



**MOREHEAD STATE UNIVERSITY**

# Digital History and Reconstruction of the Political Geography of the Yucatan Peninsula

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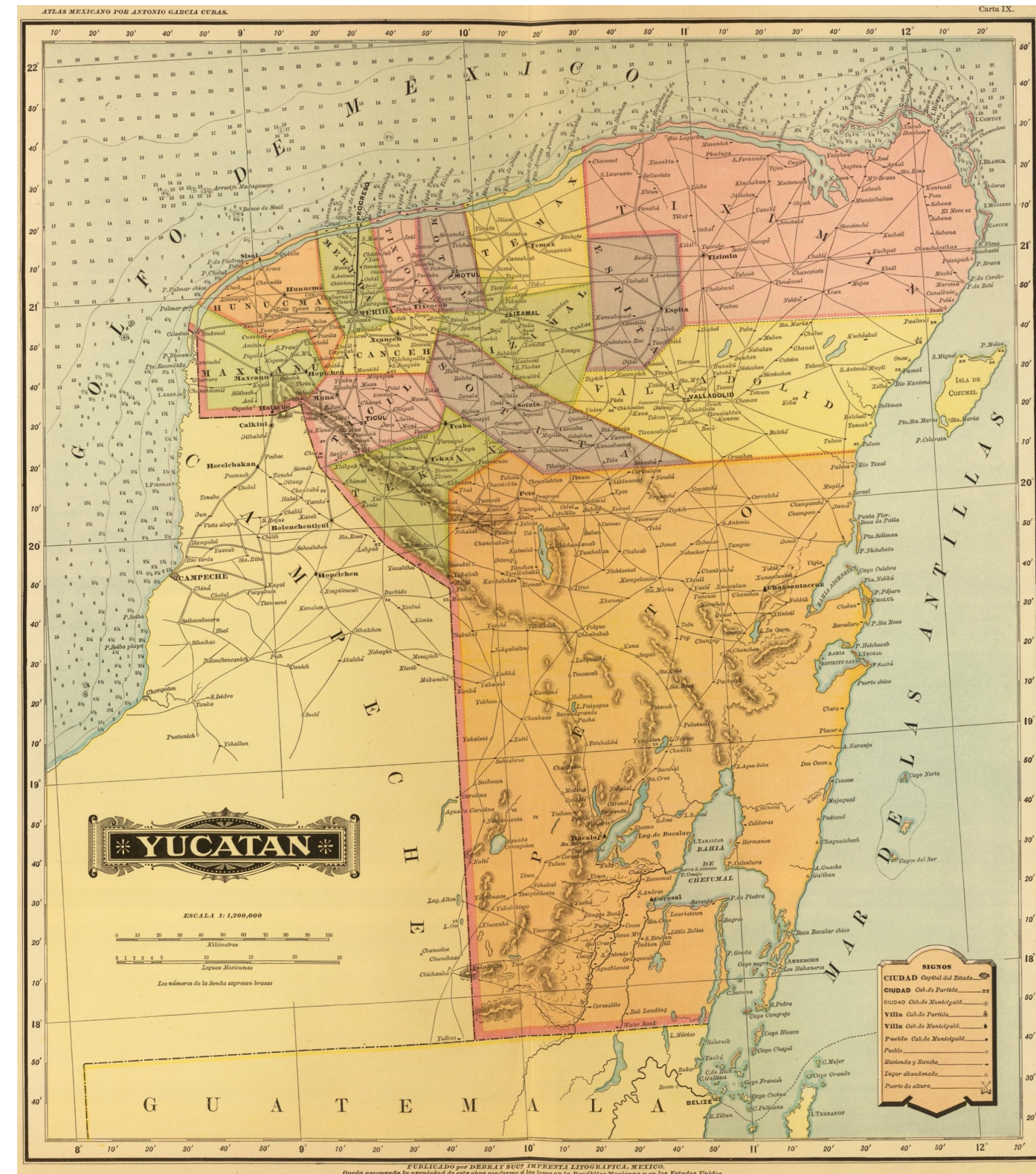
## Abstract

We compiled and digitized historical maps of the Yucatan Peninsula and compared them with previous political geographic models of reconstructed prehispanic political connections among settlements across the region. The Late Postclassic period in Mesoamerica (A.D. 1200–1519) manifested an independent development of a market economy. This transformation of economic processes appears to have impacted the interactions among towns and cities across the peninsula and changed political organization at multiple scales. To understand these changes, we acquired the oldest available maps, overlaid them with modern maps, digitized the recorded towns, cities, and roads and compared the results with the existing political geographical models. The results tie the historical regional organization of ancient Maya society to the cartographically accurate natural and constructed features, so we can improve on the results of previous investigations.

## Maya Archaeology

The rise of the capital of Mayapán emerged from a period of rapid societal change and interregional interaction during the Terminal (A.D. 850-1100) and Postclassic (A.D. 1100-1500) periods. City-states rose and fell in dynamic cycles, economic networks transformed the landscape, and Mayapán integrated the region into the Mesoamerican world system. Mayapán was the last capital of the Maya empire and was the nucleus of a centralized polity.

16<sup>th</sup> century accounts of the city's founding describe resettlement of the "native lords of the country" at the capital. Affiliated territories and towns were divided among these lords according to their rank. These local lords are expected to have returned to their own regional capitals after the Mayapán fell between A.D. 1441-1461.

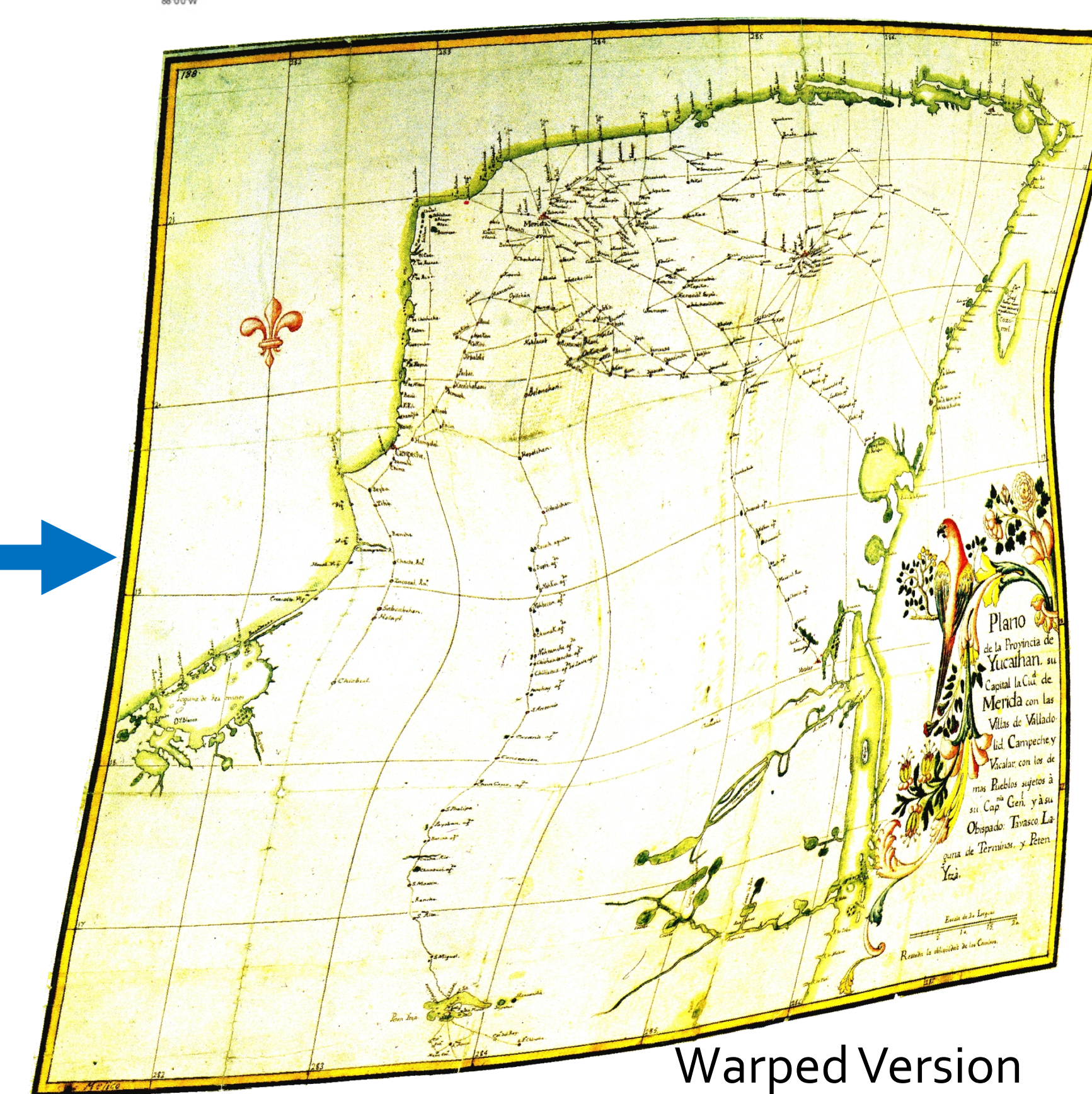


## Georeferencing Historical Maps

We used mapping software to warp the historical maps to better match the actual geographical locations of the towns and roads depicted. The north-western quadrant most accurately matched real-world locations, while the southern and eastern areas were radically inaccurate. We georeferenced five historical maps to digitize.



Original Historical Map



Warped Version

## Digitizing

We digitized the major towns and roads across the Yucatan Peninsula and overlaid them with the most recent (1957) reconstruction of the prehispanic political geography. We compared the locations, names, and road connections of all common towns. The process took several months of interactively reconstructing the recognizable places and towns for each map.



## Historical Maps

## Northern Yucatan Political Geography

Ancient Mayan cities and towns were highly variable in terms of function and complexity. Historical records and maps attest to ranked political, religious, and economic centers that imply bureaucratic complexity and the existence of formal, mid-level institutions similar to the ancient Greek polis.

The northern Yucatan at European contact was divided into at least fifteen city-states that linked sets of communities into integrated polities. It is likely that these polities were defined by the dispersal of local lords after the fall of Mayapán. Mayapán remained important in the memories of Maya informants during the Colonial Period.

## Conclusion

The historical maps guide our reconstruction of the political geography of the northern Yucatan Peninsula at the time of European contact. The roads connecting the settlements highlight the system of interactions linking the towns, and polities into an integrated political, economic, and cultural system. The findings include accurate city representations with comparison to Roys' map.

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