

# GIS as an Interpretative Tool in Greek Archaeological Research

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## Abstract

The spatial information technology known as **GIS** (Geographical Information System) has emerged as one of the most flexible and comprehensive analytical tools for handling archaeological data and exploring the human space. Geographical Information technology enables the archaeologists to record, convert, analyse and represent vast amounts of complex spatial data in a homogeneous manner. More analytically GIS, can allow archaeologists to:

- *develop an adequate concept of landscape and encourage a multiperspective envision of the past*
- *deconstruct the traditional archaeological categories (like site) and define alternatives to the ones found lacking*
- *define an analytical path that will relate individual scale to patterns observed in larger scales*
- *devise a way to represent the historical sequence of change.*

Equipped with this theoretical underpinning GIS platforms offer the possibility to *experience* the past, by testing different questions and approaches. This theoretical framework clearly upgrades GIS from a simple calculating machine, used for creating prediction schemes to an analytical tool of contextualised archaeology. As a result the standard way of viewing, analysing and approaching the past has changed.

The primary goal of this paper is to show how GIS technology in the context mentioned above can be applied in Greek archaeological research as a sophisticated visualization platform and as a functional interpretative tool. The most significant aspect of the project is that is archaeologically oriented. It was devised focusing on a series of archaeological problems, questions, and needs. Once this framework was established, GIS tools were used in order to find solutions and provide new paths to archaeological research.