, London. This parituclar effort was an attempt to influence modern Indian art in a big way, contributing significantly to Revivalism.

Lady Haringham had sought the help of the Nizam of Hyderabad in whose state the cave site fell. It created an unprecedented interest in the Nizam's mind who appointed Sir Saiyad Ahmad Khan to execute a series of major initiatives for Ajanta. Sir Saiyad's initiatives included *inter alia* the preparation of copies of Ajanta paintings that were completed in 1915.

Later, the Government of India published the paintings in four volumes. further still, Lalit Kala Akademi followed suit and got photography work done, for making the paintings accessible to the people. Ever since, endless attempts have been made Notable among them are the collection of the Archaeological Survey of India.

More, recently, the American Committee for South Asian Art has created an impressive collection of 35mm colour slides. Photographers like Lance Dane and Binoy Behl have also made noted attempts. The last three enumerated collection are hosued in IGNCA.

The challenge in visual documenting of Ajanta lies in the fact that light equipment for photography is

prohibited inside the cave as the heat emanating from it has potential to destroy the paintings. The IGNCA team was equipped with a sophisticated digital image-capturing device and with a sophisticated digital image-capturing device and a laptop computer. The team strictly adhered to the ethics of conservation, and relied only on the existing lighting condition.

The team also had to take images in a sequence of episodes. This needed academic support, which was provided by Dieter Schlingloff. He has painstakingly completed the task of identifying not only those Jatakas and themes that were previously unidentified but has also identified the individual episodes as well as their sequence which are often discontinuous, non-linear, and disparate. Such kind of visual documentation if completed in entirety would be a real asset and very useful to students, tourists and researchers. Work in this direction has been half completed.

Another significant goal was from archaeological and historical perspective. The scholarship of Ajanta has so advanced that we are now in the knowledge of a multitude of evidences in the form of details showing the manner of sculpting, hewing out the blocks of rock, various types of drawing, carving, chiselling, scheme planning, etc. as they are preserved in the rock itself. These scattered pieces of evidences in the site itself are in many ways linked to one another which provide a faint picture of what actually was happening at the site, how was the work progressing, why a certain thing was happening, how plans were changing during the process of work, and many of the caves, and projects therein, were never fully completed.

There are enough 'proofs', as Walter M. Spink, a noted expert on the subject, put it, to indicate why a pillar on the left is complete and not on the right; why a cave looks finished but is not as per the plan, and what were the original plans. Which of the caves were put to worship, and which were not.

Countless such questions arise and countless evidences are there, of archaeological value which seem to answer the questions but have seldom been photographed or made available to the researcher's community. In this attempt, such a purpose was kept in mind and some work, though not exhaustive, has been done.

Natural light as available inside is poor, and it changes from morning to evening depending on the position of the sun. The caves are semi circular in shape. When the sun rises, the other end towards cave 26 is lit. During the sunset the caves towards 1 and 2 near the entrance where the booking office is, are lit. This means that each caves has only a few hours of light inside reflecting the paintings. For most of the times paintings on the walls are plunged in near darkness. Ceilings of painted caves 16 and 17 receive light in the afternoon.

Recently, Minister for Culture and Tourism, Shri Jagmohan, initiated a number of conservation measures *inter alia* the installation of fibre optic lights, which are friendly to paintings. These light fixtures are placed in the interiors in such a way that they create spot lights on the walls and ceilings.

At this stage they do not cover the entire painted area. Wherever they are placed they do not throw light uniformly on the wall surfaces. For the sake of visiting tourists they should not be switched off. This situation provides an extremely difficult condition. Still however, some R&D was done by the IGNCA team on the site and ways and means were found to get images to one's satisfaction. The rate of spoilage was roughly 30 per cent.

Conventional photography involves heavy investment on raw stock, processing, maintenance, duplication and circulation, imposing inevitable limits to the quantum of work and size of collection. The cost factor is always a constraint for any systematic and exhaustive visual documentation.

Digital images require almost no raw stock apart from the relatively inexpensive photo CD for storage, duplication and circulation. Further, no quality is lost in duplicating. A digital image can reach a large number of people at an incredibly low cost when compared with the conventional photograph or slide.

Report by R.K. Singh