IVIS helps document archaeological finds from ancient China

by Lois Slavin

In 246 B.C., the First Emperor of China, Chi’s-Huang Ti, enlisted thousands of Chinese peasants to build him an imperial tomb consisting of a full-scale underground palace and an outer city guarded by over 6,000 individually fashioned terracotta soldiers. In 1974, farmers in the northern province of Shansi unearthed part of this magnificent treasure. Scholars around the globe declared it to be another wonder of the world and compared it to King Tutankhamen’s tomb in Egypt. And in 1985, thanks to Dr. Ching-chih Chen and Dr. Robert D. Stueart of Simmons College, the Ministry of Culture and the Provincial Bureau of Museum Affairs of the Shansi Province discovered a videodisc of China, a virtual reality computer interface to video images of the First Emperor of China and enabled them to use the project’s visual database in many different ways.

The videodisc project promises to give its viewers a unique and rich insight into the political, social, artistic, economic and military systems of that time.

Immediate interest shown

Digital became involved with the project through the initial efforts of Robert Guerante, Senior Product Promotions Specialist. Robert introduced Dr. Chen, an international information science expert and Professor and Associate Dean at Simmons College’s Graduate School of Library and Information Science, and Rus Gant, a research fellow at MIT’s Center for Advanced Visual Studies and a leading expert on videodiscs, to Rob Mosteki, Small Systems Manager for Country Development Region (CDR).

"Their project was of immediate interest to us because it seemed like an ideal opportunity for Digital to display its technology in a very practical, if unique, environment." Dr. Chen and Rus had been working on the idea for PROJECT EMPEROR for quite a while. When Robert heard about it, he set up a meeting between Dr. Chen and Rus and a number of people here," Rob explains. "Their project was of immediate interest to us because it seemed like an ideal opportunity for Digital to display its technology in a very practical, if unique, environment. As a small company, we needed more than just a year to identify their needs and help bring them to fruition."

According to Dr. Chen, author of more than 15 books in management and technology and principal investigator and director of PROJECT EMPEROR, this endeavor is concentrated very heavily on examining how new technologies can be applied to mass information storage, processing, dissemination and retrieval. "The videodisc is a very aggressive, active, dynamic way of providing information. This fits in with my concept of the library as an information source, which is different from many other people's."

In March and April, Dr. Chen and a number of experts in technology and humanities visited Beijing and Shansi to begin the videotaping and data collection. Upon their return, the actual production of the videodisc will begin at the Athena Labs at MIT. The projected completion date is late 1986. All of the aspects of the videodisc production process will be overseen by Dr. Chen and Rus Gant who both believe this project raises some important issues in information gathering, aesthetics and learning.

Limited number of books available

"The First Emperor’s tomb is one of the largest archeological finds to date, yet books on the subject have been few," says Dr. Chen. "And, books can’t really reflect the nature of three-dimensional subjects. Dr. Chen and I felt this became an ideal problem for structuring a visual database because everything—video images of the artifacts themselves, as well as photographs, drawings, maps, charts, and building plans—could be put on videodisc. This can be used as the basis for developing a series of courses on Chinese history and art on the elementary, intermediate and specialized levels. It can also become a part of a traveling museum exhibit."

Because the visual database can be utilized in many different ways, depending on the persons designing the finished pieces, Rus thinks that videodiscs can offer a new way to learn. "We are watching a particular version of this disc, a person can begin to replicate the creator’s patterns of thought and perhaps copy the experience," he explains. "With the current technology, it may come up with essentially the same material, they got there in different ways. For example, using the IVIS videodisc project, we can see how their professors actually derived and structured their information gathering process."

Tom Phelps, Program Officer for the Humanities Project in Libraries at the National Endowment for the Humanities sees PROJECT EMPEROR as "a link between scholarship and technology."

"We explored other videodisc projects, but we’re watching this one as a basis for others," says Tom. "It will give NEH a way to learn more about videodisc technology. And the final project will enable people to see more of the First Emperor’s burial pit than they’ve ever seen before."

"...the final project will enable people to see more of the First Emperor’s burial pit than they’ve ever seen before."

Continued on page 1