

PHOTOGRAMMETRIC AND PHOTOINTERPRETATION METHODS ON THE STUDY OF MONUMENTS AND HISTORICAL CENTERS IN THE GREEK AREA. CASES OF THEATERS.

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1. INTRODUCTION

We have already presented (1-18) the importance of studies for monuments and historical centers, and the contribution of photogrammetric and photointerpretation methods in them.

This paper, that particularly concerns ancient theaters, constitutes an effort to study systematically (according to the kind) the monuments, when and where it is possible.

The theater as work and expression of human sensitivity is an important indicator of the level of culture.

This particularly is met in Greece.

2. THE THEATERS TO WHICH WE REFER. PHOTOGRAMMETRIC MATERIAL

Among the great number of ancient theaters in Greece, in this effort of ours, we refer to the theaters in Epidavros, Dodoni, Delphi, Philipi, Dio, Delos, Nicopolis.

The photogrammetric material, which we have searched through and we have been working out, concerns:

- airphotographs of small scales (1:40.000, 1:30.000, 1:15.000) of different time of taking.
- airphotographs of larger scales (Epidavros 1:7.000, Dodoni 1:6.000, Delphi 1:8.000, Philipi 1:8.000, Dio 1:4.000, Delos 1:3.000, Nikopolis 1:3.000) and of different time of taking.
- terrestrial photogrammetric takings (Delphi, Delos, 1981 Patmios E. and Chalkias Th.).

3. ELABORATION AND STUDY OF THE MATERIAL

A completed study of the theater is anyway a work of multiple requirements. In this stage of the study we mainly concentrate on the following:

- Searching through the distribution of theaters in Greece,
- Photointerpretation study of the surroundings of every theater.
- Relation of the theater (or the whole historical center to which the theater belongs) to surroundings.

- Relation of the theater (if it is not a singular monument) to the historical center.
- Study of the form-geometry, construction, situation and grade of destruction of the theater, when it is possible.

We face all the above subjects mainly based on the study (stereoscopic) of the up to now collected photogrammetric material (airphotographs, terrestrial takings) in combination with field check, on the production and elaboration of suitable enlargements and orthophotographs (which present advantages of photograph and map) and on the combination of the above documents with altitude data from suitable maps.

4. REMARKS

For the above subjects we present documents with relative explanations.

These documents and their study are necessary in order to have in detail the photogrammetric requirements, according to the case, for specific interferences.

The general aim of the study (which continues) concerns:

- Preparation of photogrammetric - photointerpretation files for the totality of the theaters in Greece.
- Formation of an "atlas" which will include not only metric data but also completed information on relation with geomorphological, geotechnical, hydrological considerations, approaches - communications, land uses etc.).

The above are necessary for a more general evaluation, in Greece, of the ancient theaters and the situation in which they are, in order to take decisions for interference, preservation and development and generally for every theoretical and practical relative research.

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