

SURVEYING ANCIENT FORTIFICATIONS OF GREECE

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1. INTRODUCTION

Although Greece is famous for its archeological sites, it is hardly known for its wonderful castles, most of them venetian scattered all over the country. The interest of people and archeologists in Cycladic, Minoan, Mycenaean, Archaic, Classical and Byzantine antiquities has left unprotected precious castles to become derelict, without even been documented.

Twenty five years ago a special Greek Institute for Historical Castles was established. The Institute became member of the International Castles Institute but after 10 years of activity it stopped functioning.

Today everyone recognises the need for a data base concerning the Castles. That would help a lot of scientists to start a serious attempt for preserving the Greek Castles that would also help the authorities to give a new use to these castles. We have to keep in mind that the land value of some of them, especially those that lay in urban centers is very high. The National Technical University in cooperation with the Ministry of Culture has already started a program for making a systematic Archive of Greek Castles. This corpus will contain catalogues, indexes, geographic and photographic maps, photogrammetric records as well as bibliography for the main greek castles. This program will be integrated with another research project which will study the establishment of a new Photogrammetric Archive of Historical Monuments. This project is expected to be sponsored by the Ministry of Research and Technology to the Photogrammetric Laboratory of the National Technical University and will be executed in collaboration with the Archeological Service of the Ministry of Culture.

A considerable effort will be needed to fulfil this project, since the number of the big and important castles is more than two hundred plus the numerous towers and other smaller fortifications.

2. LOCATION AND CLASSIFICATION

The first step to be taken is to identify and locate the greek castles. Fortunately, a great deal of adequate literature is available, where most of the castles are described and their geographic places together with several historical information are also given. Based on this data a map of Greece has been issued with all the known main castles (Fig. 1 shows Peloponisos).

The classification of the castles was the next to be faced. The obvious regional classification was found inadequate since there are many parameters which are not influenced by the region.

The following classes have been given as a first approach to the classification of the greek castles :

1. Fortified Archaic Settlements
2. Mycenaean fortifications
3. Fortified cities of classical era
4. Fortified cities of Helenistic era
5. Roman fortified cities
6. Byzantine fortified cities
7. Venetian fortified cities
8. Special fortified villages
9. Fortified Monastic Complexes
10. Byzantine castles
11. Venetian castles
12. Turkish castles

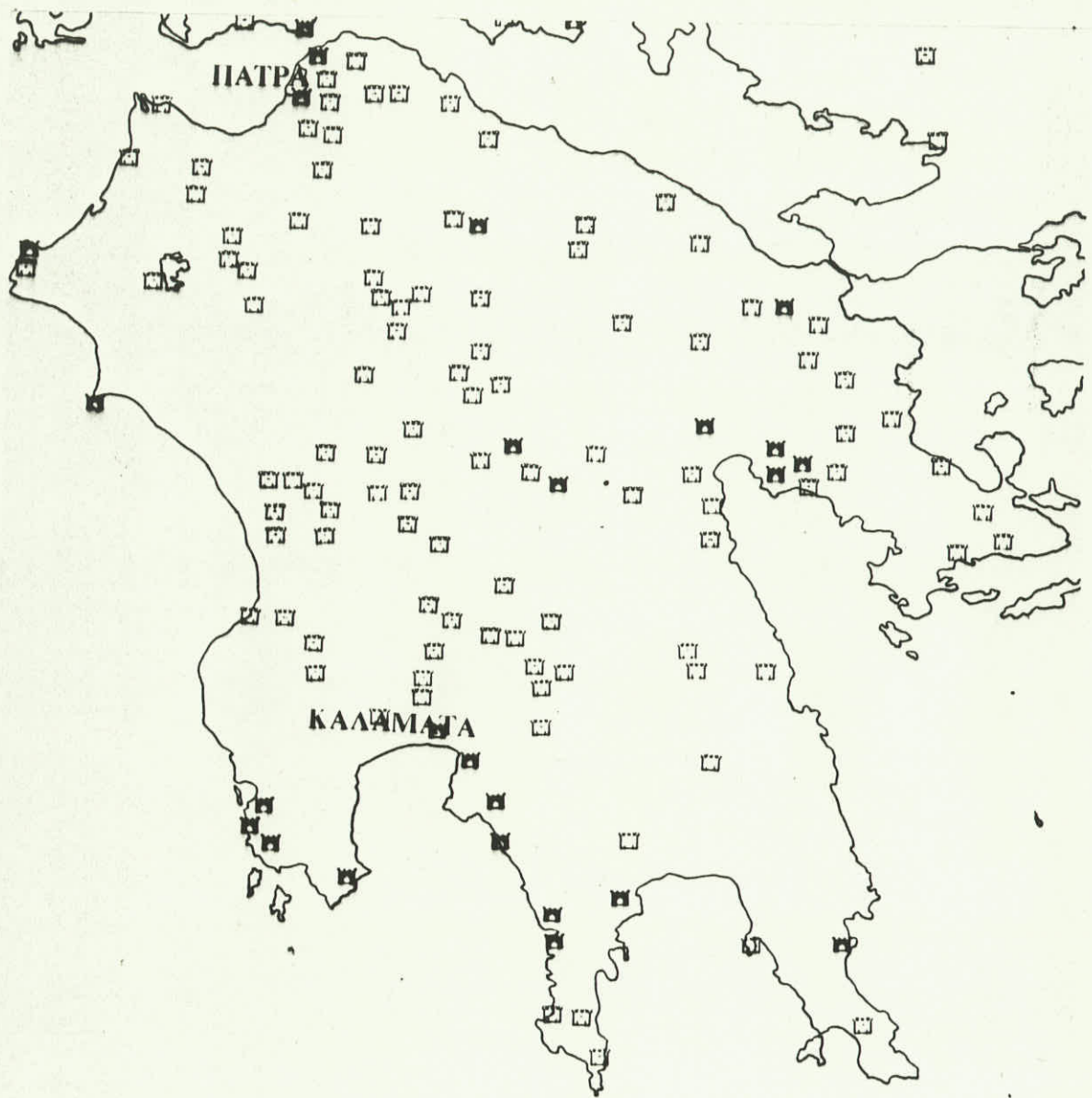


Fig. 1. Main Castles in Peloponisos

The project will focus to the case 6-12

The most difficult problem concerning the classification of these castles is the multiple intervention of man (Fig. 2). The recognition, the differentiation and the recording of various interventions require a special time-consuming job and high specialised scientists, who have to work on facade surveys of large scale.

3. **THE SURVEY PROJECT**

As it has been mentioned before the survey project will contain several pieces of information, in addition to modern surveys. First step, then is to specify the data to be collected. This step is very important and demands careful consideration since there are two possible risks. Either to collect too much data that would make the project very long and very expensive, in this case it is likely that the project will be finally completely abandoned or the specification will be too limited which means that the data base will not meet the needs of its users. The survey project has to be divided into two parts the first related to the collection of existing data and the second to the new surveys.

3.1 **Collection of existing data**

Once the information needed is specified a careful process must be outlined suitable for collecting the existing part of the data. Fortunately, quite a number of books and articles exists containing information about the castles of the greek area many of which also contain maps and diagrams. Thus, the collection of the most important part of the existing data does not seem very difficult. The full completion of it will require, however, much more time since it is obvious that this process is never ending.



Fig. 2 Multiple Structures of the walls of Castles

Somehow, the collection of the existing maps and diagrams appears to be more difficult. The collection of old maps is very time consuming since many of them have not been published and the acquisition of a good copy at a given scale is difficult or sometimes impossible.

The collection of recent surveys is also very difficult because these surveys have been performed by various agencies, for different purposes and there is not a standard process to be applied.

3.2 **New Surveys**

New surveys must be specified in details for each class of monuments. Any collection for the new survey must be carefully chosen, otherwise there will also be either too little or too many data collected. This specification must be prepared in full knowledge of what we are going to require from the data base so that the needs of the users to be satisfied within the minimum cost and time. When these specifications are fixed the most suitable technical procedure must be chosen for collecting the data. To achieve the objective as soon as possible and by the most economical means it is essential that the most recent technical procedures will be used. Also very important, for the success of the project, is the degree up to which the existing maps and diagrams will be used.

In Greece, some plans of castles exist from the 17th century (Fig. 3), some of them were redrawn at the beginning of the century (Fig. 4) and many of them were recently recorded on modern aerial photography (Fig. 5). Since many of the castles are on steep cliffs so that a topographical survey would be too costly it has been decided that photogrammetric surveys will be applied. Aerial photography at a scale 1:3000 has been already taken to about 50 castles.

The appropriate amount of the needed terrestrial photogrammetric or amateur images is very difficult to be decided because it depends on the individual castle and the surrounding topography.



Fig. 3 A. 17th century Survey of Corinthos Castle

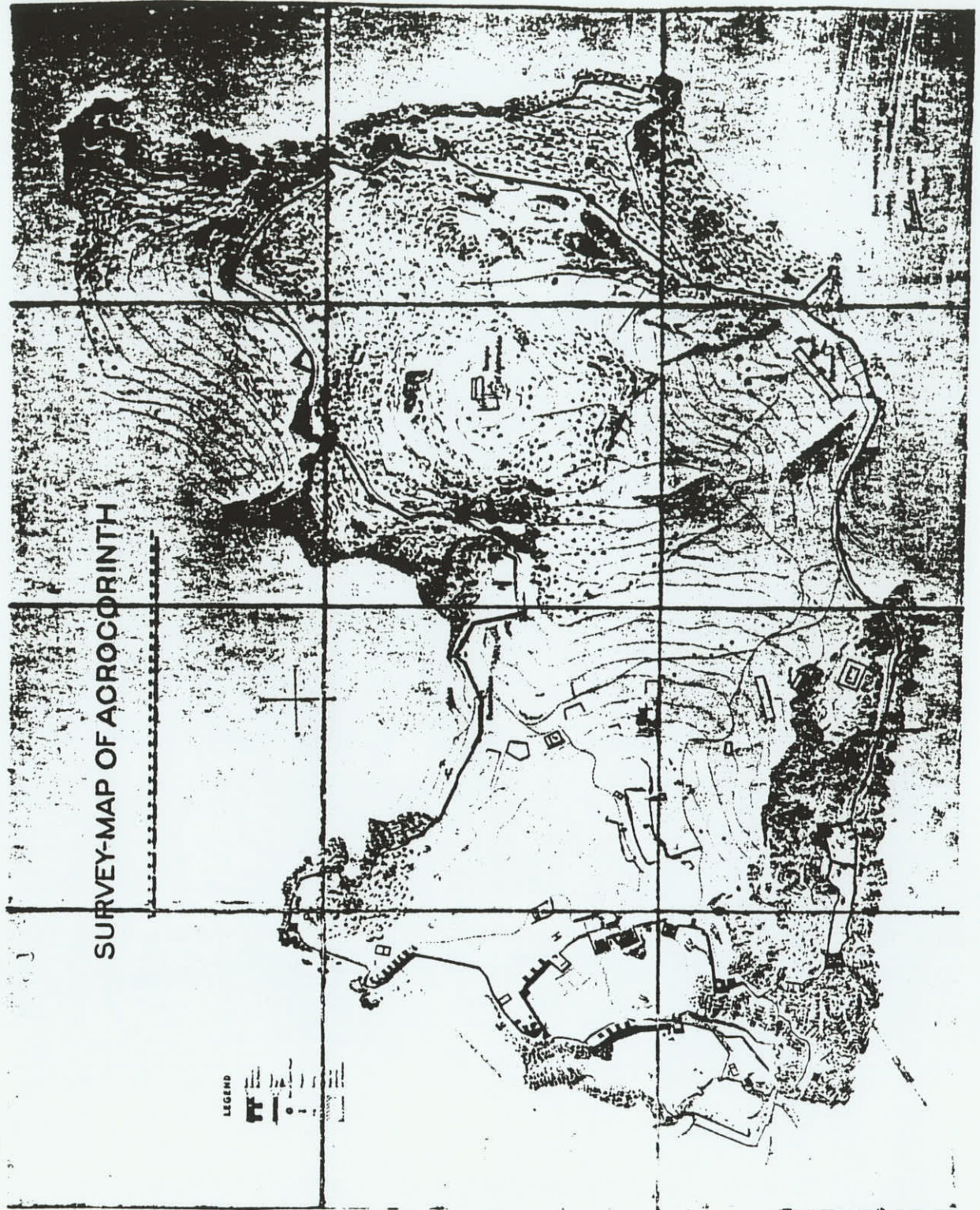


Fig. 4 A 20th century Survey of Corinthos Castle



Fig. 5 Aerial photography of a part of Corinthos Castle

It is easy to imagine that in many cases only a very limited part of the exterior facades can be taken by terrestrial photography. It also seems that the restitution of terrestrial images will not regularly be performed but as such need arises.

4. **CONCLUSIONS**

The project seems that will provide an appropriate data base of the studies related to the greek castles. It will also help the greek government and municipalities to decide for the best use of the old castles, some of which are today in urban areas with very valuable land.

The National Technical University is looking forward to the execution of this program because it will test and apply the most modern photogrammetric methods to complete the project, gaining a lot of experience and at the same time serving the society.

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