"Calakmul: The Adventure" – Background

Our software kiosk application brings the Mayan archaeological site of Calakmul to life and celebrates the ingenuity of the ancient Mayan people. Calakmul is a UNESCO World Heritage site. Our interactive software integrates rich 3D renderings of historical architecture and museum artifacts with 2D illustrations and animations. The presentation format speaks in a contemporary visual language to young people. The main goal for the user is to retrieve a personal necklace from a jaguar by exploring the complex and ultimately by mending a broken funerary mask and restoring harmony. Along the way, facets of the Mayan culture are presented and explained in text, audio and graphical terms. Thatching of a hut roof, preparation of a cacao drink, practicing the ball game, designing a stela, producing a fresco wall painting, these are some of the daily activities of the Mayan complex shared with the visitor. Monumental architecture such as the main temple and the palace, and detailed interior tomb settings, immerse the visitor in a pristine past reality that contrasts with the decayed contemporary remains that are transformed into their original states during the journey.

The software works on two levels, a tour for those children who want a casual experience, and an in-depth educational resource for those who want to study the subject matter. Text and audio in Spanish and English are used throughout, for glyph and artifact description, and for characters.

Detailed modeling in Autodesk 3D Maya Design software and 2D illustrations and animations are brought together in Flash software and augmented by XML coding.
Our small group includes consultants in 3D CG and interactive Flash coding and we employ undergraduates from the Carnegie Mellon Dept. of Architecture for modeling, animation, interface graphics and design.

The project idea emerged several years years ago during a conversation at Siggraph San Antonio where we presented the Israel Museum project "The Virtual Dig" at the San Antonio Children's Museum. A past curator from the Papalote Children's Museum (Mexico City) suggested that we develop software about the ancient Maya for their Museum. Calakmul, whose importance was just emerging in the eyes of scholars, presented a unique opportunity. After making visits and documentation of the remote Mayan archaeological site in the rain forest of the Calkmul Biosphere, and viewing tomb artifacts at a distant museum in Campeche, it was clear that an educational software could virtually unite all of these elements together to present a kind of living active cultural space. Background research, scholarly articles, archaeological references and publications served as the basis for reconstructions, elucidations and character activities. The influence of the environment can be seen in the materials and processes used in habitats, temples, food, clothing, art making and in the presence in art and myth of the creatures of the rain forest. Attention is brought to the need to preserve the legacy of the ancient Maya and to problems of looting of stelae in the complex.

Maribel Ibarra, current Papalote Museum Exhibitions Director and Curator, continues to support the implementation of this project in the gallery spaces.