

in two steps. First establishing the originality of maps and charts as historical source documents by determining the mother map of the study area. Secondly, evaluating the accuracy of the mapped elements on the historical document. The focus on the best-fit methodology has evaluated the reliability and accuracy of the Herrman map as a historical source document in terms less subjective than traditional comparative techniques. The methodology used in this study can be applied to most historical geographic research.

A practical use of this research may overlap in the field of archaeology. For example, a researcher may want to locate a historic site which has been portrayed on a historical map. However, the historic site may not be identified on contemporary maps of the area. The simplified problem is to locate the site on a contemporary map by using the historic map as a guide. Comparative cartographic techniques employing a best-fit analysis to determine the amount of map distortion is a direct application to this example. Knowing the distortion factor of the historical source map allows calculations to be determined for needed adjustments or rectification of the historic map to the contemporary map. The archaeological site can then be accurately located and plotted on the contemporary map.