The archaeological site of Copán—today a UNESCO World Heritage Site in Honduras—was a primary center for cultural and economic exchange in the Maya world from the 5th to 9th centuries. Recently the city’s cosmopolitan and multi-ethnic composition is being brought to light, which is dramatically altering our interpretations of the ancient city and the nature of its “collapse” in the early ninth century.

### INTRODUCTION
The Copán Archaeological Project, a collaboration between the Mesoamerican Research Institute (CRIA) and the Center for Regional Archeological Project at the University of Nebraska—Lincoln (CRAP), has a collection of approximately 70,000 sherds at the Copán Ceramoteca which are housed in the Center for Regional Archeological Project (CRIA) warehouse. In recent years, we have attempted to catalog the devilish storage conditions with deteriorating labels and difficult-to-remember provenience information. The goal of this project is to analyze and research this entire collection.

### OBJECTIVES
- Identify diagnostic potsherd types to help confirm site function and status at Copán.
- Refine chronological dates across the city.
- Experiment with incorporating progressive technologies into the research process.

### METHODS
Access Legacy Data
- Analyze, compare, and digitize archival data from CRIA to identify a subset of diagnostic ceramic types from outside the main ceremomial complex. Primary sources integral to our research were from the following scholars:
  - Dr. Cassandra Bill
  - Dr. William L. Fash, Jr.
  - Dr. Evan Lane
  - Dr. René Viel

Ceramic Analysis
- Locate sherds and vessels in CRIA warehouse
- Examine condition
- Compare sherds from the Ceramoteca to samples from the CRIA warehouse to select diagnostic types that best distinguish the difference between early and late Coner
- Identify damaged ceramic storage bags and containers with intention to replace for better preservation/catalog location in warehouse

Documentation and Photogrammetry
- Take still photos of 30 sherds and six whole vessels
- Create 3D models of the sample using photogrammetry
- Test use of Augmented Reality applications

### QUESTIONS
- Was there a shift in political power in Copán between the reigns of the 13th and 16th rulers?
- If so, what was the nature of the accompanying ideological and sociopolitical changes?
- To what extent did these changes play a role in the collapse of the dynasty in AD 820?

### FUTURE RESEARCH
- Optically stimulated luminescence (OSL) Dating
- Conduct photogrammetry on more sherds and reshot original sherds and vessels that were only documented on one side
- Organization and analysis of Terminal Coner diagnostic sherds
- Examine more SubOp bas from bodega
- Identify lot cards from Sheree Lane
- Input both legacy and current data into ArcGIS
- Finish 3D models

### CONCLUSION
This pilot study established a solid foundation for future ceramic analysis and research at Copan. By combing legacy data, 3D technologies and geographic information systems, we attempted to create a thorough compilation of information that will be useful to scholars in the future. This more inclusive data will be integral to creating a more accurate timeline of Copán and its collapse. By utilizing 3-D laser scanning and photogrammetry technology in the field, we can also take a closer look into the components of the individual sherds and bring back that information in place of transporting physical pieces.

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