Indigenous Dwellings 3D Model

Archival exploration of various indigenous dwelling types of the 22 Native American tribes of AZ.

This project was initiated to inventory Arizona’s indigenous dwellings. These base models will be available to future students to study local materials, form making and cultural meaning. The models are currently being utilized in the ‘Parametrics with Intent’ lab, combining traditional forms with digital modeling to generate form.

**Vernacular Design Intelligence**

Vernacular design intelligence includes the systems and mechanisms locals developed for living in Phoenix. Arizona’s extreme heat spurred a series of valuable innovations including: extensive shade covering, high thermal mass walls, outdoor adaptive living spaces and earth coupling.

**Bioclimatic Design**

Most of the world’s architecture prior to the 20th century, was climatically responsive, and could be considered bioclimatic. Re-examination of vernacular architecture and the underlying principles of locals forms, will assist in developing long-term sustainable solutions.

**Cultural Meaning**

All Arizona traditional forms, including the Hogan, Pueblo and Vato, are embedded with cultural meaning. The Vato, still used by the Gila River Indian Community members today, was constructed using locally sourced mesquite trees, cactus ribs, and arrow weed.