

HATEM EL SHAFIE

Associate Professor, Department of Architecture, Faculty of Engineering, Cairo University

MOHAMED ALI MAHER

MSc Arch., Department of Architecture, Faculty of Engineering, Cairo University

**COMPUTERS IN ARCHITECTURAL
RECORDING:
THE TACHEOMETRIC METHOD**

ABSTRACT

Architectural recording is the production of a full architectural representation of all available architectural data of a building in a specific time. The record can be retrieved for the uses of the preparation of conservation projects, archival backup and monitoring. This paper is the first among a series of papers directed towards exploring the applications of computers and the latest technologies in architectural recording. The main objective of this series of studies is to develop a comprehensive list of computer aided recording techniques suitable for architectural recording and documentation, aiming to improve the choice of technology thus improving the process of architectural recording and documentation. The study starts by introducing a theoretical background on the basic concepts and definitions related to architectural documentation and recording, then moves to identify the available technological alternatives and methods appropriate for architectural recording and documentation. Three methods are identified as computer ready, namely: tacheometric methods, close range photogrammetry and close-range 3D laser scanners.

The study then focuses on the tacheometric method as an example of available computer aided recording methods. A case in which this technique was used is then analysed.

The study concludes by determining the potentialities and limitations of the tacheometric method and identifies best practices for its application.

KEYWORDS: Architectural recording, Architectural documentation, Computers, Tacheometric method, Practice, Egypt.