Preserving the Past: Creating a Geographic Information System from the Work of Dr. Edwin Shook

Research Year: 1998
Culture: Maya
Chronology: Pre-Classic to Post Classic
Location: Antigua, Guatemala
Sites: Various (1500)

This project concentrated on the creation of a Geographic Information System (GIS) database and map of all the sites visited and reported by Dr. Edwin M. Shook. FAMSI funds were used to undertake the conversion of written data into a digital and dynamic form. From the beginning of March through the first week of April, I worked in Guatemala performing the primary data collection for the database. This entailed transferring the data of over 1,500 archaeological sites from a set of note cards that Dr. Shook has painstakingly recorded and updated over the years into an Excel database. (This data has since been converted into an Access database for wider OLE capabilities.) Additionally, maps from the Geografico Militar of Guatemala and Tulane University were acquired to begin digitizing the site location information using a like coordinate system from the note cards. Rare photographs of sites, artifacts, sculpture and excavation personnel were scanned and tied to the database. The database and image files have all been archived on ZIP disks and a CD-ROM.

Upon my arrival in Antigua, Guatemala, Dr. Shook took me into his home and set me up in a room adjacent to his office. For the duration of my stay Dr. Shook met with me several times a day to answer any questions or clarify any ambiguous references on the cards. During these sessions Dr. Shook often added anecdotal or more detailed
information from his field books for inclusion into the digital database. This was one of the most unanticipated aspects of data collection process. The database is now more than just a carbon copy of the data housed in the Shook lab. Dr. Shook’s additions give the GIS a unique blend of information that is not contained in any other primary source.

Preliminary analysis of the data reveals that the site information, particularly in the Department of Guatemala, is probably the only source data of its kind. Many of the sites that Dr. Shook and his colleagues explored and documented have not been published or recorded in any other format. Innumerable sites have been destroyed and long since forgotten. Therefore the database can be used to augment contemporary archaeological settlement pattern or architectural studies. The possibilities for the manipulation of the data in tabular and spatial forms have surpassed my initial expectations. The only regret was that once Dr. Shook offered me other data files I realized how many more components (such as hundreds if not thousands of ceramic files) could be added to the database.

Moreover, the project had another very unexpected yet positive consequence. As outlined in my budget, I contracted a student from the University of San Carlos. The student became very interested in the process and I began to instruct her in the basics of GIS. This has resulted in the possible collaboration of the student and myself to do something similar with existing site information for Guatemala in a larger more comprehensive database.

With the completion of Phase I of the project, the bulk of the grant money has been spent. I have now begun Phase II of the project.
Excavations at El Paraíso site in Quetzaltenango, showing a round shape structure.
Edwin M. Shook standing next to one of the Monte Alto sculptures.

Submitted 05/01/1998 by:
Rosalinda Méndez