techniques. The redefined concepts developed in this study are based on the cartographic element identification and empirical analysis of feature location. The results present insight to the maps' reliability by using comparative analysis techniques of the digital map images determining the locational distortion of the historic map elements.

Cartographic features or elements of the selected maps are systematically identified and grouped into categories, for comparison. These elements are traced, both visually and empirically, through a long sequence of cartogenetically related maps. These maps have been determined to be influenced by the mother map by their cartographic element structure and symbolic content. The cartographic element identification and analysis examines the evolutionary process or the compilation of information from a manuscript. The manuscript affects the status of the final map as a prototype (source or mother map) or as a fresh, new source of geographical knowledge. Whereas, information used in the compilation of a map may have been taken from previous mapped knowledge of the specific geographic area. Using previous mapped information to create a new manuscript created by another cartographer leads to copying mapped errors in nomenclature and feature distortions, as well as unique cartographic features,