



FLAAR Reports

FLAAR Archaeological Photo Archive



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The scholarly reference archive consists of

- 35mm slides, mostly Kodachrome Type A but also several other film types including Ektachrome Tungsten but some color film. I estimate 20,000 to 30,000; never counted them.
- 35mm B&W negatives, mostly Kodak ISO 125 or ISO 50. Probably 200-300 rolls, usually 36 exposures each.
- 4 X 5", perhaps 200 B&W and 400 to a thousand color.
- 8 X 10, a few score B&W and perhaps a hundred color.
- medium format 6x 6cm (Hasselblad) 2.25 X 2.25" negatives and transparencies. Probably 8,000 B&W and an equal or greater number color.

The archive itself takes up about 160 square feet of room: eleven standard shelving units with five shelves each. The scanning work area takes up about 200 square feet of room.



The archive is best known for 28 years of photography

- incised and painted Maya pottery of Peten and Teotihuacan-Tiquisate styles of Escuintla, primarily for Early Classic and Late Classic (AD 300-850).
- Preclassic Maya ceramic art
- Maya stelae, panels, and other stone sculpture
- Maya ballgame scenes and ballcourt architecture
- Maya architecture of Puuc, Chenes and Rio Bec styles
- Mayan hieroglyphic texts (stone and on pottery)
- Olmec art in general

Also included are

- Some Aztec art
- Teotihuacan art (strong in Teotihuacan-Maya influenced art)
- Zapotec and Mixtec art and architecture
- Veracruz art and architecture



Maya iconography (primarily from incised and painted ceramics)

- Deities, characters of the Popol Vuh
- Sacred animals
- Sacred plants and flowers
- Costumes, especially to distinguish and identify
 - o Rituals and ceremonies
 - Dances
 - Musical instruments
 - Sacred ballgame
 - o hunting,
 - o social classes,
 - o and occupations
- general symbolism

This archive is invaluable, and without parallel, for identifying

- Regional artistic workshops of Peten-Belize areas
- Temporal inventories: Tzakol, Tepeu, etc.

The archive is a useful international resource for epigraphers, especially for

- Primary Standard Sequence glyph texts on ceramics
- Workshops of painters of hieroglyphs on ceramics

For architectural historians, this is one of the largest private reference archives of Mayan pyramids, palaces, temples, and sacred ball courts, especially of

- Chenes
- Puuc
- Rio Bec

architectural styles, 6th-10th centuries A.D.

Cataloging Progress

There are contact sheets of probably 85% of the B&W negatives of 35mm and medium format size.

The B&W negatives (35mm and medium format) have a “roll number” assigned when the roll was developed. The number was either applied randomly by the photo lab or for some was assigned by FLAAR.

A numbering system for the color transparencies needs to be developed.

The B&W negatives within each individual roll are in order based on the date when they were photographed.

Perhaps 50% of the color transparencies are in boxes or cases based on general topic. But all need to be better cataloged and referenced.

We have size measurements for roughly 30-50% of the photos of artifacts. Perhaps 25% of the objects are in museums or accessible private collections should more information be needed. A good reference library would be helpful if each object is to receive a thorough professional archaeological record.

FLAAR has a roughly 3,000 volume library of books on pre-Columbian anthropology, archaeology, ethnohistory, botany, and zoology, of rather thorough coverage for up to 1990. This library is in boxes in storage and covers Maya, Olmec, and Teotihuacan cultures relatively thoroughly, with good coverage also of Zapotec, Mixtec, Toltec, Aztec and Veracruz cultures, primarily of Mexico, Guatemala, Belize, and Honduras.

The library covers South America only to a limited degree. In photographs of South America we have only limited images of Peruvian ruins.



Quality of the FLAAR Photo Archive

Creo-Scitex loaned two scanners to FLAAR, on open-ended loan: an EverSmart Supreme (circa US \$45,000) and an iQSmart2 (circa \$20,000). The EverSmart Supreme scanner is specifically to scan the FLAAR Photo Archive.

These are extremely high quality scanners, the best flatbeds that we are familiar with. Only a drum scanner would be better (but flatbeds are more efficient). We scanned about most of the 4x5 transparencies and perhaps 5% of the rest of the archive: the resulting quality was awesome.

The 35mm photographs of artifacts were taken mainly with a Leica R3, R4 or R5, almost always on a tripod.

Some 35mm outdoor shoots (pre-Columbian architectural history) were taken with a Nikon F3.



All the medium format photographs were taken with Hasselblad cameras and Zeiss lenses; all using a tripod.

The large format photographs were taken with a Linhof 4x5 Technikardan and/or a Linhof 8x10 Kardan Master GTL, each with Schneider or Rodenstock lenses.

Current photography (since 1996) is with a BetterLight 48 megapixel tri-linear scanning back on a Cambo 4x5 camera. We have the panorama and circumferential-rollout accessories for the BetterLight (PanoWideView). This is the most accurate camera in the world for doing rollouts.

Our 35mm digital cameras currently are:

- Nikon D100
- Nikon D200
- Canon EOS 5D

FLAAR also has a \$75,000 Cruse reprographic camera, 80 megapixels, on long-term loan from the manufacturer in Germany. Since our building on campus is being torn down this summer, this Cruse reprographic digital camera scanner is potentially available via FLAAR to another institution. This Cruse, however, is for scanning paintings, rare maps, and other flat work; not for scanning negatives or transparencies.

For medium format cameras we tend to use a PhaseOne P25 22 megapixel back on a Hasselblad. These medium format backs are on-loan to FLAAR from a camera company in Colorado.

Costs (what FLAAR has provided)

For two years (circa 1994-1995) I kept track of the precise cost of doing the photography. Based on these costs I estimated that the photography from 1969 to 1996 cost over two million dollars. Perhaps several hundred thousand dollars of photography has been accomplished since then. Our budget for additional photography was phased out by about 2000 but we wish are prepared to re-initiate new photography if a partner institution can be located for storage and cataloging of past, present, and future photography.

In addition to what we have already photographed, there is a huge amount of archaeological material that still needs to be recorded with professional lighting technology and high quality digital cameras (all of which we have, plus our abundant experience). Our teams are available as consultants or partners in future projects, both in Mesoamerica, elsewhere in Latin America, or elsewhere in the world. Dr Hellmuth and FLAAR were the consultants for the Malta Centre for Restoration, University of Malta. This is the Centre that handles the cultural patrimony for the island of Malta.

FLAAR has modest basic funding to accomplish additional photography; where we seek partnership is funding to scan and archive the material already gathered.

Costs (what is needed to move forward)

- Scanner operator (we have the scanners)
- Cataloger
- Graphic designer to prepare the material in PDFs for dissemination
- Web designer to prepare the material for dissemination.

(can be students as long as they stay available for more than one semester; you don't want to have to retrain a new person at the end of a single semester)

Value

The scholarly value is without parallel. This archive (if scanned and available to scholars and students) is equal or greater than any single resource at Harvard or Yale.

FLAAR comes with a dowry, about a quarter million dollars worth of scanning and digital photography equipment. This is the world-class range of sophisticated equipment that any museum in any large city in the world would be proud to have. Only a few universities in the world have a

- Cruse scanner (80 megapixels, \$86,000),
- a 48 megapixel BetterLight large-format circumferential rollout digital camera system,
- a 120/220/70mm Seitz SuperRoundShot panoramic/circumferential rollout camera,
- a 22-megapixel medium format digital camera system
- studio lighting equipment

Since nowadays most courses are delivered via PowerPoint and not archaic 35mm color slides, this photo archive is a substantial resource for courses, seminars, training, etc. Digitized images can more easily be turned into course material via variable-data short run digital presses too.

Additional Assets: substantial reference library

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FLAAR recently acquired a comprehensive library of books on the anthropology of Latin America with a strong point in the anthropology of the Maya area (but also including ethnography and ethnology of South America). This library is estimated at an additional 2,000 volumes over and above what is already in the original FLAAR library. All is boxed and ready to ship.

Summary

Epigraphers, iconographers and archaeologists who are familiar with the contents of the FLAAR Photo Archive consider that the photography of Nicholas Hellmuth, in terms of professional quality, is among the photographs that best brings out the detail of the subject.

In some cases when we have compared photos in the FLAAR archive with photos published by National Geographic, the FLAAR photos were a distinctly different and definitely a noticeably high quality. It's that we spend more time to make sure that our result wakes up what's hidden latent in the material and brings out the iconographic, cultural, and historical importance of the artifact. Often a photographer, who is not himself an iconographer or anthropologist, is too intent on taking a commercial-style picture. We don't do this kind of photography: we record the inherent cultural features of the sculpture or artifact or building by using our training from decades in the field.

If you compare the contents of the FLAAR Archive with, for example, photos of Maya architecture of Yucatan and Campeche, from the Carnegie Institution of Washington archives (in the Peabody Museum, Harvard University), the FLAAR photos are of consistently better quality, in part because we made the effort to bring in professional equipment.

There is demand for these photo, especially by scholars, students writing PhD dissertations, and popular books on Maya archaeology. However the main value of this archive is its sheer size and the fact that so many of the photos are unique. Several of the temples and palaces in the photo archive have collapsed years after and our photos are sometimes the only professional quality records that remain.