



Methodological approach to conservation



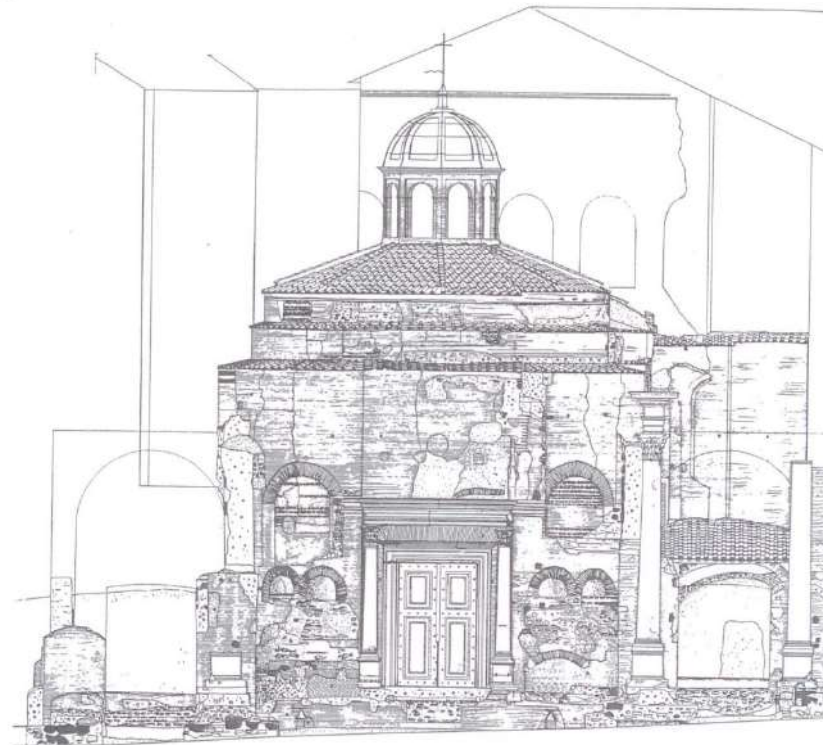
Erasmus+

Methodological Approach to Conservation: Physical Approach

2 ECTS

SH

Sustainable Heritage



Methodological Approach to Conservation: Physical Approach

1. Introduction to Methodological Approach
2. Geometrical Survey
3. Geometrical Survey: traditional method
4. Geometrical Survey: new tools
5. Material Survey.
6. Mechanical Survey.
7. Damage maps I: degradation problems
8. Degradation types.
9. Damage maps II: fissure and crack problems
10. Damage maps III: moisture problems
11. Damage tests on masonry constructions I
12. Damage tests on masonry constructions II
13. Survey, maps and tests on wooden construction
- 14. Archaeology**
15. Stratigraphy

Methodological Approach to Conservation: Physical Approach



LESSON 14. ARCHAEOLOGY

Building deterioration causes

At the moment in which a construction operation is concluded, the intervention of several instances that deteriorate its results begins; the most common are the following:

1. **Degradation.** The loss of qualities is inevitable because of the simple and unavoidable incidence of environmental factors; this "simple aging" will begin to manifest itself in what we call "patina", which is a mixture of deposits and chemical alterations that cushion the differences in color and texture.
2. **Deformations.** The actions that affect the buildings, which we usually reduce to that of gravity, produce deformations that are normally compatible with general or sectorial stability, although sometimes they cause collapse; among such deformations we include cracks, crashes, arrows and seats



3. **Weathering.** The passage of time and the use of a building lead to the acceleration and concentration of degradation in specific areas, causing the disappearance of part of the building's material. The extreme case of wear will be ruin.
4. **Deposits.** It is evident that diverse circumstances (accidents, obsolescence, reforms, ruins, destructions ...) can contribute to the deposit on the forms variable amounts of materials either as part of a natural or anthropic process.
5. **Reforms.** Everything in a building is reformable, and in all periods the reforms have been integrated, to a greater or lesser extent, with the pre-existing parts, reaching the case of intentionally hiding all appearance of antiquity



ARCHAEOLOGY

Aspects of archaeological work

- A. **Excavation:** With the passage of time there is an accumulation of material and objects over the ruins, of natural or anthropic origin. The elimination of these deposits allows to discover the objects, deposits, remains, ruins, etc. that were hidden.
- B. **Archaeological survey:** An important part of archaeology is the graphic description of the findings, both in drawings and photographs.
- C. **Protection of the remains found.** When discovering the remains, they are left unprotected and exposed to the conditions of weather, humidity, rain, solar radiation, etc.
- D. **Interpretation of the remains.** In the archaeological campaigns are remains that, besides being conserved, must be studied and analyzed. In many cases, these remains are part of a set that can be recovered, such as the skeleton of an animal or columns that can be reassembled by anastylosis.
- E. **Dissemination of the findings.** This may consist of exposing the remains found in museums or interpretation centers adjacent to the site, but also in generating routes that allow the public to see the site itself.

ARCHAEOLOGY

A. Excavation

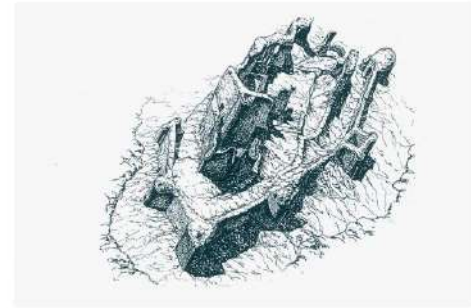
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Archaeological works at St Mary of Carracedo monastery

ARCHAEOLOGY

A. Excavation



Puebla de Almenara Castle, Cuenca

Archaeological excavations with protection and consolidation of remains. Organization of routes and accesses.

ARCHAEOLOGY

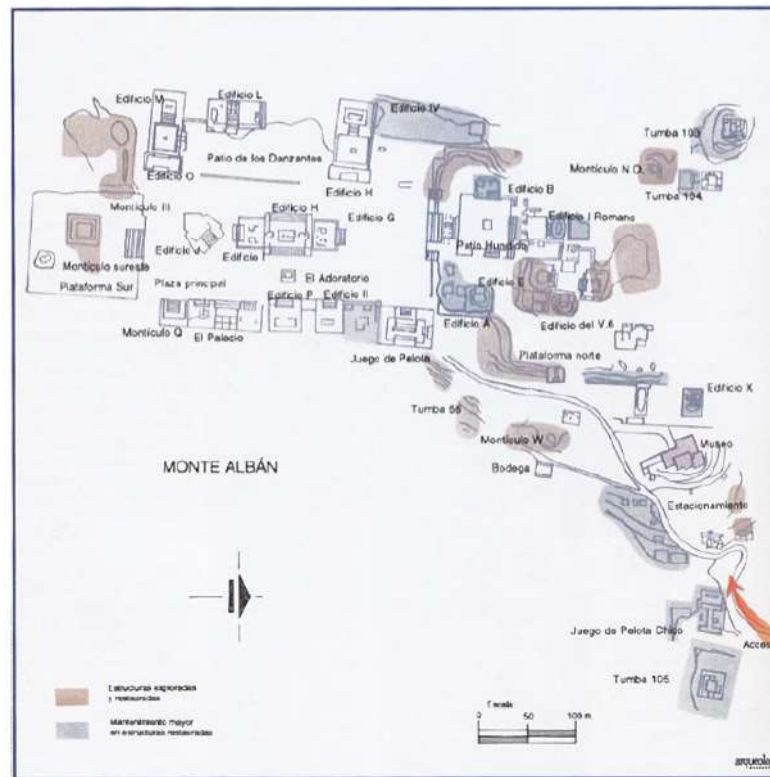


Church of Santa María de Los Reyes. Grijalba. Burgos
Cleaning and surface treatment of decorated vaults. Paving and
balustrades of the choir. Hollow carpentry. Interior lighting. Exterior
paving.

ARCHAEOLOGY

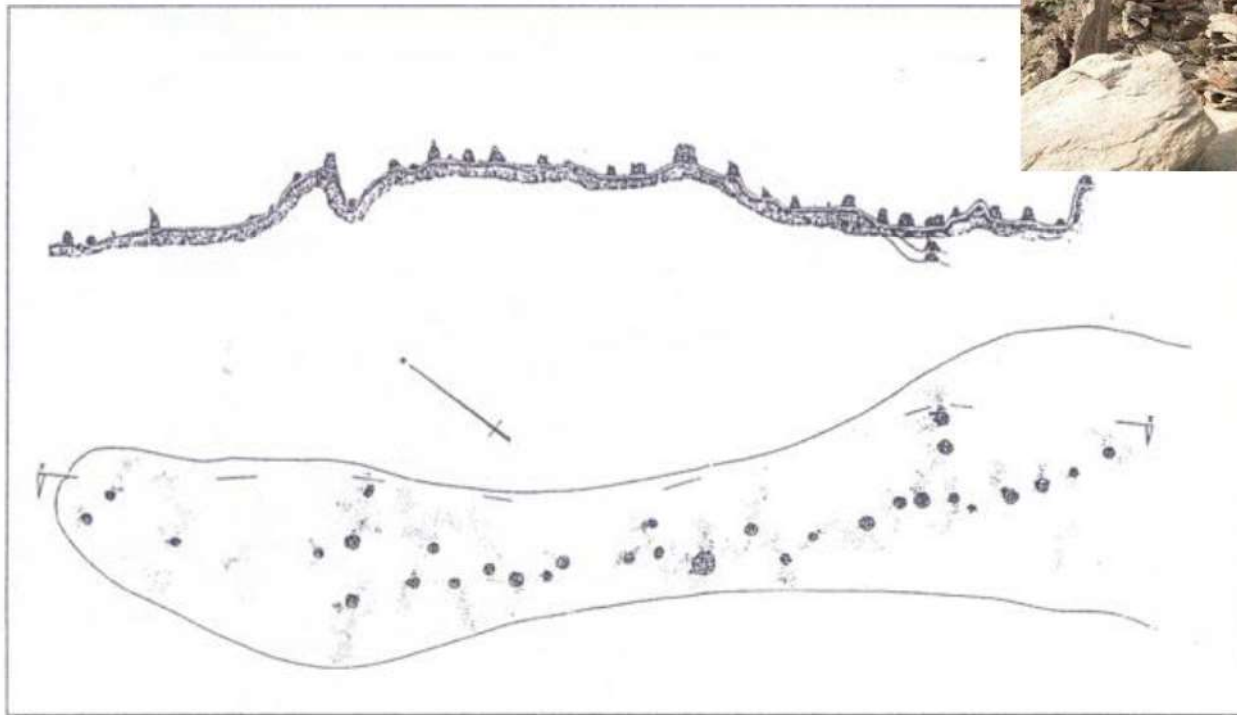
B. Archaeological survey:

An important part of archaeology is the graphic description of the findings, both in drawings and photographs. This drawing may involve different scales, from territorial to local and detail.



ARCHAEOLOGY

B. Archaeological survey



Plant and section Archaeological Joint High Crown. Canarian Museum Archeology Service, 1992, in SBT Archaeological Letter.

ARCHAEOLOGY

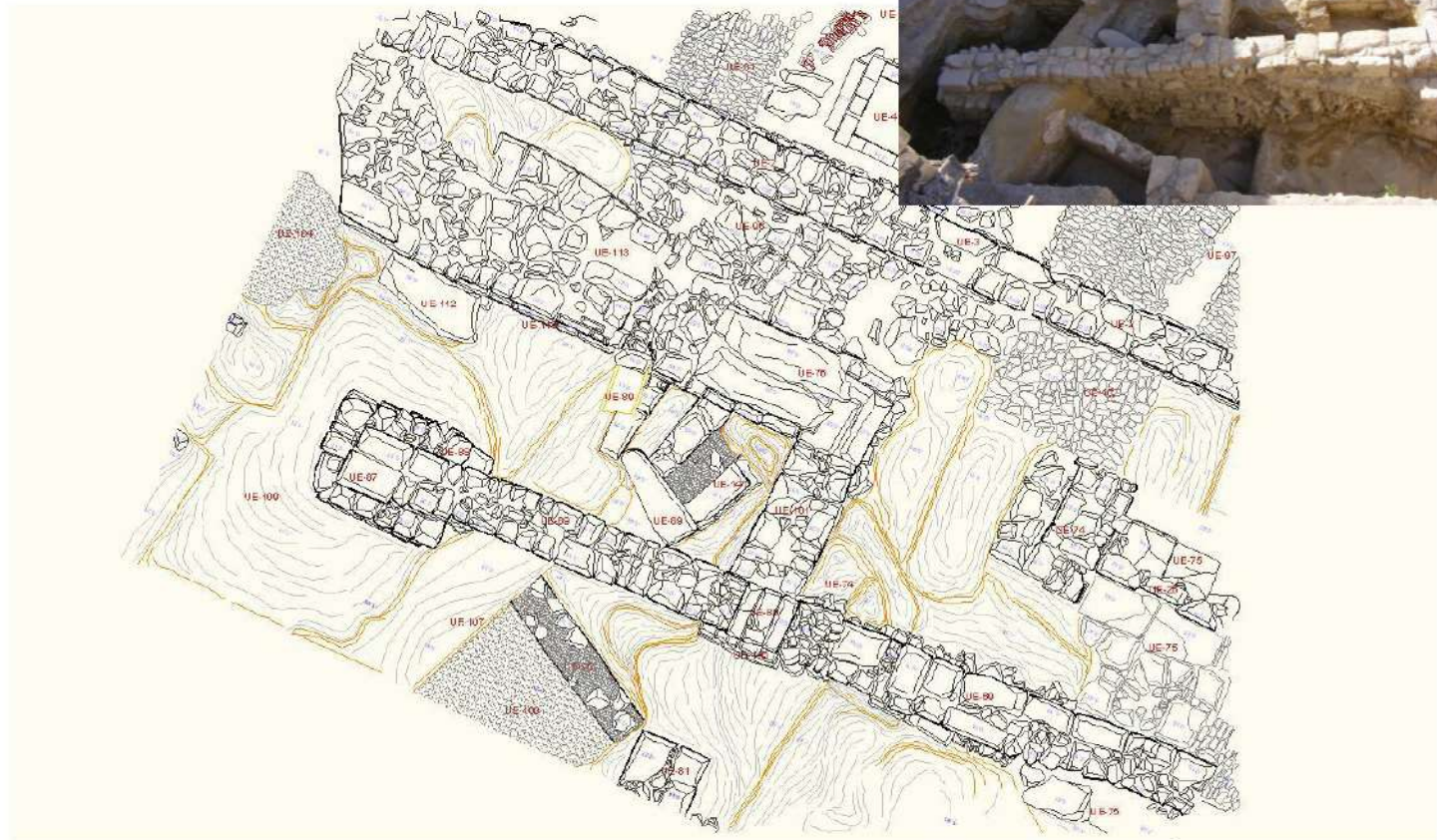
B. Archaeological survey



General Plan: archaeological site of Santo Domingo in Úbeda, Jaén

ARCHAEOLOGY

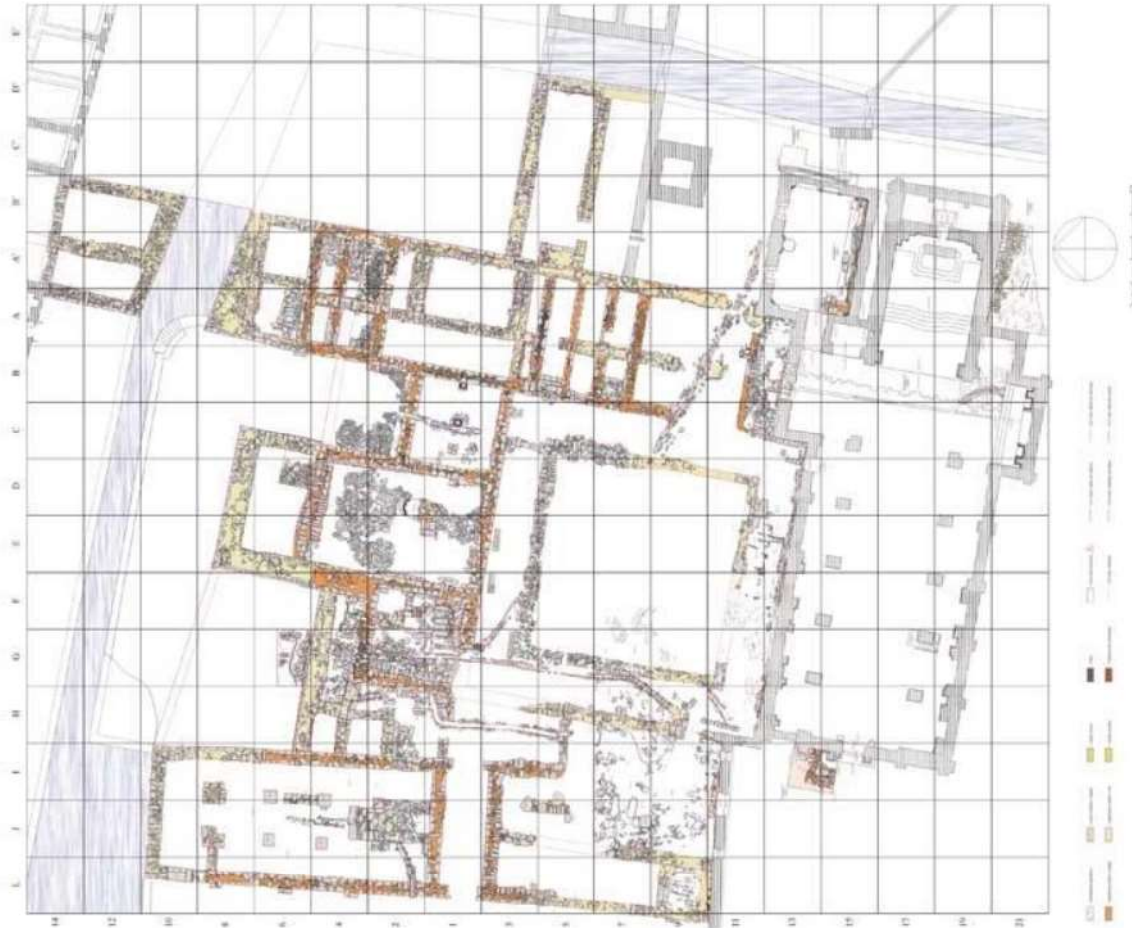
B. Archaeological survey



Partial Plan and photography: archaeological site of Santo Domingo in Úbeda, Jaén

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B. Archaeological survey



Archaeological excavation area plant

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D. Interpretation of the remains.

In the archaeological campaigns are remains that, besides being conserved, must be studied and analyzed. In many cases, these remains are part of a set that can be recovered, such as the skeleton of an animal or columns that can be reassembled by anastylosis.



Archaeological site

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D. Interpretation of the remains.



Roman theatre in Guadix, Spain

Roman theatre in Cartagena, Spain

Two Roman theatres that show different stages in the interpretation of the ancient monument

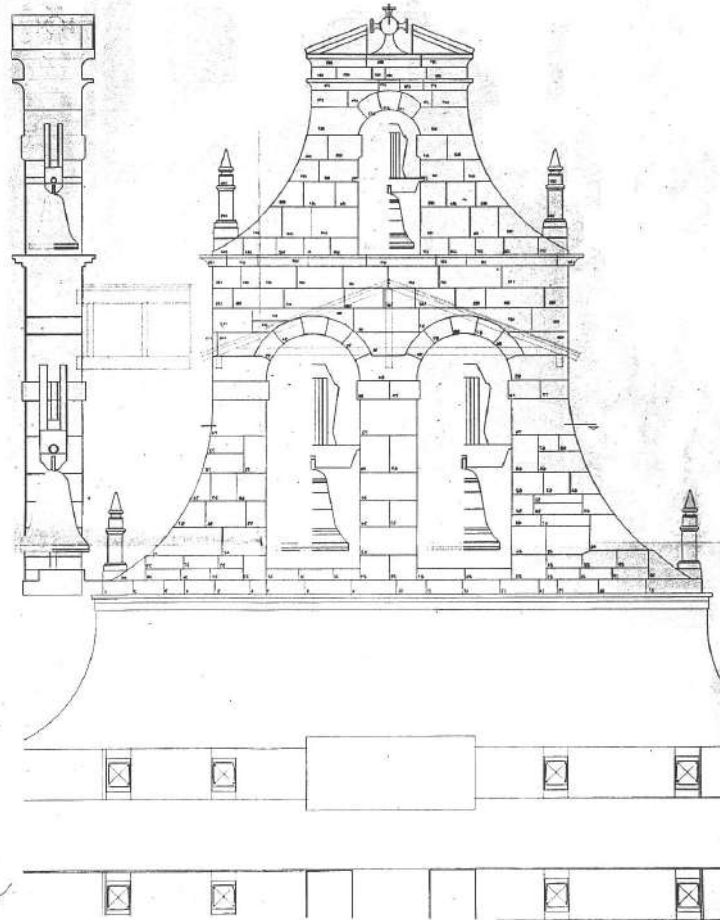
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D. Interpretation of the remains.



MEMORIAL MEMORY AND ADEQUACY OF ITS ENVIRONMENT. UZQUIZA EMBALSE. BURGOS.

Adaptation, through anastylosis, of the existing remains of cattails and cover, coming from demolitions, due to the construction of the Uzquiza reservoir.



ARCHAEOLOGY

Archeology of architecture

Archeology of architecture: reading of the phases that make up a building. Without using invasive methodologies you can only know the visible surface of the building, which is why readings of vertical walls are frequent. You can also read horizontal paraments, read sections and plants and axonometric views or perspectives.



ARCHAEOLOGY

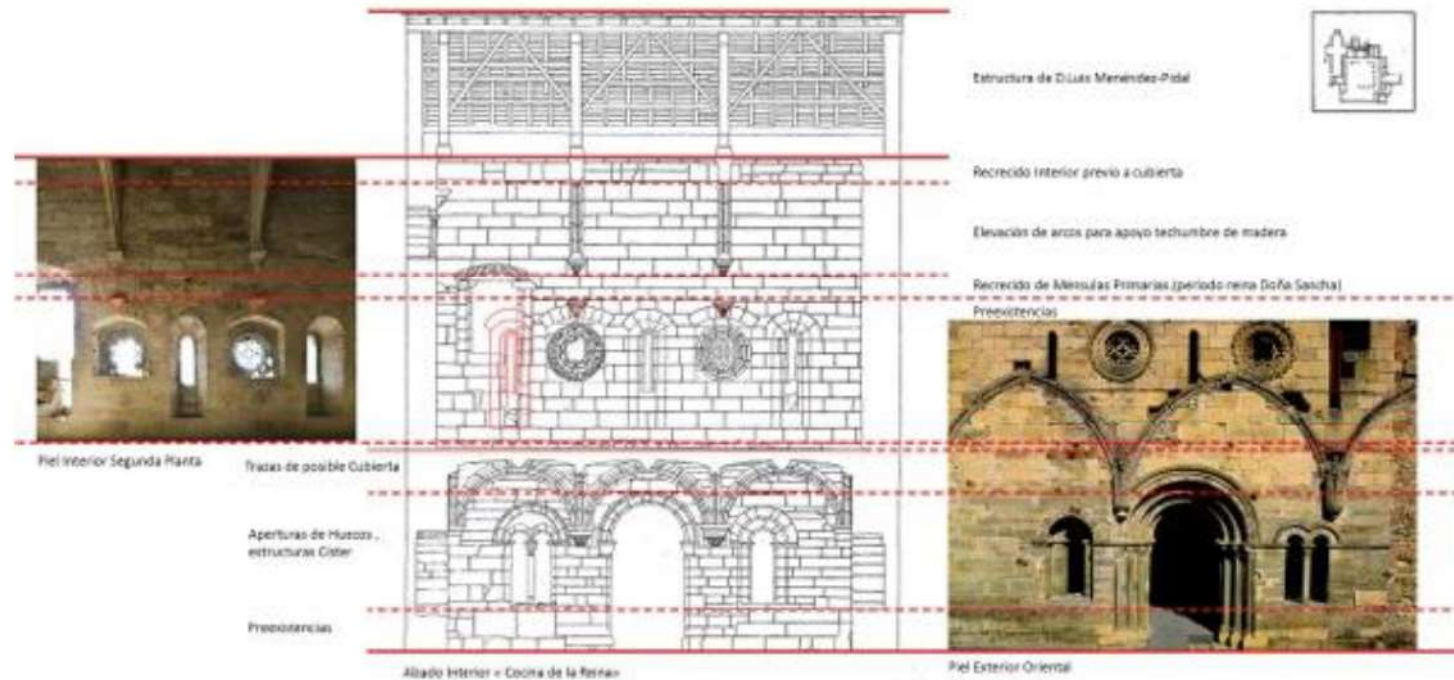
Archeology of architecture



Archaeological analysis over ortophotography.
Santa María de Carracedo monastery

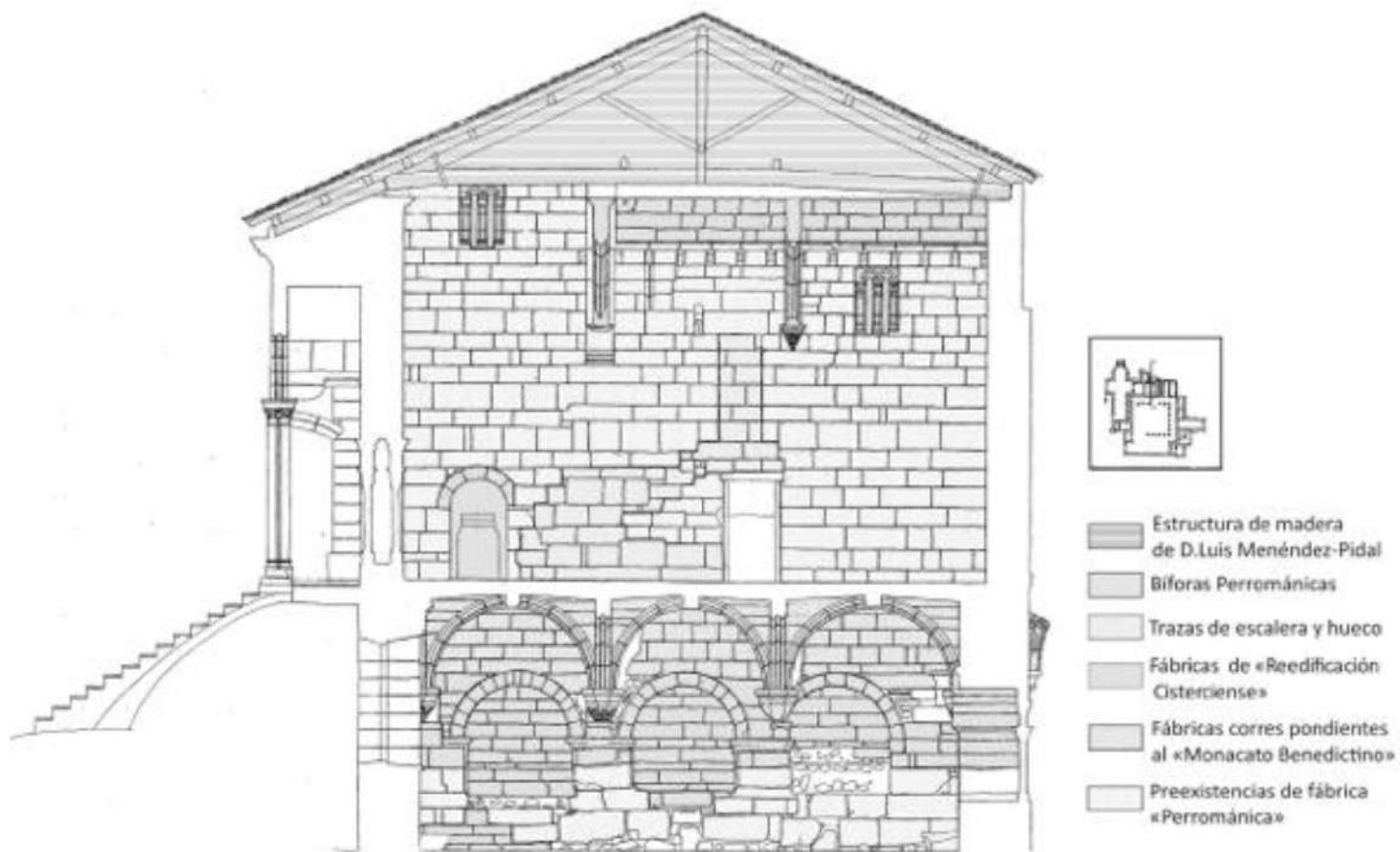
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Archeology of architecture



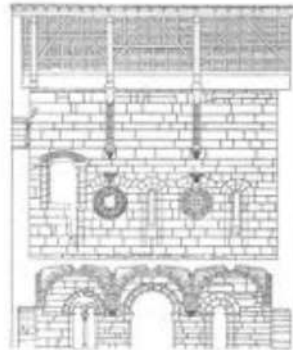
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Archeology of architecture

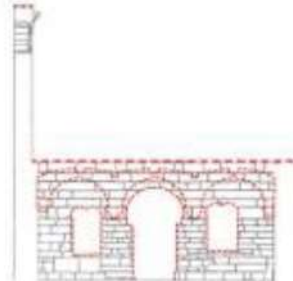


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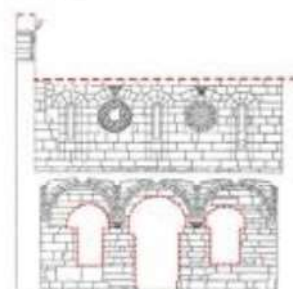
Archeology of architecture



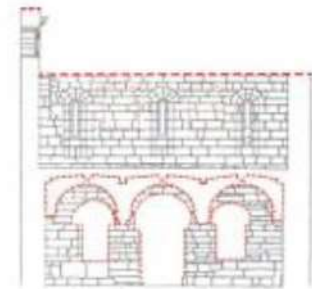
La Sección en la actualidad.



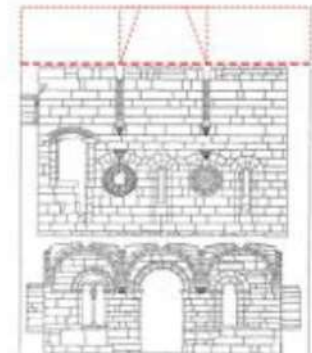
Primera Fundación.



Reforma Cisterciense.



Construcción Benedictina.



Construcción de la Ramada Cocina de la Reina.



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