

HERITAGE 2016

5th International Conference
on Heritage and Sustainable Development

Edited by

Rogério Amoêda
Sérgio Lira
Cristina Pinheiro



Volume 2

HERITAGE 2016

Proceedings of the 5th International Conference
on Heritage and Sustainable Development
Volume 2

*Lisbon, Portugal
12-15 July*

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ISBN 978-989-8734-15-0
eISBN 978-989-8734-14-3

Published by
Green Lines Instituto para o Desenvolvimento Sustentável
Green Lines Institute for Sustainable Development
Av. Alcáides de Faria, 377 S.12
4750-106 Barcelos, Portugal
mail@greenlines-institute.org
<http://www.greenlines-institute.org>

1st edition, July 2016

Published in electronic format.

Print on demand.

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Restoration of the old slaughterhouse from Porcuna (Andalusia, Spain): use of new tools in heritage conservation

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ABSTRACT: The achievement of high quality graphic data allows the planning of a supervision Project and represents one of the data-retrieval bases, either clearly identifiable or others arising from the interaction between these activities and such documents or the graphic element itself with the physical elements to be analyzed. In contrast with the traditional approach, where the graphic entity was devoted to the upkeep of historical elements and design in general, in nowadays heritage contribution, the graphic element is developed in each and every stage of the activity, granting the researchers with tools by means of which there can be established a dialogue between the historical remains and the creation of new living spaces. The last ten years have witnessed how heritage supervision implied a total change based on a new globalizing concept of “heritage”, due to an interdisciplinary perspective: History, Architecture, Archaeology... The widening of this realm towards these disciplines allows a similarly exponential enlargement of the result and makes them coherent with respect to the reality approached. The use of an intensive record methodology and a systematic planning from a previous archaeological, historical and documental research is used to provide mainly a graphic datum which establishes, beforehand, the problems to face within the restoration and refurbishment work in historical buildings. This theoretical frame, shared by many researchers, lacks, however, enough reflection on study- approach methodology or fulfillment. Hereby we show the outcome of this interdisciplinary process of theoretical, methodological and practical work developed in the restoration of the old medieval slaughterhouse in Porcuna.

1 THEORY AND PRAXIS OF HERITAGE INTERVENTION

A previous research and planning are issued as a warrant of resource equilibrium and project success, as Peter Palchinsky’s case (Graham, 1993) shows in its engineering.

The achievement of high quality graphic data allows the planning of a supervision Project and represents one of the data-retrieval bases, either clearly identifiable or others arising from the interaction between these activities and such documents or the graphic element itself with the physical elements to be analyzed.

Drawings and images are essential in the process of reading and interpretation of construction elements and historical facts, their context, analysis, state diagnosis, pathologies, etc, as well as in a solution facing their maintenance and restoration.

In contrast with the traditional approach, where the graphic entity was devoted to the upkeep of historical elements and design in general, in nowadays heritage contribution, the graphic element is developed in each and every stage of the activity, granting the researchers with tools by means of which there can be established a dialogue between the historical remains and the creation of new living spaces.

The last ten years have witnessed how heritage supervision implied a total change based on a new globalizing concept of “heritage”, due to an interdisciplinary perspective: History, Architecture, Archaeology,... The widening of this realm towards these disciplines allows a similarly exponential enlargement of the result and makes them coherent with respect to the reality approached.

2 PROJECT OF HERITAGE APPROACH IN PORCUNA

Porcuna is one of the relevant historical cities in Andalucía. Its first settlement, in the Late Neolithic – Calcolithic age, i.e., around six thousand years ago, starting with the building of two large fortified villages with circular-plan huts consisting of a double polis on two big hills, Alcores and Albalate, controlling the shores of the river Salado of Porcuna, and turning into the main nuclear settlements in the Guadalquivir Valleys during the recent Prehistory. In the Orientalising Period (VII-VI centuries BC), there starts the decline of Albalate and the concentration of population in Alcores, which grows conforming a large city, present-day Porcuna, which continues its existence until today. During Protohistory (VI-I centuries BC), Ibolca will be the capital city for the Túrdulos, one of the Turdetania peoples. In Roman times, and now under the name of *Obvlco*, it became into one of the most important cities in the Bética. In late ancient times and Mediaeval Period, with the islamized name of *Bulkuna*, it gets a relevant role as county head dependant on Córdoba. In 1240 it is included in the Kingdom of Castile with its actual name, paying homage to Ferdinand III and getting integrated into the feudal lordship of the Calatrava Military Order, to which it belongs until the 19th century, when administratively it got inserted into Jaen and, somehow, being relegated to a second level.

This fruitful history has reached our days thanks to the research of the last five hundred years, and, mainly, to the development of global research projects. Archaeological Porcuna Project led by Arteaga, Roos, Ramos and Nocete (Arteaga, 1999), rose in the eighties as evolvement of the first archaeological diggings in the Cerrillo Blanco site, being the first systematic archaeological approach, from Prehistory to the Roman Period, with the effort and hard work of hundreds of people and impressive outcomes.

Thus, since the late nineties until our days, ARQVIPO has been the nucleus of a research Project, management and heritage dissemination from a global theory, carrying out a wide series of approaches. Such pieces of research have consequently obtained the formulation of a theory, methodology and praxis of History-Archaeology, deep and profound, with extensive data corpus and a growing analytic complexity owed to the progressive provision of data and problems as well as their respective resolution processes, together with the interdisciplinary contributions coming from as many scientific perspectives as possible. Consequently, new pieces of information are cast to the light of History, continuously submitting new theories to the eye of the criticism begotten by the empirical evidence and building up solid and reliable historical knowledge.

Running parallel to the scientific research process, we have faced and undergone the dark process of heritage destruction in Porcuna. Apart from previous catastrophes –Lisbon earthquake in 1755, Spanish Civil War between 1936-1939, which caused partial damage, the misconception of “modern development” starting in the sixties and pervading the last fifty years, has “knocked down” hundreds of medieval and modern buildings, including noble constructions such as palaces or churches despite their protected status, because they would evoke years of scarcity.



Figure 1. View of the building of the old Medieval Butchers after the Civil War.

A deep local research, considering the global theory, allows crucial technical insights in order to analyze maintain and restore sustainable life systems adapted to the Campiña environment. At heritage approach level, and from the graphic perspective, we are dealing deep into the deepening material knowledge about materials definition of traditional building techniques and their application to the present building process, working process repair and their updating, etc., according to a detailed and scientific study of the local archaeological registration, existing written resources, ethnological experiences with neighbours, etc.

3 THE GRAPHIC TOOL AND THE DOCUMENTS APPLIED IN THE APPROACH

The systematic graphic expression, used as a research device, enables us to establish a discourse on graphic synthesis of reality and characteristics of a historical element or an emerging archaeological structure. Resultantly, processes such as parameter stratigraphic reading, so widespread and accepted from the principles of Harris (1991) and so long applied to building heritage research (Francovich & Parenti, 1988; Brogiolo, 1995; Francovich & Bianchi, 2002), gain a main impact when, they are additionally applied to volumes achieving a “chronological volumetry” of the groups. Regardless the evolution of the archaeological registration systems as suggested by Caballero (2006), the metric capacity and the analysis of the graphic representation let us recognize and identify the different stages and their relations.

The systematic, continuous and organized photography in the processes of documentation, supervision and construction, allows the fixation of images where we can study data, show the sequence of element states, photogrammetric restoration, etc.

During the preliminary research and the following field work, we have underlined a few requirements demanded in the applied graphic research, which we have learnt how to manage:

- Complexity of heritage work, because of its own content heterogeneousness, finding tools capable to synthesize and analyze all the data.

- Need of analysis implementation to develop new fieldwork devices in Heritage which base on objective data/evidence, contrasted and shared with other disciplines, preventing, therefore, strained developments.
- Search for the appropriate methodology applied to fieldwork where there combine photography, thermography, drawings, *in situ* data retrieval, etc.
- Need of a versatile utensil, allowing us to modify the project according to material analyses and research.

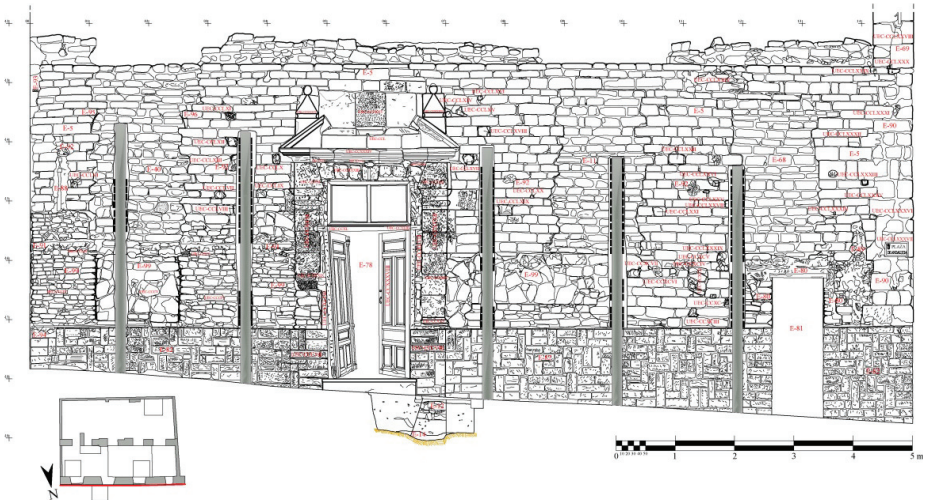


Figure 2. Drawing piece by piece the main elevation.

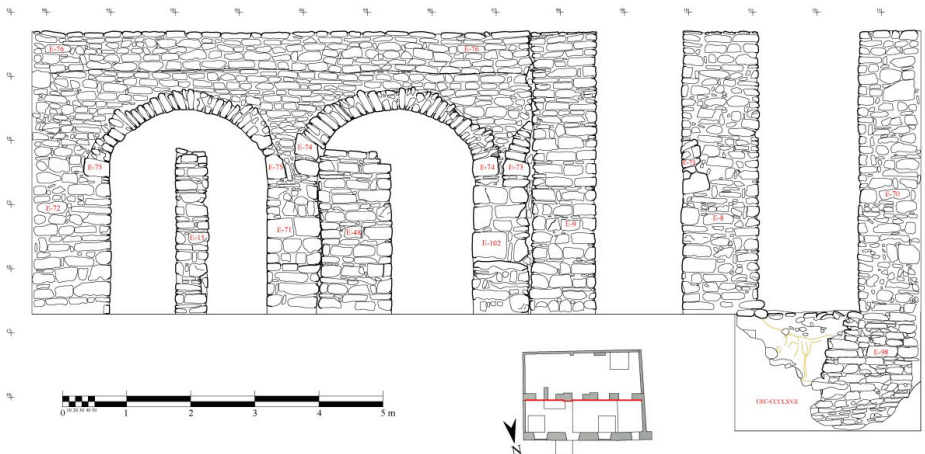


Figure 3. Piece by piece drawing of the interior structure of the building in which the principales and secondary elements can be clearly seen.

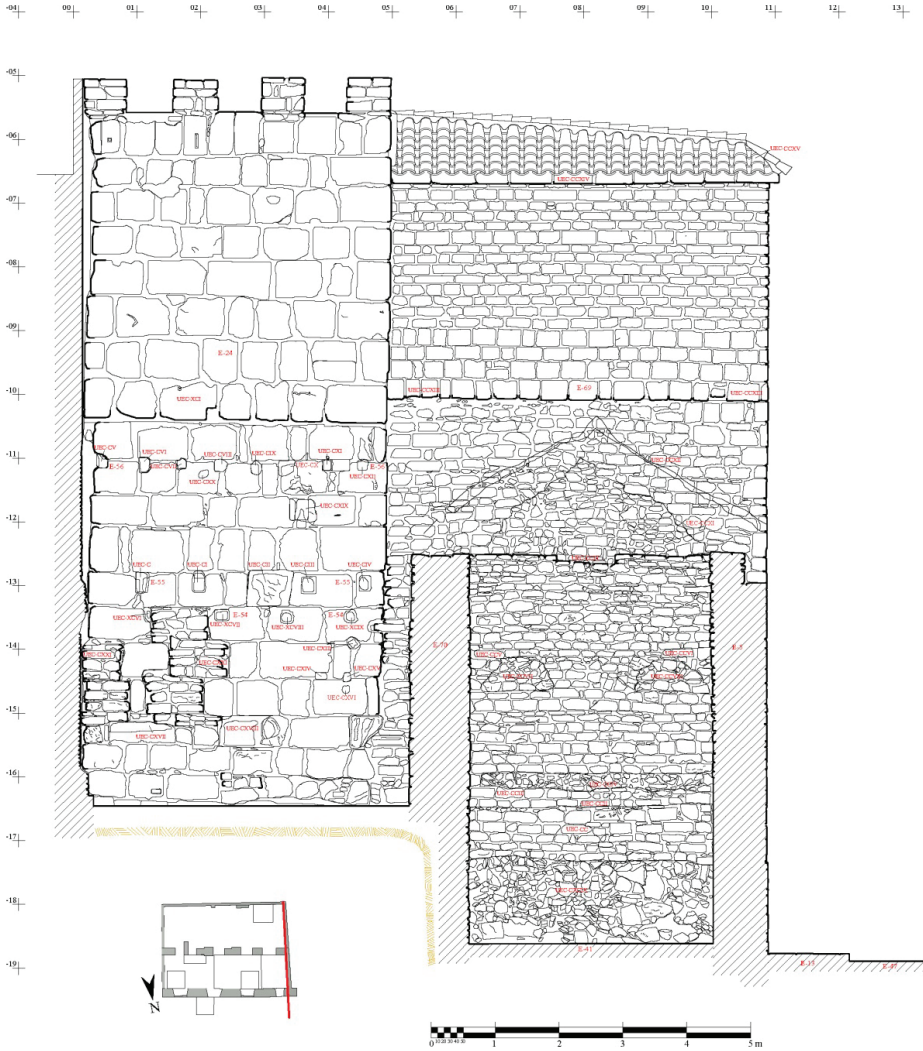


Figure 4. Front view of the tower.

4 FIELDWORK IN THE MEDIEVAL SLAUGHTERHOUSE FROM PORCUNA

The fieldwork in the Medieval Slaughterhouse from Porcuna had a previous history. In 1999, there was a demolition project fostered by a joint agreement between the Town Hall and (Jaen) County. A project was designed to substitute the historical building with a decontextualised and disproportionate construction which, far from recovering the traditional values, would continue the destructive line of heritage loss. It was reported this case to different cultural authorities, including the Ombudsman from Andalucía. The instigators, based on unreliable technical reports and lack of material or historical knowledge, adduced that the building was both irrelevant and contemporary, showing an example of poor technical formation and a low professional deontological compromise. It is now when we know that the construction was already existing in the second half of the 15th century, having important elements unique in the stripped local heritage.

In 2001, the works to take the building down started: roofs, walls, ornamental covers. No parallel study was carried out, no criteria was followed, submitting the remains to which the whole building was reduced to the open air for eight years, causing several pathologies. The matter was at an impasse until 2008 when a new Town Hall decided to ask for the assistance and advice of a varied group of technicians.



Figure 5. Aerial view of the archaeological excavation. After she begins a thorough graphic documentation process.

Given to the fact that we are dealing with a Medieval building, it must have substituted the open air meat-sell carried out by the “board dealers” in the same spot, sheltered by the shadow of the castle and by the entrance of one of the main gates to the city as it used to be in the Castilian cities during the Low Middle Ages. The first Renaissance concept of urban development from the end of the 15th century coming from Italy implied the creation of public buildings sponsored by the families, with the aim of showing they were preserving the “Republic”. The slaughterhouse is planned by the Town Council to arrange and control healthy meat sell by professional tax-paying butchers and a guaranteed minimum stock. The first written record, a lawsuit with a local butcher involved, goes back to 1480. Such a use of a public slaughterhouse, with several butcher’s stalls, an area where to slaughter the cattle and a stockyard with a few modifications, lasts since the last fourth of the 15th century until 1931.

In 1931, the slaughterhouse closed down with the coming of the II Republic. The building was split up in two, housing the local library and work office simultaneously, everything in accordance to the republican regeneration programme. The Spanish Civil War (1936-1939) provoked the closure of the library in January 1937. After the war, the building turned into County Courtrooms, then low-level court, the latter having been its normal use until the restoration works began.

The fieldwork made its start from a previous research where the main data corpus was taken, including graphics. From there on, we began to work on the project writing. The fulfillment of the working process was supported by a further archaeological approach in order to retrieve the

date from the areas and elements to be involved in the Project, looking for the compatibility between the programme and the restoration and integration of the elements plus an exhaustive control of the new building works, replacement and restoration.



Figure 6. View of the construction process. The pieces are located exactly at the original site after careful documentation process.

The fact that an emerging structure is worked on entails the question of what to be shown from it, with its original image having been modified through history. Therefore, the stratigraphic study of the building sequences lets us glimpse and analyse the evolution of the building entity, identification and characterization of ancient building systems and the knowledge about a specific material in a precise moment for a specific purpose. A graphic representation, the photogrammetric restoration, together with the methodology for ornament reading, allows us to establish a “chronographical” analysis (Caballero, 1995). As for the Medieval Slaughterhouse project, it was carried out knowing, beforehand, that it was not the objective to give the building an idealized original look back. It was a priority to show the historical building process.

Being aware that “*the synthesis intends to retake their former formal comprehension and social unity.*” (Caballero, 1996), the fieldwork with ornamental drawing attached to other graphic devices to obtain *in situ* data attempts to reject sensational graphics or preconceptions which remain far from being scientific drawing. It is not our aim to criticize virtual recreation graphic tools or 3D modeling but our aim is not to turn logical facts into evidence, and the previously-mentioned methods lack theoretical debate. That reason, i.e., not letting the tool or expected outcome take over the research, is why we have always trusted the analysis of ornaments in chronological order, more suitable for our Project. Any graphic usage that presupposes, simplifies or recreates implies a risk of altering, confusing and fashionably topicalising the objective of the research. With the purpose of avoiding those risks, we have

undergone the complex reading of the walls in the project, from the Turdulan period to contemporary days, making up an interesting but complex reading-understanding activity.

We faced the composition of the Project after considering the building not just as a mere object, but also its role within the urban site, as its unique function within the local archaeology according to Rossi (1982) in his attempt to establish such a concept of urban archaeology. That is how the whole cluster of elements was given a context and characteristics not just as disconnected pieces, but as part of a *unicum* in this new project.

Once the elements to substitute, restore and eliminate were established, the new plan resembles a craftsman's piece of work (Sennet, 2009), i.e., it observes and analyses everything at our disposal to work in a personalized, almost surgical, way. The architectural project will be in charge of making a whole single building "cluster" out of the several pieces and display the processed remains as parts of a wider unit, essential for a complete, unabridged understanding. This multidisciplinary team has made possible to establish the right building solutions and architectural language. Here it is where the existing exercising of contemporary architecture must search for clean spaces and single group readings, avoiding postmodern architectural confusion (Frampton, 2009).



Figure 7. Exterior view of the restored building.

5 CONCLUSIONS

This fieldwork has helped us show the graphic instrument applied to Works on heritage. That leads us to a range of conclusions that constitute a clear methodology on how to apply new graphic technologies:

- Drawing as an objective tool: the straight application of the graphic tool, supported on subsidiary techniques, such as photogrammetry or restoracion. It must be the common ground for all the disciplines and fields of knowledge to establish working strategies. A clear research process will generate clear materials and results.
- Recreation as thematic risk: given to the large number of languages and media, the graphic stage will remain as key element applied to heritage restoration. The scientific and objective justification for any graphic decision will be the technical support leading towards clear and straight fieldwork.

- Multidisciplinary debate required by our Heritage must search for a scientific justification in an decision taken, improving the outcomes of the piece of research. Hence, systematic drawing of ornaments, floors and stratigraphic sections will offer essential help when understanding heritage as a coherent whole.
- Contemporary architecture in heritage work will be the “conglomerating entity” leading us to a clean global Reading of the work, clarifying and highlighting the previous times.
- Heritage fieldwork must respect the remains as material documents from different stages and forms of life from ancient-past civilizations. Both, remains and research results, graphics and written historical records, join the worked-on building as documents and works of History.



Figure 8. Interior view of the restored building.

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