EXARC JOURNAL 2023/2
14 Articles | Open Access

The content is published under Creative Commons Attribution 4.0 International license (CC BY 4.0).

Reviewed Article:

Reconstruction of 'Lattara type' Housing in a French Archaeosite in Southern France

Persistent Identifier: https://exarc.net/ark:/88735/10690

EXARC Journal Issue 2023/2 | **Publication Date:** 2023-06-17

Author(s): Valentin Grande [1] ✉, Corinne Le Baud [1]

[1] Randa Ardesca, Archéosite d'Ardèche, 1800 route de Chandolas, 07120 Saint-Alban-Auriolles, France.

Randa Ardesca is an "Archaeosite", which means it is a place dedicated to experimental archaeology and living history. This type of site could also be an archaeological site, but Randa Ardesca is not because the excavations made in situ were not inconclusive. We are located in the south of France, in the region of Ardèche. Randa Ardesca opened its doors 10 years ago, with the goal of recreating a Celtic village from the Early Iron Age. This project is

autonomous and is dedicated to experimental archaeology, with the aim of enhancing the research data and theory from archaeological sites with tried and tested methods.

> The reconstruction of the Lattara type habitats has raised many questions which are still unanswered. Some observations have however been useful, particularly in relation to the proportions for the clay mixtures, the number of bricks necessary, the assembling of the stone foundations, etc.

Introduction

The archaeological material for this period is scarce locally and does not give enough data for reconstruction. Thus, the decision was made to experiment on building techniques of the various types of habitats encountered in archaeological excavations throughout the south-eastern quarter of France in the regions near Ardèche such as Gard and Herault. The building material was chosen to fit the local climate and resources, and to provide reconstructions that would be compatible with the archaeological context of southern Ardèche. The implementation of the houses is also a delicate choice, as the original constructions may have been erected on softer grounds than that of Randa Ardesca. The typical landscape here is full of stones.

The use of modern tools or materials was strictly forbidden during the building processes; clay and soil were stomped in a basin with bare feet, in order to evaluate the time and resources needed in that period for that type of habitat.

In the first ten years of its existence, Randa Ardesca built a tavern, the chief's house, and a series of shops representing different craftsmanship in the period between the 5th century BC and 4th century BC. On the site, these constructions are dispersed and randomly placed along the path of the archaeosite.

This year, Randa Ardesca initiated the construction of three new dwellings inspired by ruins uncovered in *Lattara*, in the department of Herault. These present themselves as a block of housing typical of *Lattara.*[1]

After a visit to the Henri Prades Museum of Lattes in 2021, we were offered a tour of the private reconstruction of *Lattara*. Reconstruction attempts resulted in a number of unresolved questions, particularly in relation to the roofs as the choice of reconstruction materials utilised meant that they were not waterproof. We are faced therefore, with the difficulty of establishing how to resolve these issues and contribute to advancing our understanding of ancient peoples. We also face the challenge of making room for a ‘living neighbourhood’ from the 5th century BC in our expanding Celtic village. This next expansion phase of the *Lattara* suburb project in Randa Ardesca will allow us to portray a social organisation of habitats representative of the Iron Age in southern France.

Archeological context of *Lattara*

This antique port located near the town of Lattes and Montpellier in France was active from the VI century BC until III century AD and is well documented. In 1983, an excavation campaign was launched on the part of the site belonging to the State, which was led by researchers from the UPR 290 of CNRS (today known as UMR 5140—CNRS, Ministère de la Culture, Université Montpellier III, INRAP), and it continues to this day in the form of successive triennial programmes (the first of which was launched in 1986). The site also has a museum attached to it (https://archeologie.culture.gouv.fr/lattara).

During the period from the 5th to 4th century BC, a major transformation occurred in the towns of southern France, such as *Lattara*. Thatched roofs were replaced with flat-slanted alternatives and habitats were joined closely together, probably to maximise on space within the city walls as the population increased. In *Lattara*, the habitats were constructed from rectangular bases and the walls were made of clay bricks mounted upon a stone flashing (Michelozzi, 1982 Py, 2009).

Around 450 BC in *Lattara*, a new enclosure wall was built upon the traces of the ancient Etruscan wall. From this point on, the city was totally transformed, and compact intertwined dwellings start to appear on each side of large main avenues. These new suburbs continued to develop up until the first century BC showing efficient and long lasting urbanisation. Some traces of this type of urbanisation have also been found in Gaillant in the archaeological site of le Marduel and in Martigues, an additional site we have gathered data from for our reconstruction works. This development of fortified sites around the 5th century BC can be linked to the growing colonies from foreign Mediterranean populations in these regions of southern France (Greeks, Etruscans, and Iberians). Commercial contacts between Celts and these foreign populations might have been profitable at times, but conflict over land and commercial points could also have lead local populations to build stronger defences.

Originally, the bricks of the dwellings may have had different compositions, so at Randa Ardesca we chose to experiment with different mixtures and techniques (adobe, bauge, and shuttering) in the different habitats. For the roof, the hypothesis which seems most plausible, is that horizontal reeds over round beams were used, which were then covered by a 20 cm thick coating of clay for a watertight result (Py, 2009). We will be using phragmite reeds, as this plant was abundant during the V and IV centuries BC in southern France along the Rhone valley and the banks of the Chassezac river (where the archaeosite is located). These different materials have been found in the excavation of some of *Lattara* burned dwellings.[2]

The first buildings constructed on the archaeosite were of more ancient shapes, like the double apses represented in the so-called ‘Chief’s House’ of Randa Ardesca (See Figure 1), inspired from the data collected from the excavations of Gaillant in the Gard. This new residential area will open a more coherent and global overview of the different habitats that

were encountered during the V to IV centuries BC which represents a cultural transitional period of urbanisation.

The making of the two first *Lattara* type habitats

The Celtic village of Randa Ardesca still does not have an antique urban suburb. It is our main motivation to start building the first two dwellings. It will grow to be a suburb in the years to come, and it is planned to have a fortified wall around it too. It is the first attempt in France to rebuild an entire district of this type of Celtic dwelling. In *Lattara* the reconstitution was only one part of a housing complex.

During the two and half months of the 2022 summer work camp, we completed the levelling of the chosen locations, the stone footings of two of the houses and the beginning of the brick walls for one of them. The experiment was conducted under supervision of two main workshop managers and over 30 volunteers.

To begin with, the chosen locations were essentially on limestone slabs, a hard and irregular surface. To make them flat enough took 3 people two weeks of work, filling the holes with lime stones picked on location and cutting rock to even the surfaces.

At the same time, the stone foundations were assembled. This second phase took three people roughly a month's work. The foundations were built from limestone rocks found on location, measuring from 30 to 60 cm high and 40 cm thick. In *Lattara*, the foundations are rarely over 40 cm high, but due to the irregularities of the surface at Randa Ardesca, the foundations are higher where the level is lower. The limestone rocks of the footings have a cob mortar. These two structures are side-by-side with a one-meter gap between them to make room for a small alley. The third house is planned to have a common wall with one of the first two.

Once the stone foundation was finished, it was time for the bricks. For the first house, we decided to use adobe bricks made of clay soil, straw and water, mortared with cob. The bricks were made in 20 x 15 x 10 moulds and left to dry in the sun for a minimum of two days, at over 30°C (See Figure 2). They were then assembled in two parallel rows for each wall. Each row needed between 120 and 130 bricks (See Figure 3). These walls will measure 3 m high when finished (See Figure 4).

The last stage of construction will consist of assembling the framework, with round chestnut beams, phragmite reeds and a 20 cm clay coating to finish. These final stages will probably be on the plan for the 2023 work camps, as the actual work of mounting the walls is still in progress.

Conclusion

The reconstruction of the *Lattara* type habitats has raised many questions which are still unanswered. Some observations have however been useful, particularly in relation to the proportions for the clay mixtures, the number of bricks necessary, the assembling of the stone foundations, etc. What remains to be answered is: how much time will these structures last? Which mixtures and materials will be most efficient and long lasting to ensure a waterproof roof? Can we make a waterproof roof at all? Will these structures survive the Ardèche climate?

All these questions confirm the importance of experimental archaeology as a discipline, to come to understand the basics of efficiency and life span that these structures eventually had, and discover or re-discover how our ancestors responded to problems with their resources and creativity.

Hopefully, the work done in Randa Ardesca will come to enrich the experiments already held elsewhere in this topic.

1 The reconstitution of this type of house has already been undertaken at the Museum Henri Prades of Lattes (De Chazelles, Leal and Klein 2018). A virtual visit of this future habitat is available in the bibliography.

2 House 130, zone 1 : Py, 2009.

Keywords archaeological open-air museum
(re)construction

Country France

Bibliography

De Chazelles, C-A., Leal, E. and Klein, A., 2018. *Échanges transdisciplinaires sur les constructions en terre crue,* Volume 4, Construction en terre crue : torchis, techniques de garnissage et définition, architecture et mobilier, Actes de la table ronde internationale de Lattes, 23/25 novembre 2016, Montpellier : Éditions de l'Espérou.

Michelozzi, A., 1982, *L'habitation protohistorique en Languedoc oriental (VIIIe-Ier s. av. J.-C.)*, Association pour la recherche archéologique en Languedoc oriental, Caveirac.

Py, M., 2009. *Lattara: Lattes, Hérault : Comptoir gaulois méditerranéen entre Étrusques, Grecs et Romains*, Collection Hauts lieux de l'Histoire, Éditions Errance, Paris.

Site archeologique Lattara Musée Henri Prades, 2020. Visite virtuelle d'une maison protohistorique de Lattara. Available At : < https://www.youtube.com/watch?v=illQ5I2g68g > [Accessed on 8 October 2022).

Share This Page

Corresponding Author

Valentin Grande
Randa Ardesca
Archéosite d'Ardèche
1800 route de Chandolas
07120 Saint-Alban-Auriolles
France
E-mail Contact

Gallery Image

FIG 1. THE SO-CALLED ‘CHIEF’S HOUSE’ OF RANDA ARDESCA, PHOTO BY RANDA ARDESCA

FIG 2. ADOBE BRICKS DRYING IN THE SUN. PHOTO BY RANDA ARDESCA

FIG 3. THE LIMESTONE FOUNDATIONS WITH THE FIRST OF ROWS OF ADOBE BRICKS. PHOTO BY RANDA ARDESCA

FIG 4. THESE WALLS WILL MEASURE 3 M HIGH WHEN FINISHED. PHOTO BY RANDA ARDESCA