

Detailed conservation of historic center of Baku (Republic of the Arzebajian)

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ABSTRACT:

The problem of surveys and their representation in the planning and conservation of historic centres is gradually gaining weight if it is seen primarily as a means of researching and organising information to become familiar with the urban composition and individual architectural organisms. the project is realized in collaboration with the “State Department of the Historical and Architectural Reserve Icheri Sheher” of Baku.

Initially has been realized, through GPS instrumentation and total station, a network of station points materialised on the ground and suitably monographic forms the basis for updating basic cartography and ensures topographic and geographic coordination of all the surveyed areas' components.

It is carried out by using a professional, digital, high-resolution camera. The number of photographs provides full coverage of surveyed surfaces on a general and detailed scale. The survey was used both for general documentation and to execute digital photoplanes, digitally rectified mosaics obtained with purpose-built software with the aid of topographic points.

The single frames have been made with great attention; the technique used is called post-swirl-technique and enables the original image to be distorted to eliminate non-parallelism effects between the camera's focal plane and the surveyed object.

The use of Information Technology (IT) to help solve territorial intervention problems is by now a common practice thanks to the development of tools capable of managing various typologies of graphic and alphanumeric data. They include two well-established sectors such as CAD (Computer Aided Design) and GIS (Geographical Information Systems).

The contemporary management of all the information has allowed to realize a three-dimensional model of the historic center of Baku for geometric and planning analysis or for virtual navigations. Starting from cartography on a 1:1000 scale, the 3D model must represent everything that exists in the urban environment and, therefore, not just buildings and streets but all sorts of architectural particulars.

The variety and number of activities required to restore and valorise the historic centre require a multidisciplinary approach.