# A New Catalog and Quantitative Analysis of Copador Glyphs

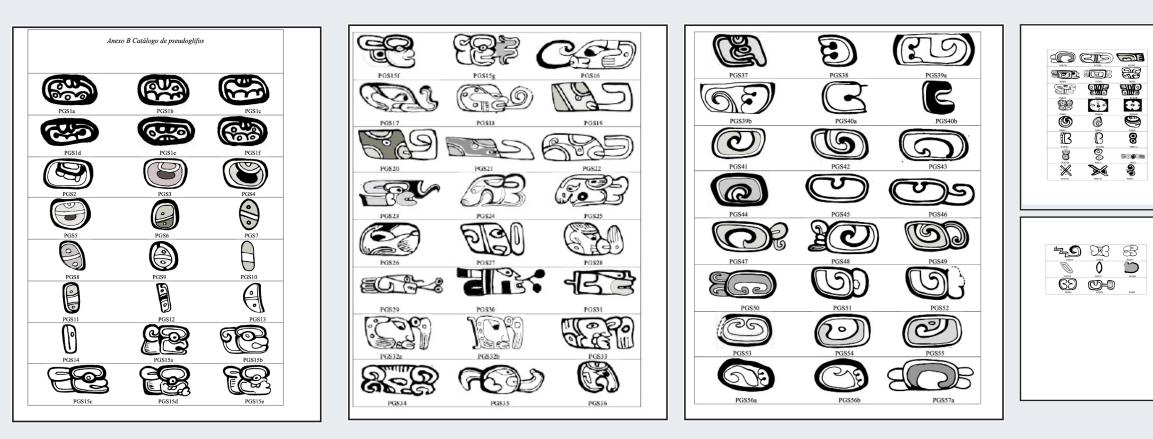
Ana Sofia Kisley | Department of Linguistics, UNC-Chapel Hill

#### Abstract

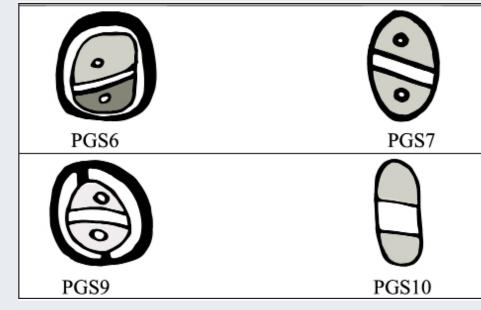
Glyphs found on Copador pottery vessels of Honduras and El Salvador have been termed pseudoglyphs (Longyear 1952) because they are unreadable as Mayan inscriptions. They have since been examined archaeologically (Alfaro Moisa 2013, Caballero Díaz 2017), but not linguistically. The goal of this project was to create an improved catalog of Copador signs and a record of inscriptions that could be used to investigate whether the structure of the inscriptions resembles a linguistic writing system. Initial findings show that some signs appear far more frequently than others and in reliable configurations. Notable comparisons can also be made between some signs and those in Mayan hieroglyphs, and between the signs and motifs in the vessels' iconography. Most importantly, the catalog and corpus materials created during this project open up the possibility of doing statistical analyses of Copador texts. This was a preliminary project, but future research may reveal more about the structure and function of these texts.

# Introduction

"Copador" refers to a type of pottery vessel found at sites in El Salvador and in Honduras near Copan. Caballero Díaz (2017) compiled the first catalog of glyphs specific to Copador vessels.



- This preliminary catalog was not free of problems.
- •Sometimes multiple glyphs were grouped together as one, or the same glyph appeared under multiple entries.



Same glyph

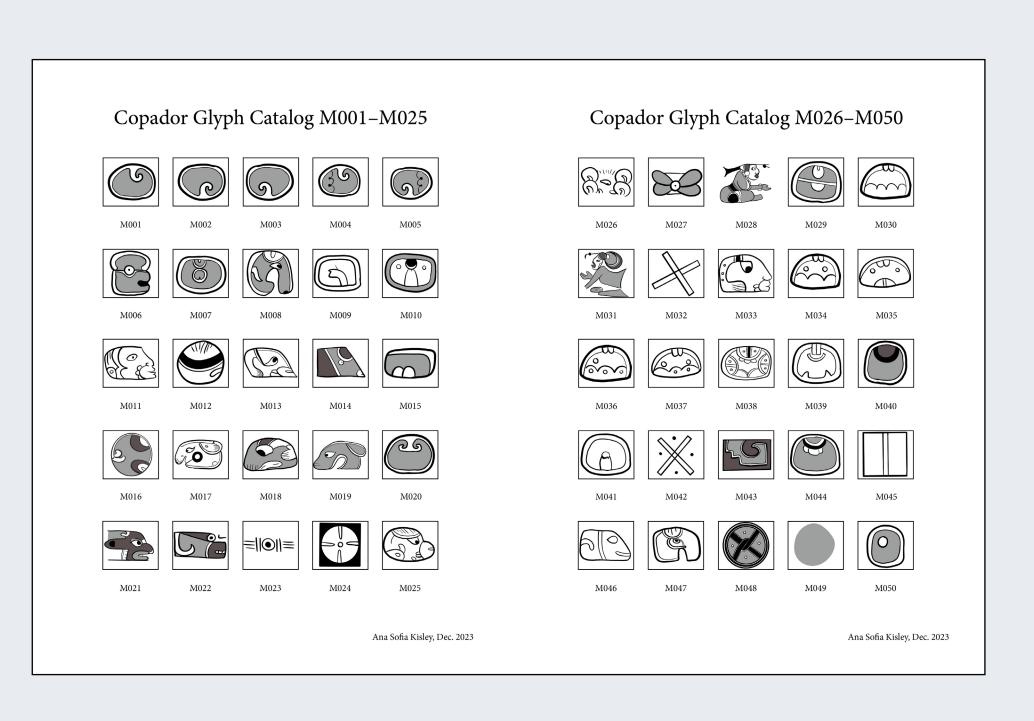


Different glyphs

• My goal was to create a revised catalog of glyphs and to use it as the basis for further quantitative analyses, which may ultimately be used to assess whether the glyphs represent a spoken language or not.

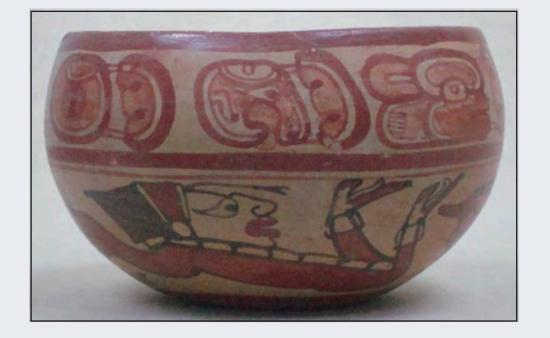
### Methods

- Each new glyph was assigned a catalog number.
- Unless a glyph was very clearly a stylistic variation, it was tentatively given its own entry.
- •M (Main) and E (Elongated) sign categories were inspired by Thompson's 1962 catalog of Mayan hieroglyphs.



- •I recorded every instance of every sign (>1900) in a spreadsheet that became my database.
- I used that to develop a corpus of 194 texts, where any sequence of signs on a vessel was rendered as a continuous sequence of their corresponding catalog numbers.

Vessel (photos from Caballero Díaz 2017: Anexo 4)



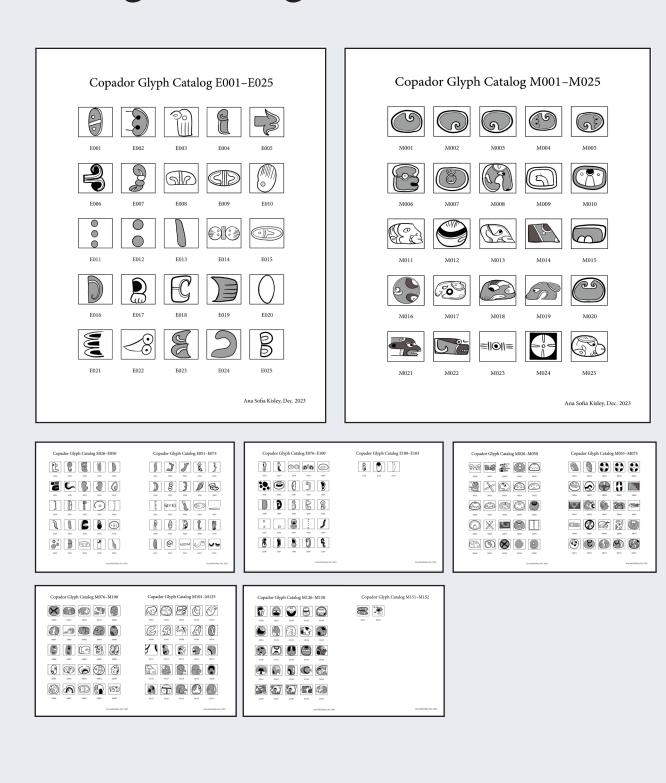
Roll-out photograph of glyph band

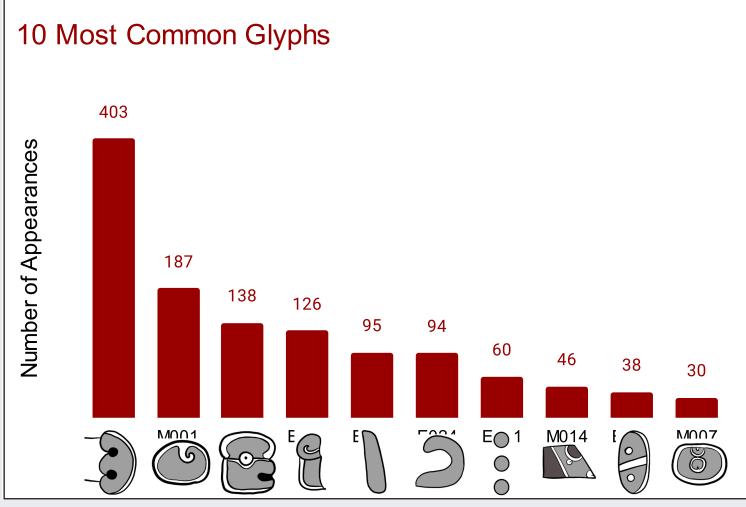
Corpus text

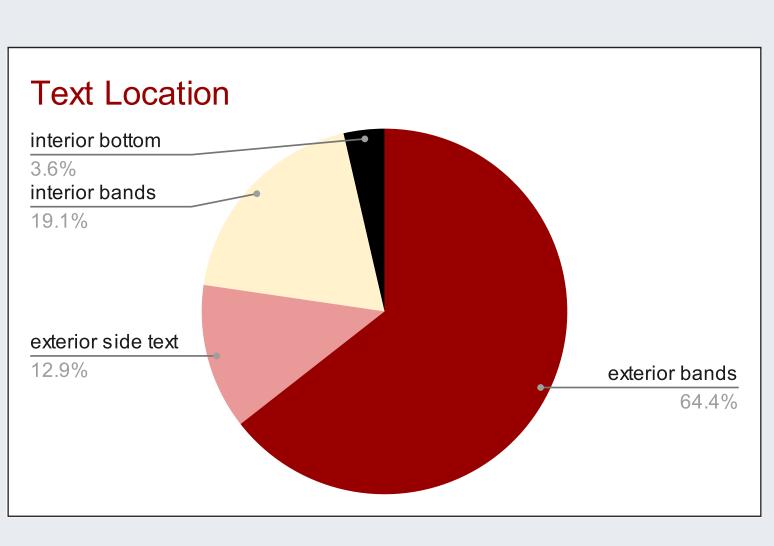
E002-M007 E002-M006-E004 E002-M008 E002-M007 E002-M006-E004 E002-M007 E002-M006-E004

#### Results

The completed catalog (below) contains 255 signs, 153 main signs and 103 elongated signs.







### Discussion

- More research is required to make a claim as to whether this writing system represents language or pseudo-writing.
- Next steps are to use distributions of possible sign variants to consolidate my catalog, and to find patterns in the texts to compare to linguistic structures of local languages.

# Acknowledgements

This research was conducted in the Department of Linguistics at UNC-Chapel Hill. Davíd Mora-Marín suggested I take on this project and served as my mentor throughout the process. The work would not have been possible without photos from Claudia Alfaro Moisa, Maberick Caballero Díaz, Dorie Reents-Budet, and Justin Kerr. I also acknowledge the indigenous Lenca and Xinka peoples of Honduras and El Salvador whose ancestors were responsible for crafting the vessels included in this study.

# References

Alfaro Moisa, Claudia. 2013. Análisis de la cerámica Copador procedente de cuatro sitios arqueológicos de la fase pay del occidente y centro de El Salvador. Department of Archeology, Universidad Tecnológica de El Salvador. (Licenciatura.)

Alfaro Moisa, Claudia & Caballero Díaz, Maberick & Mora-Marín, David & Reents-Budet, Dorie. 2022. Base de datos proyecto escritura Copador.

Calvin, Inga E. (2006). Between text and image: An analysis on pseudo-glyphs on Late Classic Maya pottery from Guatemala. Department of Anthropology, University of Colorado. (Doctoral Dissertation.)

Caballero Díaz, Maverick. (2017). Los pseudoglifos como signos gráficos, un análisis de los grupos cerámicos del clasico tardío Gualpopa, Copador, y Arambala. Department of Archeology, Universidad Tecnológica de El Salvador. (Licenciatura.)

Longyear, John Munro III. 1952. Copan Ceramics: A study of southeastern Maya pottery. Washington, D.C.: Carnegie Institution of Washington. (Publication no. 597.)

Mora-Marín, David. 2022. Aproximaciones metodológicas a los textos estilo Copador. Department of Linguistics, University of North Carolina at Chapel Hill. (PowerPoint slides.)

Reents-Budet, Dorie & Bishop, Ronald L. & Sampeck, Katherine. n.d. Ambiguity in the source attribution of Copador's cream polychrome: a reassessment of Copador production location. Department of Anthropology, National Museum of History, Smithsonian Institution, and Department of Sociology and Anthropology, Illinois State University. (PowerPoint slides.)