

# "ARCHIAS" - Digital Archive of the Iron Age Siderospilia Necropolis

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### Introduction

Especially in recent years, the digital revolution has affected research and in particular the field of archaeology, which would be unmanageable today without digital media. Digital are in fact the photographs of contexts and artefacts, the graphic and topographical documentation, as well as the huge amount of data collected in the field or laboratory. True Digital Archaeology is able to collect data in a non-invasive manner, guaranteeing the timely documentation of entire sites, structures, or artefacts and preserving the cultural heritage they embody.

The research project is aimed at the creation of a database of the paper, graphic, photographic, and videographic archives of the Italian Archaeological Mission in Priniàs (Crete), which concerns structures and materials from the necropolis located in c.da Siderospilia investigated between 1969 and 1978.

The archive provides a systematic cataloguing of the archaeological complexes, monuments, and artefacts found at the necropolis of Siderospilia. For each of them, the creation of graphic, photographic, and possibly videographic archives external to the database and connected to it via hyperlinks is planned.

### The ARCHIAS relational database

The database presented here, called ARCHIAS (digital ARCHive of the Iron Age Siderospilia necropolis), is based on the relational model organised in the form of tables with rows and columns. It has an interface for relational data management (RDBMS) using the Microsoft Jet Database Engine and incorporates a module for the rapid development of management applications. Besides being the most popular database model in the world at the moment, this type of repository offers a number of tools that make it very user-friendly (easy to use). The simplicity of its tabular structure is easily understood by most users and is aimed at identifying entities and the relationships between them (Fig. 1, Entity Relationships

relational schema). The catalogue cards provided by the ICCD (Central Institute for Catalogue and Documentation) have been consulted to record data on computer support, bearing in mind the importance of creating a database capable of interacting with other projects (Fig. 2, Organisation of cards on ICCD basis).

### **Data tables**

The first sheet created with the purpose of providing general definitions for the terminological identification of the context is the SI Sheet (archaeological site). The archaeological site is in fact configured as the "territorial container" in which the overall material evidence is included. Instead, the cards with detailed characteristics are contained in the specific cards: CA (archaeological complexes), MA (archaeological monuments), RA (archaeological finds). Every recorded field of each individual card has a unique code to allow the cards to be interconnected (Fig. 3, Interconnectivity of data recorded on the database). The project was therefore conceived and developed with other possible future applications in mind.

The database was created in such a way as to be projected as much as possible, from a conceptual point of view, towards the idea of knowledge sharing and, from a practical point of view, towards considerable flexibility linked to the very nature of archaeological data, always updatable and often destined to be the subject of new readings and interpretations.

The basic purpose of the ARCHIAS database is therefore to archive and document information on archaeological complexes, monuments and finds in a holistic manner (Fig. 4, Archaeological find inv. P4144 with links to photos, drawing, diary and digging diary). It will have a double purpose: on the one hand, it will facilitate the management of a large amount of data; on the other hand, it will be useful for the definition of the various contextual associations and thus constitute one of the basic tools for the study of the context and the funerary practices attested in it.