

Copan Maya Ballcourt Architecture & Scarlet Macaw Logo Goalstones

**Stepped Areas
were as important as
Playing Field
down the Center**

Parque Arqueológico
Copán, Honduras



FLAAR



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MESOAMÉRICA

**Stepped Areas were as
important as Playing
Field down the Center**

Maya Architecture of Copan,
Honduras, Publication Number 1

Copán Maya Ballcourt Architecture & Scarlet Macaw Logo Goalstones

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FLAAR (USA) and FLAAR
Mesoamerica (Guatemala)**

FLAAR Photo Archive
Publication Number 10



Part I

Copán Maya
Ballcourt Architecture

Parque Arqueológico Copán, Honduras

The ballcourt of Copan, Honduras, is one of the best preserved and thus most important ballcourts of the Maya areas. The ballcourt of Chichen Itza is the largest and Chichen Itza is reported to have a dozen additional ballcourts, but to understand how the Classic Maya used wide stairways the ballcourt of Copan is essential to visit and see in person.





Cropped from the previous photograph to focus on the playing alley. This part of the court is often narrow, as here. Only at Chichen Itza is it super-wide. But the ballcourt at Chichen Itza is centuries later than the ballcourt here at Copan. As is clear when you look at maps of ballcourt areas, the “playing field” is I-shaped, with a wide area at each end. But 99% of all articles, books, and web pages on ballgames focus on the alley with the two sloping sides, since the “goal stones” are at the top. Here at Copan the goal stones are the head of a scarlet macaw. At Chichen Itza and other late sites the goal stone is a round ring. So 99% of the modern discussions of ballcourts and the ballgame feature the round goal. The ballcourt you see here is the latest construction of a series

of ballcourts at Copan, 8th century (so hundred(s) of years before the Chichen Itza ballcourt in Yucatan, Mexico).

The purpose of the present portfolio of photographs of the ballcourt of Copan is to show that not all sites had round rings as goalstones, and that the areas of wide stairways was a key part of the ceremonies associated with the Late Classic ballgame of the core area of the Maya Lowlands, especially ballgame depictions on vases of Codex Style and polychrome central Peten style, sculptures at Yaxchilan (Chiapas, Mexico and nearby).



Looking West, the north end of the ballcourt is the wide area of steps. There are the same size, shape, width of steps on the north end of the vaulted building parallel to the West side of the playing alley.

Cloudy day, so the trees are in the shade. I estimate this wide photo was taken with a special Linhof Technorama 617 camera with medium-format film, 6 cm high and 17 centimeters wide. If you Google Linhof 617 S III Technorama Panoramic Film Camera you can see this camera inside-out. Today you can do comparable with an iPhone, but the resolution is higher if you scan the medium format transparency with a good scanner and especially with bet-

ter-than-average scanner software. We have been using digital camera equipment since 1998 and iPhone cameras since 2018 but also have Canon EOS 1Dx Mark III, Nikon D812, Nikon D5 and several Sony mirrorless cameras.

To have multi-room corbel-vaulted buildings on each side of a ballcourt is rare. But to have two platforms is typical and so other sites could have had wooden structures atop each side (or could have had just flat top). Eric Taladoire has cataloged ballcourts for decades. And FLAAR worked together with architect David Morgen to draw ballcourt structures across Mesoamerica (albeit only a percent of the hundreds of ballcourts that exist).

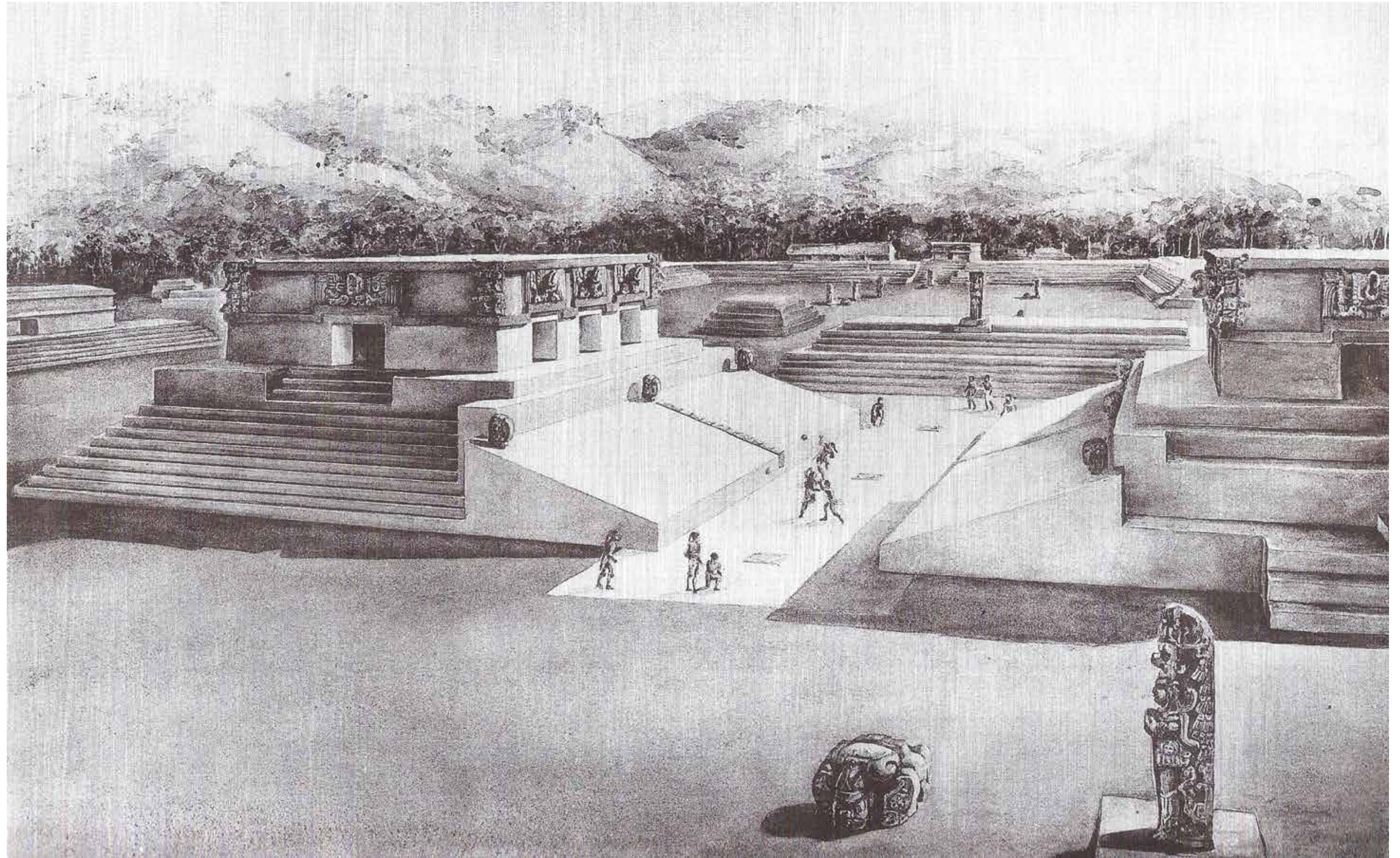


Every month the ground cover is a different color. This is not a photo with a drone; this is from the acropolis area looking down.



Each month the sun is at a different angle. So it helps to prepare and be in the right place at the right time to have the sun directly overlooking the court. Cropped from medium format Hasselblad photo (about 33% of the original image).

3-dimensional reconstruction drawing of the final phase of the main Copan ballcourt by Tatiana Proskouriakoff, 1946. Several editions exist of her book, starting with the original by the Carnegie Institution of Washington. In that past century it was not yet realized that much of the ceremony (before and after some games) was up and down the steps (not in the alley; that was the sports area).





This photo was taken in a year before the Hieroglyphic Stairway was covered.



This photo was taken a later year, with the tarps over the Hieroglyphic Stairway to protect the sculpted steps and other sculptures.



Every year the rainfall is a bit different, but normally there is a rainy season and a dry season. In the dry season (as you see here) the grass turns brown. This photo is so many decades ago that the Hieroglyphic Stairway was not yet covered by a protective cover (to protect the rainfall from eroding the sculptures). In front of the base is Stela M; in front of Stela M is a zoomorphic altar, CPN 25. We have a separate year 2023 FLAAR Photo Archive report on CPN 25 already posted on our www.Maya-archaeology.org.



Every several hours the movement of the sun illuminates some parts of the ballcourt and leaves other parts in shadows.



Our intent is to allow students and the general public to see every angle and every aspect of the Copan ballcourt. We thank Camila Morales for scanning the 35mm color slides.



On each field trip (from 1960's-1970's-1980's-1990's and then with digital cameras from 1998 onward, on each field trip we did different angles of photography. So it helps to have been doing photography here on multiple field trips.



In this frankly extraordinary view you can see the ENTIRE other side plus end zone of the ballcourt.

Yes, this lens distorts the area in front of me (from where I take the photo) but this lens allows us to see all the way across the playing alley. And, to see the end zone at the left.



In this photo the angle is not as distorted. August 1991; we have done many weeks of field trips to photograph at Copan.



Here you can see the playing alley down the middle and the end zone at the far end.

There would also have been another end zone at the other end but it has no stone wall or steps to define it.



Great view of one end zone and the long line of steps. It is not common to have a stela at an end of the ballcourt but stelae are placed in many different locations.



Rare view of the entire end zone where you can't help but notice that steps are across the entire end



Every angle helps (I recommend to avoid using 15mm ultra-wide angle lenses; today (2023 and for recent years) you can use an iPhone, Google Pixel phone or comparable telephones to create panorama views that are amazing. Now you notice that the end zone is wider than the playing field.



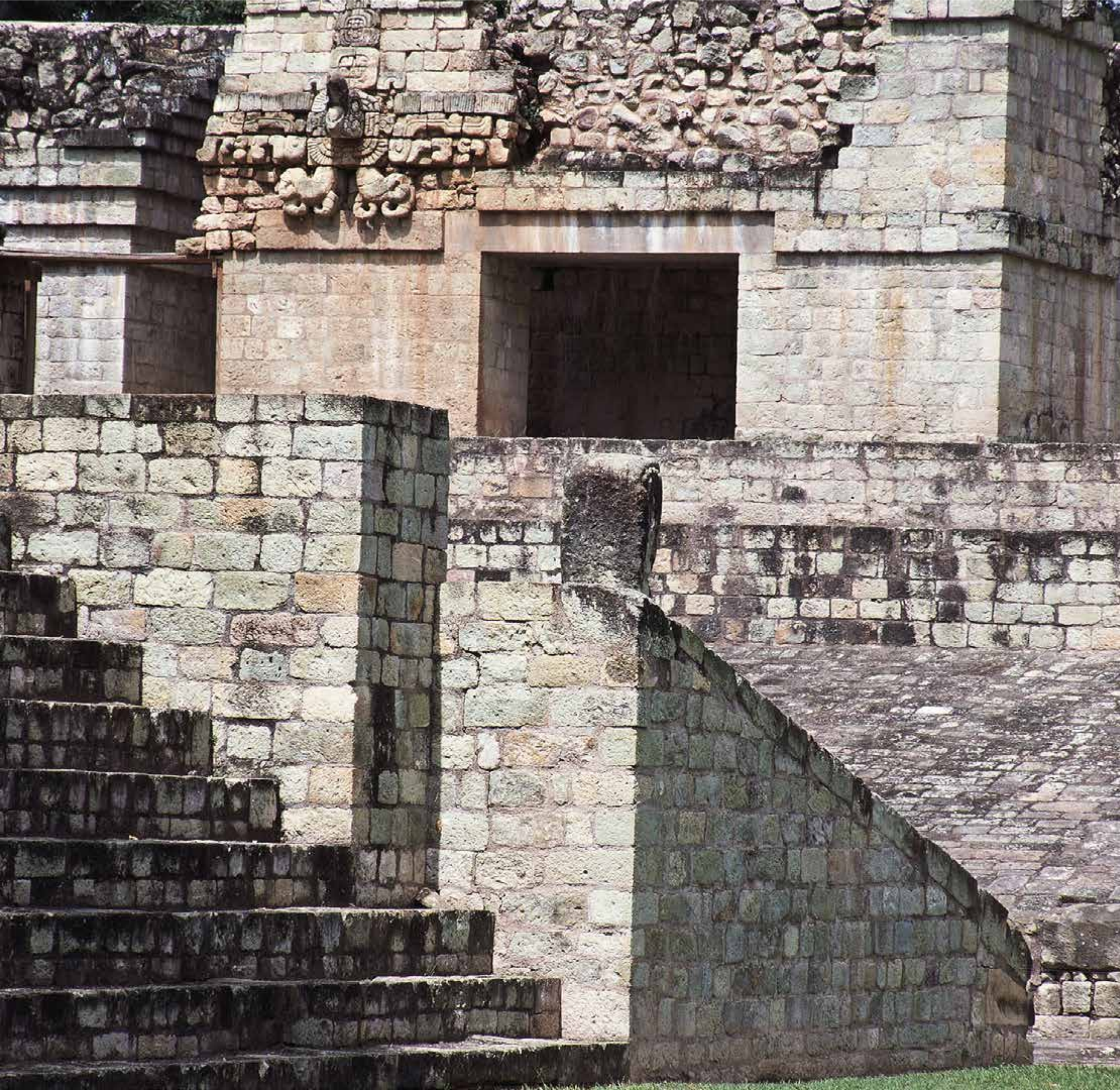
Straight angle of the end zone. Notice that the entire end of this area is a stepped area, including around the corner of the left playing alley. Steps everywhere but the playing alley



Everyone focuses on the I-shaped playing field (understandably, since this is a ballgame, an athletic sport and competition and ritual). But don't forget the STEPS and WIDE stairways covering entire sides of this side of the area.



Same area as the previous page photo, but from the plaza level.



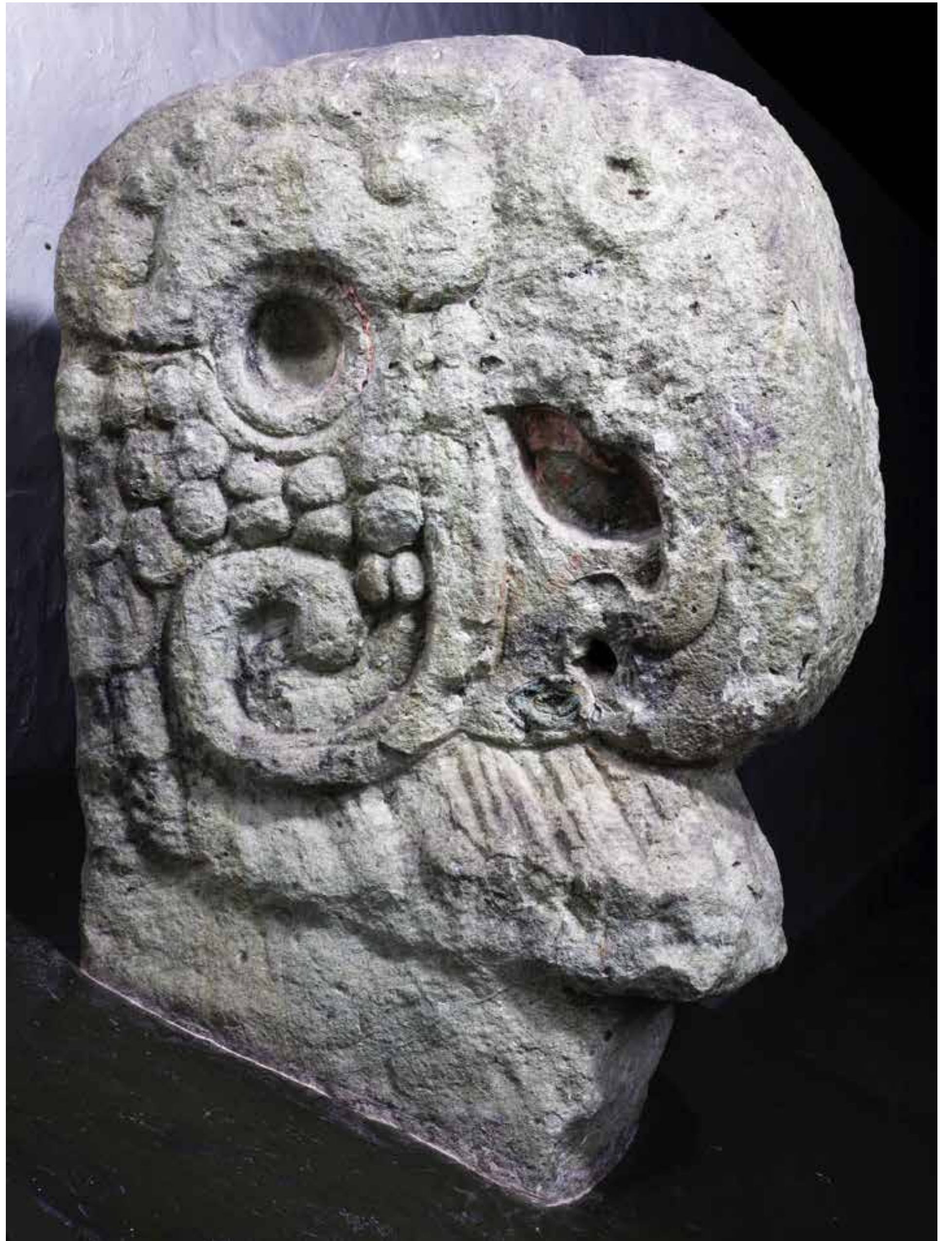
This photo is an angle rarely seen in publications.

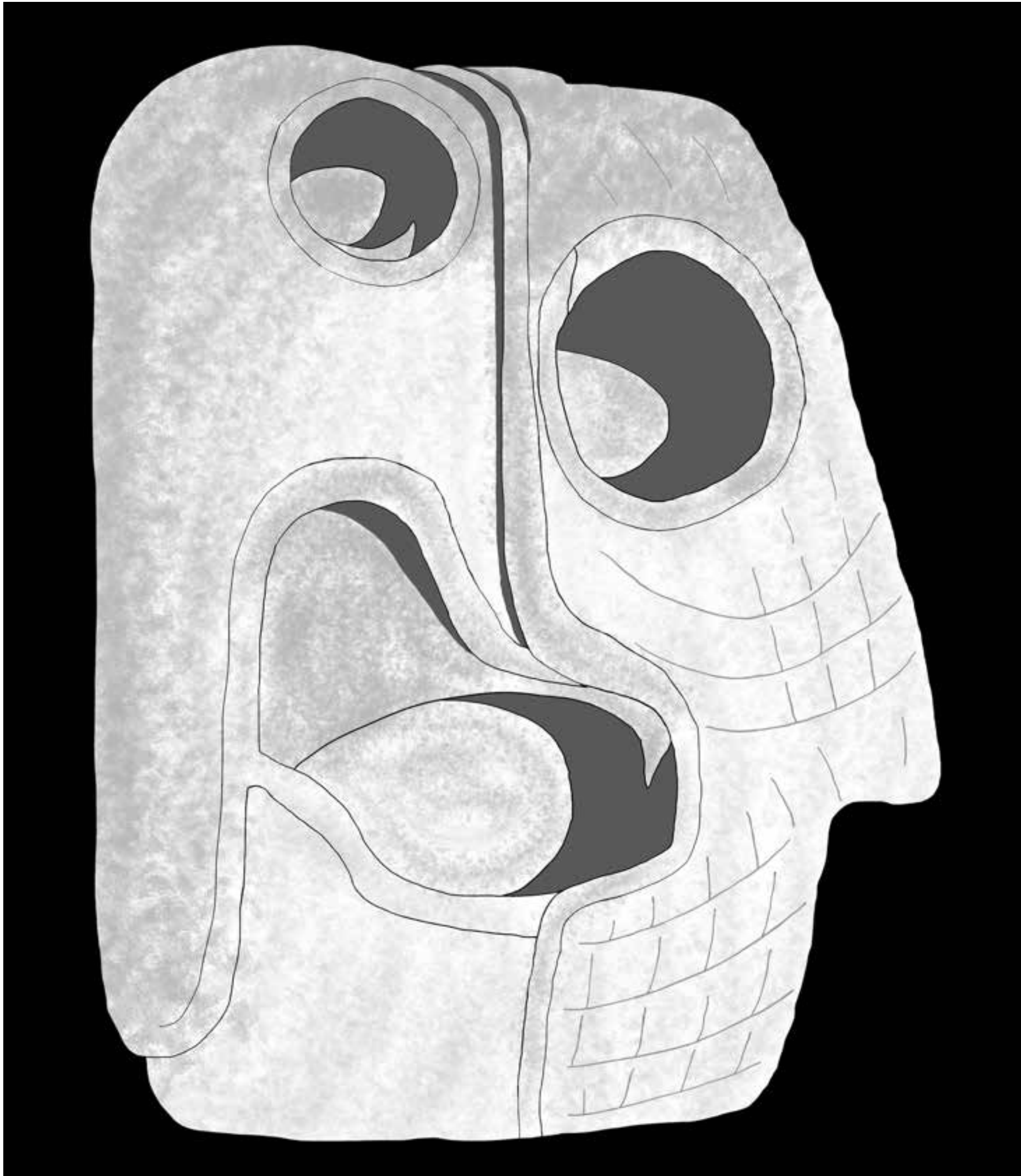
It shows steps from bottom to top adjacent to the end of the playing alley.

You can also see the stepped corbel vault (which is visible inside the building because the outside wall crumbled over the last thousand+ years of tropical rain storms (whose winds cause giant trees to blow over and the weight of the falling tree trunk crushes everything below)).

Part II

**The Scarlet Macaw Ballcourt
“Goalstones”**





Xochicalco macaw, estimated to be a ballcourt marker. Drawing by Rosa Sequen (FLAAR Mesoamerica) from photograph by Nicholas Hellmuth decades ago.

Turner, in his Figure 5.30,b shows two additional macaw stone heads from the Xochicalco site museum. These look even more like the ones of Copan, albeit not as tall. The tall one of Xochicalco is published in many reports but the other two I have seen only in Turner's 2015 PhD dissertation.

Claudia Garcia-Des Lauriers shows a photo of a macaw (with horizontal tenon) that is estimated to be from the ballcourt of Los Horcones. That site has LOTS of Teotihuacan influence.

Xochicalco has lots of Teotihuacan influence.

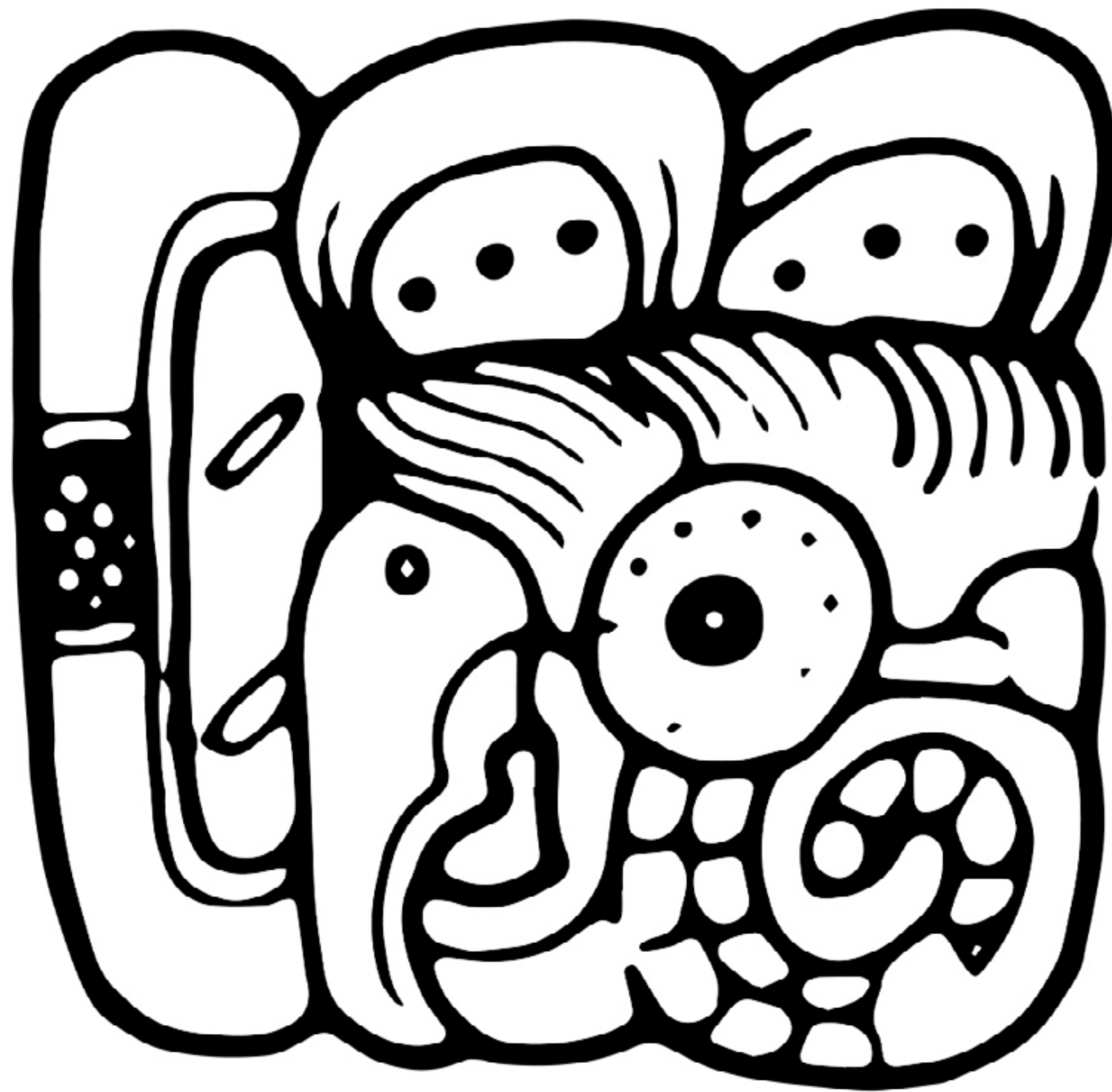
Kaminaljuyu has lots of Teotihuacan influence (and had macaw sculptures).

Copan has lots of Teotihuacan influence.

Is it possible that macaw ballcourt association came from Teotihuacan? This is a question, not a documentation. There are two twos of macaw-like heads on the wings of a frontal bird in a Teotihuacan mural, Conjunto del Sol.

Here is what Garcia says about the one at Los Horcones:

According to local informants, a sculpture now found at the Parque Matamoros in Tonalá comes from Los Horcones was a monument decorating a ballcourt (Fig. 7.12). The tenoned sculpture represents a macaw ballcourt marker similar to those seen on ballcourts from Kaminaljuyu, Copan, and Xochicalco (Parsons 1986: Fig. 203; Taube 2003: Figure 11.3f; Smith y Hirth 2000: Photo 3.13). This monument likely formed part of the sculptural decoration of one of the ballcourts from Los Horcones. (GARCÍA-Des Lauriers 2007: text associated with her Fig. 7.12).



In addition to making a corpus of all macaw ballcourt / ballgame sculptures of all Mesoamerica (there are more than just Copan and Xochicalco), it will help to make a corpus of all Maya hieroglyphs that show the profile head of a macaw.

Glyph from Copan Stela 19, cropped from drawing by Linda Schele, SD-1034, FAMSI database.

PLATE 25

AVES

BLUE MACAW (*Ara militaris*)

1. Figure with macaw head and holding firebrands, Dresden 40b.
2. Head-dress, Dresden 16c.
3. Tro-Cortesianus 12a.
4. Glyph, Copan, Stela 11 (Maudslay, I, Pl. 112, gl. 12).
5. Same, Copan, Stela B (Maudslay, I, Pl. 38).
6. Glyph used in connection with fig. 1.
7. Glyph.
8. Stone carving of upper mandible and head, Copan, Stela B (Maudslay, I, Pl. 37).
9. Head, probably of a turtle, month sign *Kayab*, Quirigua, Stela A (Maudslay, II, Pl. 7, gl. 14).
10. Head, probably of a macaw, Copan, Altar Q (Maudslay, I, Pl. 93).
11. Tro-Cortesianus 37b.
12. Head, probably of a macaw, Copan, Stela A (Maudslay, I, Pl. 30, gl. 19).
13. Tro-Cortesianus 94c.



Tozzer and Allen found 13 examples of macaws in Maya art already by year 1910 (Plate 25).

Today you can occasionally find macaws on ceramics, sometimes even crossing their neck with another bird as seen at Copan. So macaws are visible in Classic Maya vases, bowls and plates but not as common as waterbirds.

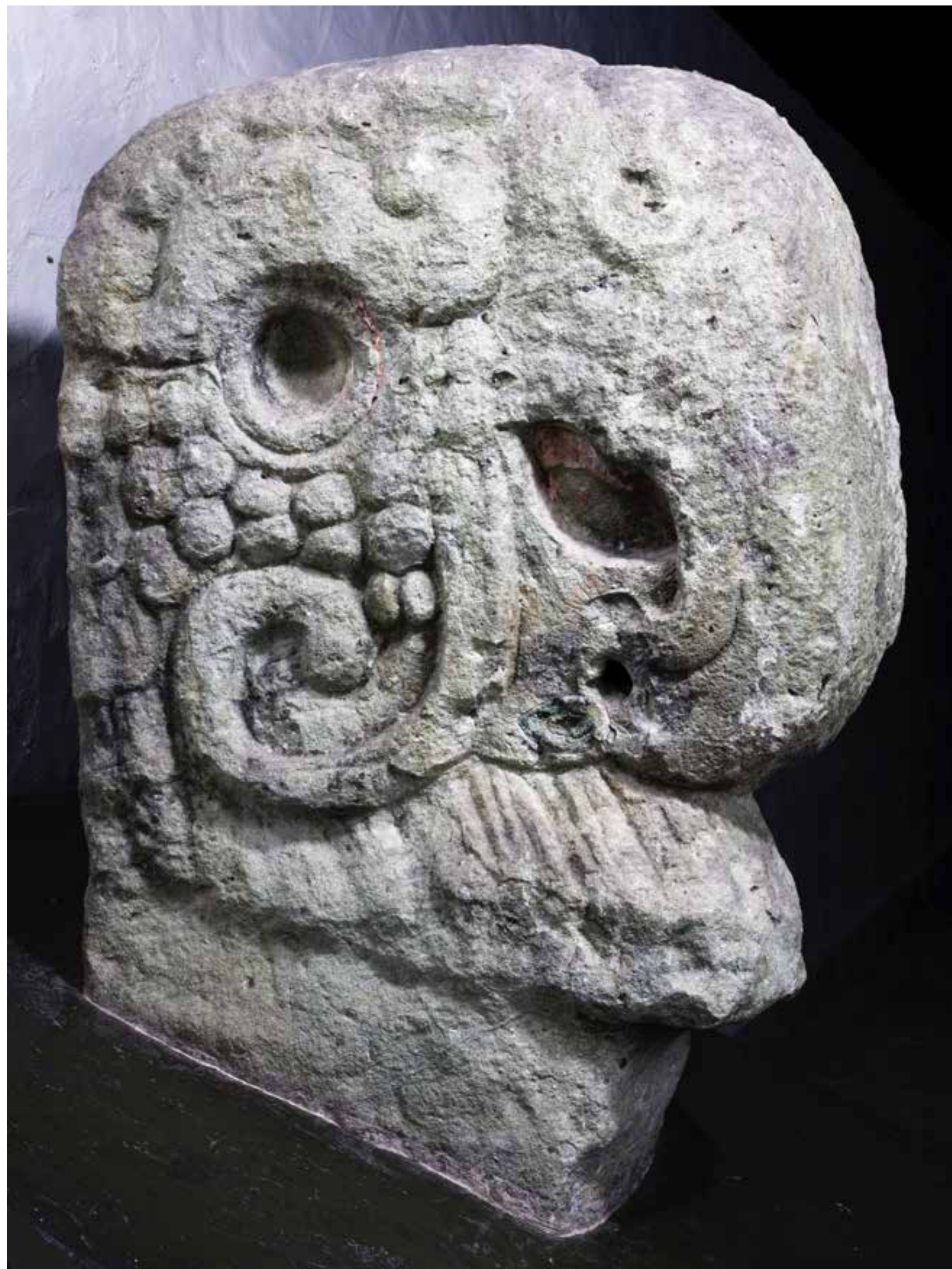
Where you can find most macaws in Classic Maya art is in hieroglyphic inscriptions. Tozzer and Allen found a few already over a century ago, but today lots more Maya stelae, altars, lintels and panels are available to study (and thus to find more macaws as face variant hieroglyphs).



In addition to finding all macaws of ballcourts, would also be an informative research project to find all macaws in Classic Maya art, including the codices. Copan has more macaw sculptures than most other sites. I show here two of the macaws in the Codex Dresden. Lots of birds “look like macaws” but I prefer to have both a “macaw eye” and also a macaw beak. A beak alone is not enough to convince me. Macaw at the right; Codex Dresden, page XVI (16), Villacorta 2007: 14.



Codex Dresden, page XL (40), Villacorta 2007: 90. Two segments of a Sky Band are above.



Each sculptor (and each patron) had different aspects of the macaw that they wanted to focus on.

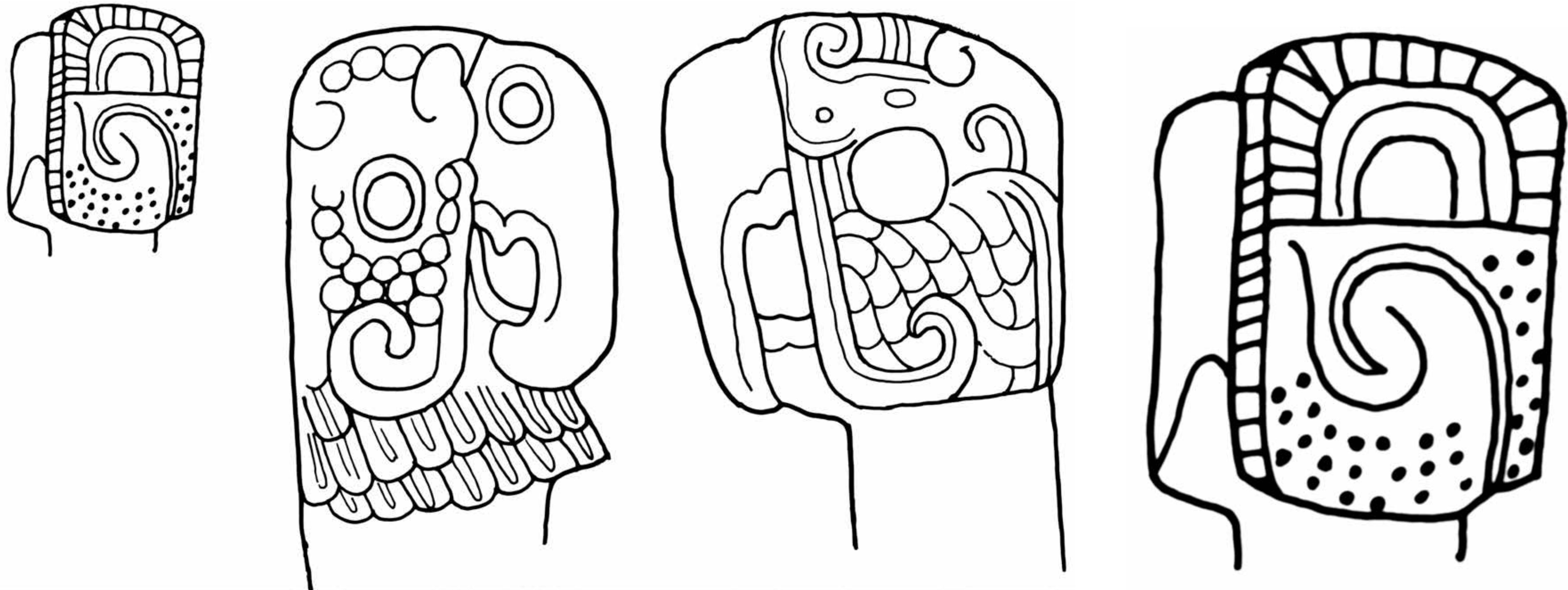
And styles changed over the centuries, so each newly renovated ballcourt would have a slightly different style of rendering of the face of the macaws.

Would be a good BA or MA thesis topic to find 100% of all other ballgame goals that are macaws. For example, Xochicalco, far away from the Maya heartland (but with lots of Maya influence), has a macaw goalstone obviously copied from Copan (unless Copan copied from Xochicalco?).

And, make an illustrated tabulation of all full-face macaw hieroglyphs and see if there are any full-figure personified macaw hieroglyphs.

Each archaeologist and iconographer uses their own preferred word for what these stones were used for. I call them goalstones, deliberately as a single word in order to unite their meaning.





Drawings by Linda Schele, SD-7000. The “eyebrow crest” in the left-facing macaw is more a generic Maya monster face attribute.

Crucial is to see what bird has the round circular area (that you expect of a macaw) and the curling rows of segmented aspects of the macaw facing left. Is that really a scarlet macaw, or a composite creature?

Stylized, not naturalistic.



To study iconography and epigraphy it helps to know the pertinent flora and fauna.

When you visit the area of Copan Ruins there are macaw sanctuaries where the birds fly over to sit on your shoulder and hands. Here is Gaby Cabnal, one of the helpful Q'eqchi' Mayan-speaking individuals who works for FLAAR. This photo is August 5, 2013; Gaby is still working for us today in 2023.

Naturally not every species is native to each part of the Maya area, but birds, felines and other animals, live, were traded among Maya cities and across Mesoamerica, with macaws being brought all the way to what is now southern USA.

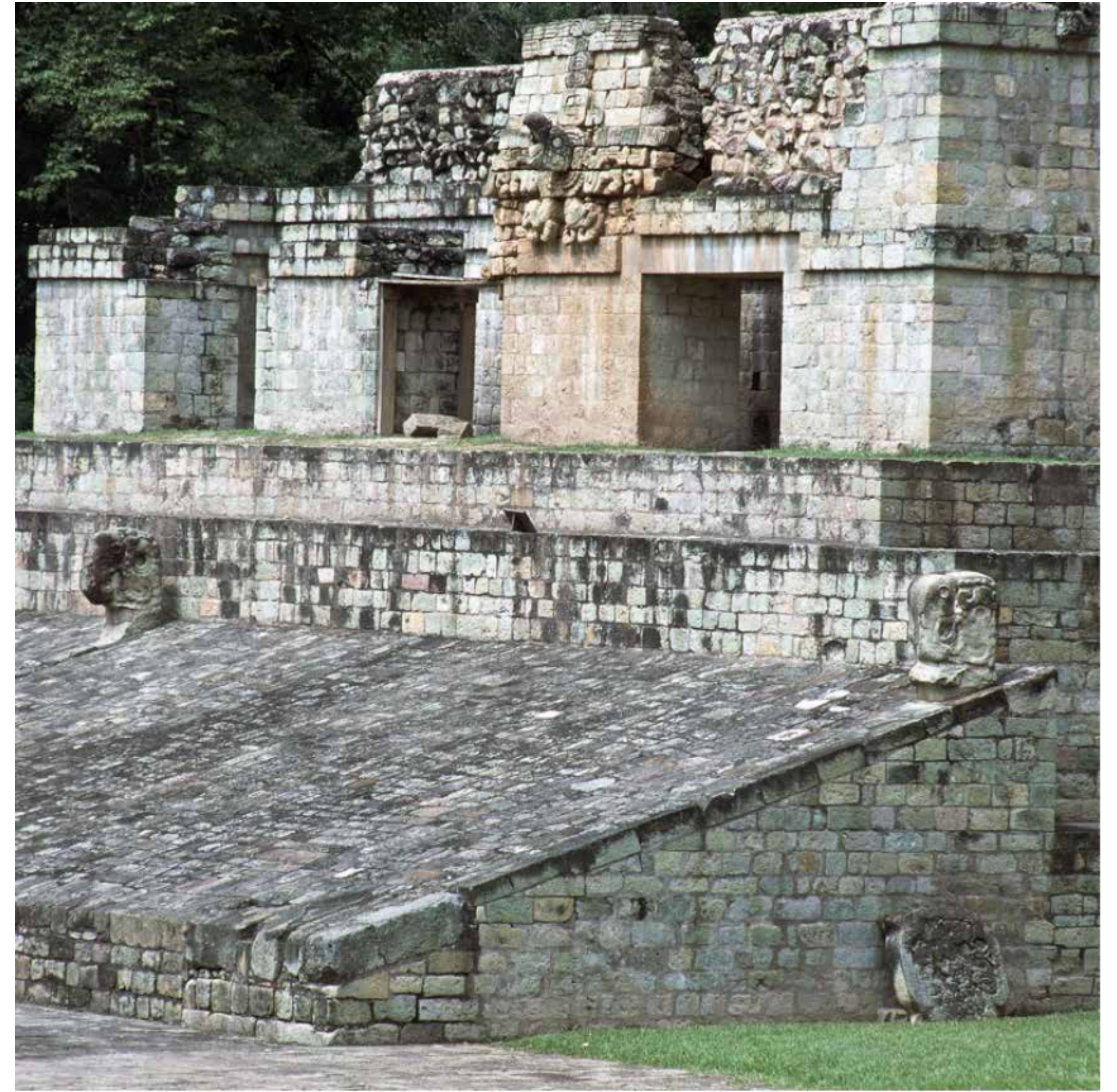
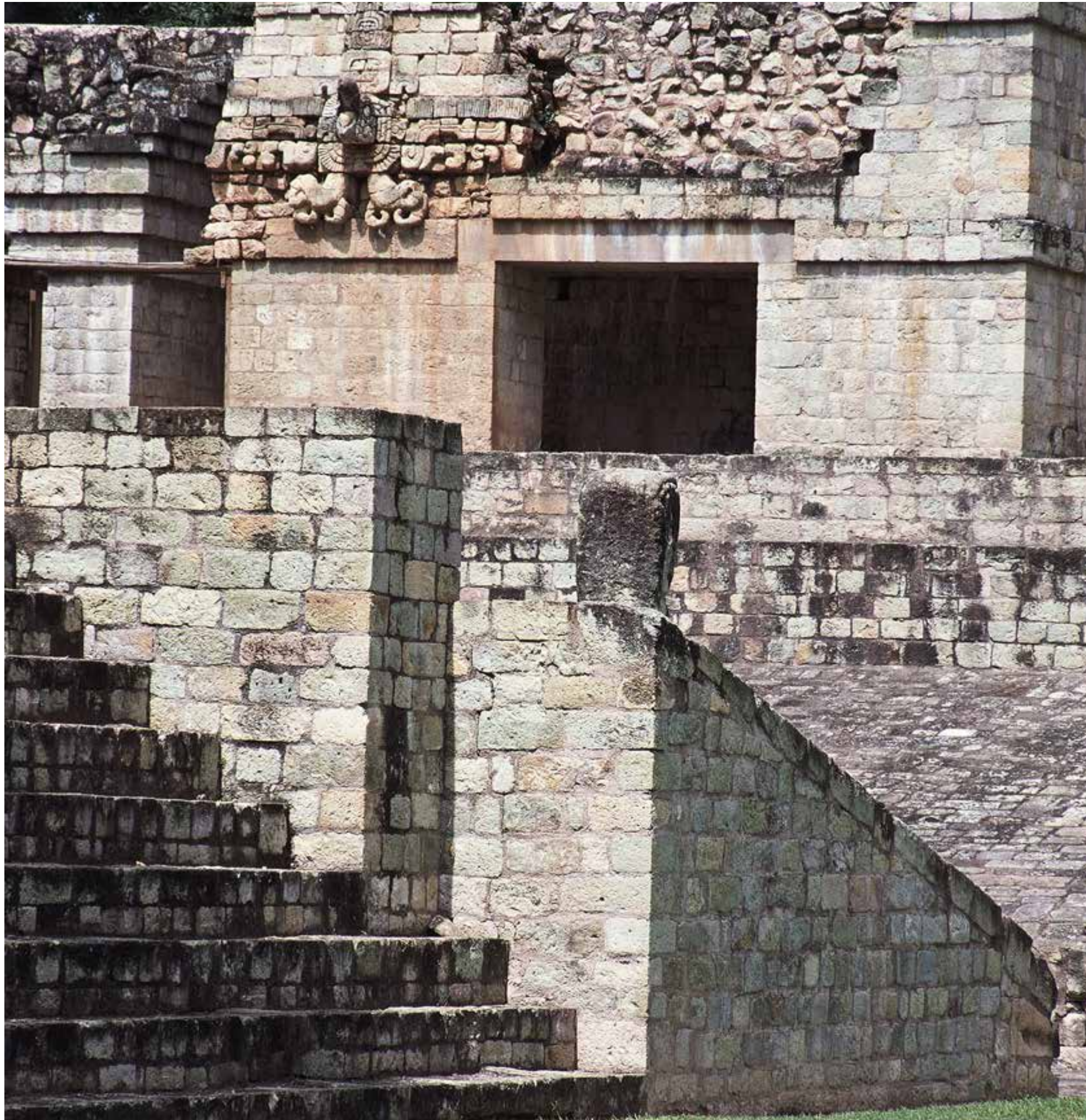
What would help is a close-up set of photos of the head of each species and compare each species with the Copan ballcourt goalstones.



This is the earlier style of macaw goalstones at Copan, Honduras.

The photos on the following page are also of these earlier style of ballcourt goalstones at Copan.





Angled slope is the dominant feature on each side of the playing alley. The steps are “around the corner” where (I suggest) pre-game and post-game rituals took place.



August 2, 2013, Nikon D800E with 60mm Nikon lens.

In this 1987 BA thesis, Williamson shows line drawings of the frontal views of these macaws (the Hellmuth photo here shows the macaws at the corner).



To study hieroglyphs and sculptures of macaws it helps to have access to crisp close-up photos.

These are photos by Nicholas Hellmuth from past decades, from the FLAAR Photo Archive of flora and fauna.



Many birds in Classic Maya art have designs on their wings: hieroglyphs, stylized reptile heads, or other motifs. Some of these motifs come from the design of the underside of the wing, so to study iconography you need to photograph the bird in flight with light on both sides of the wing so you can see the details.

Since many Maya hieroglyphs show the faces of birds, mammals, toads, iguanas, or other fauna, it helps to take close-up photos of the heads of each species so you



can compare them. These photos were taken a quarter-century ago. With digital camera technology of today we can do even better.

The photograph at the upper left has the forest background removed digitally so we can focus our attention on the size, shape, position and color of each feather.



The wings are similar to those of the Principal Bird Deity (who normally is a Snake Hawk, also named Laughing Falcon). But at Copan the Seven Macaw of the Popol Vuh is literally a Macaw variant of the Principal Bird Deity.

The bird at the left has been called a quetzal but I am not convinced since the beak is not what I would expect, and the scroll under the eye is more “macaw-like” than quetzal-like. So... lots more bird iconography and epigraphy would help before captioning that bird as a quetzal (unless a glyph associated states that it is a quetzal). The talons may help; each is slightly different in proportions. And the tail feathers are different length.



Surely there are more examples of this kind of entwined birds. These face each other; the birds of Copan look totally different directions.

On Early Classic scene(s) on ceramics the birds face same way as at Copan. But the scene is how here is Post Classic or later, Codex Madrid. And the bird at the right is not necessarily a macaw (beak is too long).



IHAH has kindly provided us with chairs so I could sit at my portable desk and use the computer in the Copan archaeological project. Already in 1998 we had the most powerful digital camera in the world, a Better Light tri-linear scan back, installed in a Linhof 4x5" camera.

It takes a heavy-duty tripod and special tripod head to hold the weight of this digital camera system. The entire system was operated with a Mac laptop computer (a quarter century ago).

If you like macaws, if you like butterflies, if you enjoy hiking under the gorgeous trees of the Copan park area, then come to Honduras to experience all this yourself.



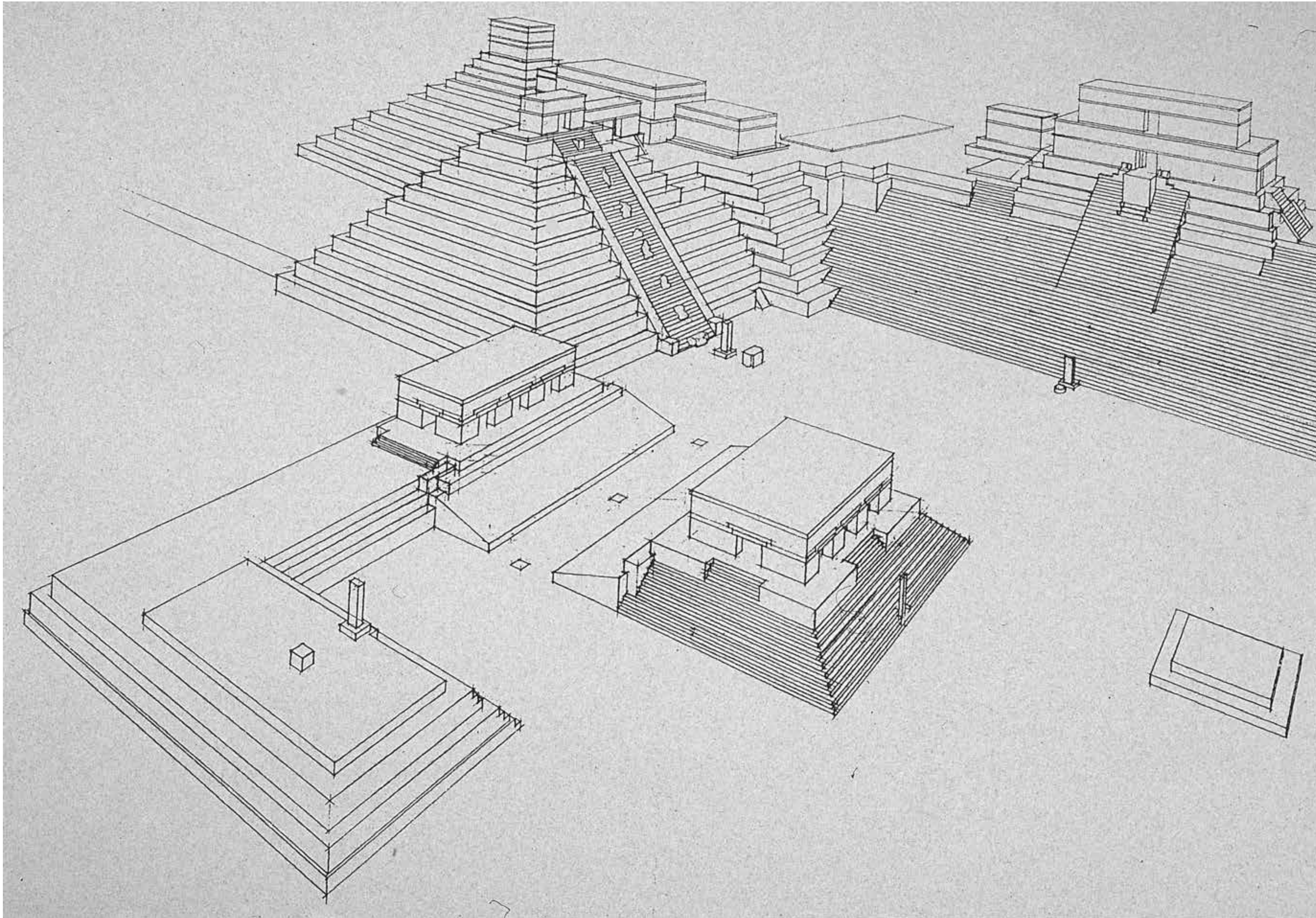
Stepped corbel vaults are not common but they are known throughout the entire world of Maya architecture. I did my first photography of Maya corbel vaults in 1961, at Palenque (age 16). Then I visited Puuc Maya sites at age 17; and by age 18 I was a student intern when I offered the Bonampak team of INAH to help carry their supplies by foot to Bonampak and to help them set up their camp for that season. So I got to see more corbel vaults (and of course the murals).

By age 19 I was working at Tikal for an entire 12 months (hired as a photographer and architectural draftsman, since I was majoring in Architectural Sciences in college). Got to see corbel vaults of every size and shape during that year (1965). Even excavated a hidden vault that covered the Tomb of the Jade Jaguar (Tikal Bu. 196, that I discovered under Tikal Structure 5D-73 after archaeologists Linton Satterthwaite and William Coe asked me to excavate and date that entire pyramidal structure (that is facing the south side of Temple II). Str. 5D-73 is outside the far northwest corner of the Central Acropolis (I also excavated the palace adjacent to the east).



Then during the 1970's-1980's-1990's I explored Puuc, Chenes and Rio Bec areas and took thousands of photographs, especially of corbel vaults. So I can say that these stepped corbel vaults on the Copan ballcourt are worth coming to visit and learning about from the local guides.

The stepped corbel vault is inside on both sides, but since the front façade has fallen during the last thousand years, you can now see inside.



Drawing by David Morgan for
FLAAR research on Maya ballcourt
architecture



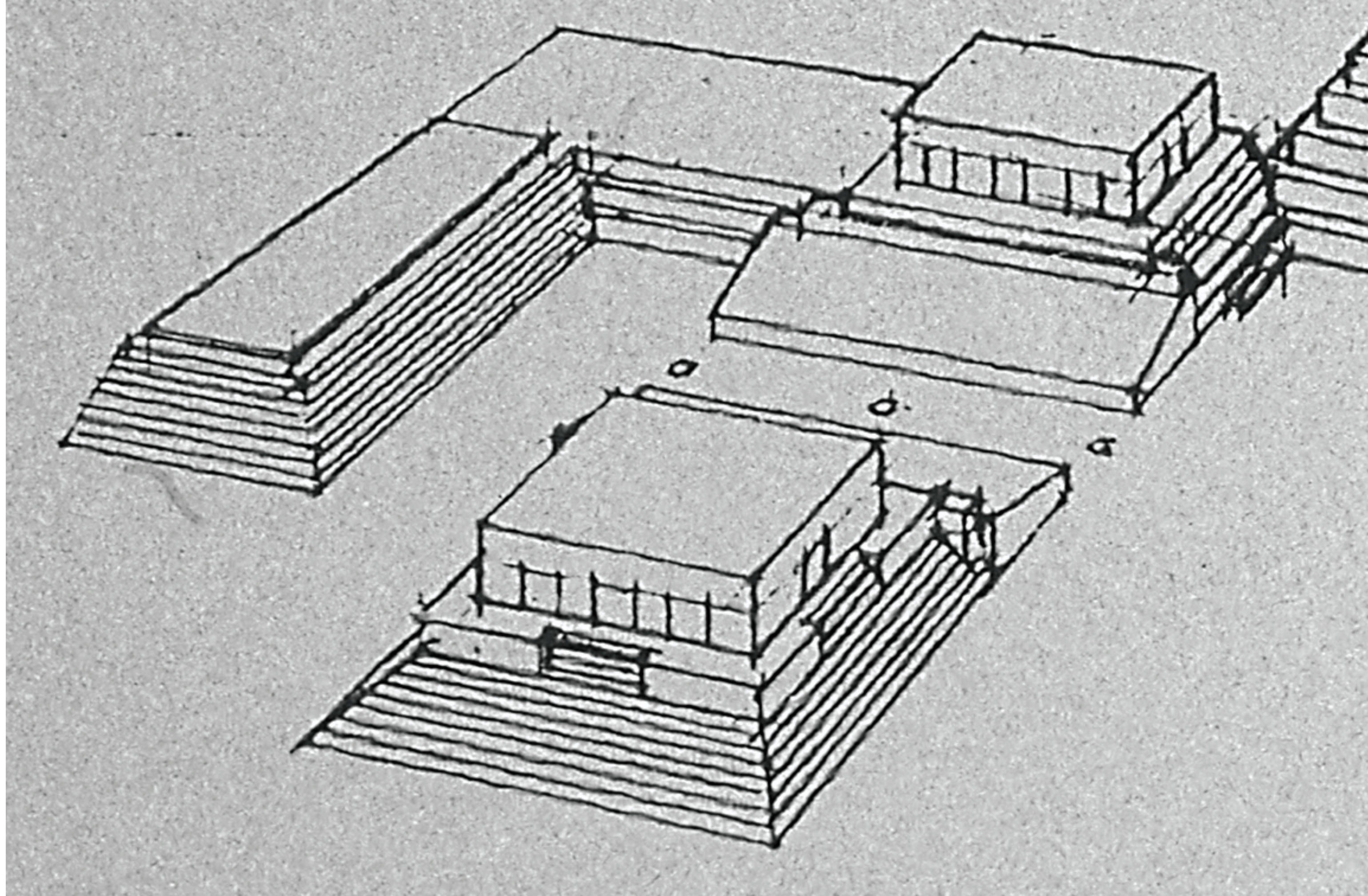
The back of the ballcourt is not photographed or pictured very often since everyone's focus is the playing alley on the other side.



Steps at the left (at the end of the playing field). More steps at the right; that entire side of the ballcourt has steps on both ends and the entire back. Since the back is under trees, sunlight does not illuminate it, so I thought to photograph. The back side is best seen in 3-dimensional architectural drawings. If you want to see the entire ballcourt, Sketchfab has a wonderful model

by professor Atsushi Noguchi, The Center for Next Generation Archaeological Studies (NGAS), Komatsu University, Japan.

<https://sketchfab.com/3d-models/ball-court-copan-honduras-9fce9040008c409b989837cb7123f340>



Cropped by Hellmuth from sketch drawing by David Morgan so you can see “steps all up and down most sides of the ballcourt” except for the playing alley.

So, the playing alley was for the athletic part.

The steps are for theatrics, pageantry, and often for the execution (where the ball with the head of the victim was rolled down the steps).

It would be helpful if there were 3D renderings by Hasso Hohmann and Annegrete Vogrin available to show here in a 2nd edition of this report.



A final view to show the space of the end zone (with lots of steps on one side).

All photographs by Nicholas Hellmuth, FLAAR Photo Archive.

We put these photos into horizontal format so professors, teachers, and students can use them in PowerPoint presentations, since PPTx format is horizontal.

References Cited and additional Suggested Reading

There are endless important monographs, articles, and theses written about Copan which include the ballcourt(s). Baudez covers primarily the sculptures on the round markers (which we show in several separate FLAAR publications). So the list below is on the ballcourt architecture. You can also find the various Copan project excavation reports on the earlier ballcourts, but the current publication is to make photos available of the final phase.

There are endless books on monumental Maya architecture which include the ballcourt of Copan. You can find lots more books and articles on-line. I show here a sample.

HOHMANN, Hasso and Annegrete VOGRIN

1982 Die Architektur von Copan (Honduras): Vermessung - Plandarstellung - Untersuchung der baulichen Elemente und des räumlichen Konzepts (2 volumes). Akademische Druck - u. Verlagsanstalt, Graz, Austria, 1982. Volume I: 245 pages, Volume II: maps. Biblio., appendices, plates and maps.

PROSKOURIAKOFF, Tatiana

1946 An Album of Maya Architecture. Carnegie Institution of Washington. Publication 558

PROSKOURIAKOFF, Tatiana

1976 An Album of Maya Architecture. Reprint by University of Oklahoma Press.
Has several dates for the reprint: 1963 and 1976.

STROMSVIK, Gustav

1952 The Ball Courts at Copan, with Notes on the Courts at La Union, Quirigua, San Pedro Pinula and Asuncion Mitla. Contributions to American Archaeology and History No. 55. Carnegie Institution Publication 596.

TOKOVININE, Alexandre

n.d. The Royal Ball Game of the Ancient Maya. MayaVase Data Base. <http://www.mayavase.com/alex/alexballgame.html>

TURNER, Andrew

2015 2015 Cultures at the Crossroads: Art, Religion, and Interregional Interaction in Central Mexico, AD 600-900. PhD dissertation. 536 pages.

VON WINNING, Hasso

2014 Paraphernalia for the Ceremonial Ball Game in Ancient Mexico. *Art Bulletin of Victoria* 25. NGV.

No figure numbers under any photo or illustration (only scattered in the text). No credit or citation for the drawings, so we do not know whether by John Montgomery, Schele, Barbara Fash or from the CIW era.

WILLIAMSON, Richard

1987 Copan Ball Court AIII, Symbol, Power, And Pilgrimage among the Classic Maya. BA thesis. <https://core.ac.uk/download/pdf/158316459.pdf>

https://www.reddit.com/r/ArtefactPorn/comments/126mvv9/an_old_photo_of_a_maya_ball_court_marker_in_the/

Shows a really large macaw ball court marker, municipality of La Unión, Copán

**List of FLAAR Reports
in progress**
from the Copan segment of
the FLAAR Photo Archive

Altogether we estimate about 20 reports on Copan.
Here are the first eleven. They hopefully will be
published one-per-month; the first was published
the first days of September.

Cauac Monster, Cosmic Monster with Quadripartite Badge Headdress, Crocodile & God N,
Copan CPN 25, Altar of Stela M
FLAAR Photo Archive Publication Number 1,
Maya Sculptures of Copan, Honduras, Publication Number 1

Scorpion, Venus, Moon Goddess with Rabbit Companion
Celestial Deities on Sky Band Motifs on Copan Structure 8N-66C Bench Front
FLAAR Photo Archive Publication Number 2,
Maya Sculptures of Copan, Honduras, Publication Number 2

Copan Ceramic Incensario Lids, Local adaptation of Teotihuacan Style
Volume I, Photos in full-page Height, Horizontal Format
FLAAR Photo Archive Publication Number 3,
Maya Ceramics of Copan, Honduras, Publication Number 1A

Copan Ceramic Incensario Lids, Local adaptation of Teotihuacan Style
Volume II, Vertical Format
FLAAR Photo Archive Publication Number 4,
Maya Ceramics of Copan, Honduras, Publication Number 1B

Full-Figure Personified Hieroglyphs
on front of Bench in Str. 9N-82 (House of the Bacabs)
FLAAR Photo Archive Publication Number 5,
Maya Sculptures of Copan, Honduras, Publication Number 3

Beards on Kings of Copan
Beards on Kings of Copan-FLAAR-Photo-Archive-Copan.docx
FLAAR Photo Archive Publication Number 6,
Maya Sculptures of Copan, Honduras, Publication Number 4

Paddler God Faces and Hieroglyphs at Copan
FLAAR Photo Archive Publication Number 7,
Maya Sculptures of Copan, Honduras, Publication Number 5

Cauac Monsters at Copan, especially in Stacks on Corners of Palaces and Mythical Structures
FLAAR Photo Archive Publication Number 8,
Maya Sculptures of Copan, Honduras, Publication Number 6

*Copan Maya Ballgame Players,
Maya Outfits: Chest Protector & Deflector and Thigh Protector
Mexican Ballgame Outfits: Yoke, Hacha and Ballgame Handstone*
FLAAR Photo Archive Publication Number 9,
Maya Sculptures of Copan, Honduras, Publication Number 7

*Copan Maya Ballcourt Architecture & Scarlet Macaw Logo Goalstones
Stepped Areas were as important as Playing Field down the Center*
FLAAR Photo Archive Publication Number 10,
Maya Architecture of Copan, Honduras, Publication Number 1

*Maya Ballcourt Architecture
3-Dimensional Architectural Reconstruction Drawings by David Morgan*
FLAAR Photo Archive Publication Number 11,
FLAAR Drawings Archive Segment, Publication Number 1.

Toads and/or Frogs in Art and Iconography of Copan, Honduras
FLAAR Photo Archive Publication Number 12,
Maya Sculptures of Copan, Honduras, Publication Number 8

Bats in Sculpture and Hieroglyphic Inscriptions of Copan, Honduras
FLAAR Photo Archive Publication Number 13,

Maya Sculptures of Copan, Honduras, Publication Number 9

Samples of Classic Maya Ceramics of Copan, Honduras
FLAAR Photo Archive Publication Number 14,
Maya Ceramics of Copan, Honduras, Publication Number 2

*Jade and Greenstone Craftsmanship of Copan, Honduras
Finished Jade Ornaments plus Documentation of Jade Working on Raw Stone*
FLAAR Photo Archive Publication Number 15,
Artifacts of Jade, Obsidian, Flint (Chert) and other Materials of Copan, Honduras,
Publication Number 1.

*Full-Figure Personified Hieroglyphs:
Bench Front inside Copan Structure 9M-146*
FLAAR Photo Archive Publication Number 16
Maya Sculptures of Copan, Honduras, Publication Number 10

*Iconography of Incense Scattering and Face-Variant Long-Count
Maya Hieroglyphs on Nim Li Punit Stela 15, Belize*
FLAAR Photo Archive Publication Number 17
Maya Sculptures of Belize, Publication Number 1

*The Story of the Blom Plate: a Masterpiece of Maya Iconography
and Primary Standard Sequence, PSS, Hieroglyphs, Chetumal, Quintana Roo, Mexico*
FLAAR Photo Archive Publication Number 18
Iconography of Maya Ceramics of Mexico, Publication Number 1
Primary Standard Sequence, PSS, Maya Hieroglyphs in the FLAAR Photo Archive,
Publication Number 1