

Digitalization of historical maps: the map of old Damascus as a model

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Abstract

Historical Geographic Information Systems (HGIS) are a collection of digital information about places as they have changed over time. Information comes from many sources and historical maps are the most important one. Historical maps often hold information retained by no other written source, such as place-names, boundaries, and physical features that have been modified or erased by modern development. Historical maps capture the attitudes of those who made them and represent worldviews of their time.

In the present study, we propose to establish a simplified GIS of the central part of old Damascus city based on a historical map. This map was built by the French in 1912 with a scale of 1/10000. The idea is based upon the geo-locating of this map by using control points interpolated from a digital orthophoto of Damascus city. The referenced map well then be used as semantic and geometric data. The resulted digital historical map well be compared with a modern one prepared with a GIS software to evaluate its geometric accuracy and to identify the evolution of Damascus city during a century.

The above approach is applied to the historical map of Bousra Ash-Sham city. This map was built by the French in beginning of the 20th century with a scale of 1/5000. The goal here is to establish an Archeological Geographic Information System (AGIS) of the old Bousra Ash-Sham.

Key words: Historical map, Geographic Information System, Orthophoto, Map geo- referencing.

For the paper in Arabic see pages (11-27).

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