

## A Quantitative Analysis of Pre- and Post-Palatial Messenian Survey Data

Beginning in the early 20th century, interest in the Mycenaean state of Pylos prompted a series of archaeological surveys that have made Messenia one of the most extensively documented regions of the Mycenaean world (e.g., The Minnesota Messenia Expedition: McDonald and Rapp, 1972; The Pylos Regional Archaeological Project: Davis et al., 1997; The Iklaina Archaeological Project: Cosmopoulos, 2016). Although these surveys have provided a trove of data for ancient Messenia, they have rarely been analyzed through more recent quantitative methodologies. This lack is most notable in the region's earliest but most extensive project, The Minnesota Messenia Expedition. The present work is part of a Master's Thesis collating the survey data from Late Bronze and Early Iron Age Messenia and exploring various methods of quantitative analysis that have not yet been applied to the region.

In this paper, I first use Messenian survey data to conduct a distribution analysis for the periods immediately before and after the destruction of the palace at Pylos. Building on this analysis, I create a spatial proximity network (also known as proximal point or k-nearest neighbor analysis: Brughmans and Peeples, 2023) to identify key characteristics of regional settlement during these two periods and explore local reactions to the collapse of the Pylian palatial system. Results from both analyses are then considered against current theories of Mycenaean state formation and collapse, and additional avenues for computational analysis of this dataset are proposed.

## Bibliography

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