

## Studies and projects for the archaeological park of the Nuraghe s'Urachi (Sardinia, Italy). From knowledge for heritage conservation to project for the community

Gian Marco Chiri<sup>1</sup>, Francesco Novelli<sup>2</sup>

<sup>1</sup>University of Cagliari (Italy), [g.chiri@unica.it](mailto:g.chiri@unica.it); <sup>2</sup>Polytechnic of Turin (Italy), [francesco.novelli@polito.it](mailto:francesco.novelli@polito.it)

**Topic:** T4.1. Conservation and restoration projects of vernacular architecture<sub>2</sub>

### Abstract

*This piece of research regards the archaeological area of the Nuraghe s'Urachi in San Vero Milis (OR-Sardinia, Italy). The site is probably one of the most significant and complex testimonies of the so-called "Nuragic civilization" in Sardinia (18th–11th century BC). Among the approximately eight thousand currently surviving "nuraghi", the s'Urachi complex stands out for its pivotal role in the vast and important network of territorial relations that characterized central-western Sardinia during the Archaic period. Its crucial role in terms of its political, economic, social, and military importance is displayed by its considerable size. Today only seven of the ten perimetral towers are still visible, and of the central tower — originally over twenty-five meters high — only the base remains. However, from an archaeological point of view, the Nuraghe still constitutes one of the most interesting artifacts of the region. As part of a renewed collective interest in Nuragic sites, the area of the excavations of s'Urachi is a candidate to host a new archaeological park whose formal and organizational characters are still to be defined (section 1.1). In August 2021, a workshop was organized and promoted as part of Accademia Adrianea in Rome Master's degree program on Architecture and Archaeology. The workshop focused on the site to envision four possible scenarios (section 2.1) for implementing and stimulating the preservation and conservation processes, as well as to enhance the archaeological area in accord with the municipal administration and the local community. The process of rediscovery, participation, sharing, and final "reappropriation" of this heritage's tangible and intangible value represents one of the fundamental objectives this article intends to outline.*

**Keywords:** Nuraghe, conservation projects, architecture, heritage communities

### 1. Introduction

In November 2021, thirty-one Sardinian Nuragic archaeological sites out of the currently surviving over fifteen thousand throughout the region had been registered in UNESCO's World Heritage tentative list. The popular movement to obtain recognition of the archaeological remains of the Nuragic civilization as a world heritage site — a movement involving public institutions, universities, and civic associations — served as an important first milestone. Nevertheless, a series of

questions potentially compromising the population's interest and the trial of UNESCO recognition appear critical. Currently, the only archaeological site of the Nuragic era registered on the World Heritage List is the so-called *Reggia di Barumini*. This site still has some critical issues concerning the Management Plan, the document envisaged by the UNESCO Convention for enhancing the monument and its territorial context. It is, therefore, necessary to highlight how, in light of these issues, governmental action should be primarily oriented towards the construction of

a system of rules, opportunities, and actions that strengthen the link between the asset to be protected and the community that hosts it. The recent establishment of the "Mont'e Prama Foundation," namesake of the site where the famous statues of the "Giants of Mont'e Prama" were found, will have to deal with constructing the system of the archaeological areas of the Sinis Peninsula and the Campidano di Milis. This foundation constitutes an important novelty in public initiative, working in conjunction with other projects stewarded by the University of Cagliari to support the enhancement, musealisation, and accessibility of these areas. This interest, however, which includes territorial promotion initiatives, risks being thwarted by the enormous dispersion of public funding lines and by the fragmentation of decision-making centers. The thirty-one Nuragic sites registered in the World Heritage Site, certainly among the most emblematic, best preserved and legible, constitute an infinitesimal percentage of the remnants of the ancient Sardinian civilization of the Bronze Age.



Fig. 1. Aerial view of the so-called *Reggia di Barumini*

The non-World Heritage sites, although crucial for the knowledge of the ancient Mediterranean in its protohistoric phase, are at risk for being insufficiently cared for and undervalued, and thus neglected in favor of the formally recognized World Heritage sites. In this context, the Nuraghe of S'Urachi (or S'Uraki) in the San Vero Milis Municipality (Oristano, Italy) stands as an exemplary manufact. The scientific understanding and management strategies of the site must be deepened regardless of its exclusion from the tentative list.

San Vero Milis' S'Urachi is arguably one of the most critical sites in the area. It is one of the largest "complex-nuraghe" in Sardinia, and at its cultural peak was among the most relevant megalithic constructions in the western Mediterranean. The large basalt tower, originally over twenty-five meters high of which only the five-meter base remains, was surrounded by a long defensive stone wall and a relatively-rare deep moat. Its highly unusual territorial location in the lowland expresses the importance of claiming the political, military, and symbolic possession of that specific node in commercial relations as well as its strategic location along the exchange routes between the hinterland (the *Monti Ferru*, rich in ores) and the sea, through the ports of the Sinis peninsula. In fact, the building is among the longest-lived in terms of use, so the Phoenician and even Roman ruins are evident. Today, s'Urachi is the symbol of the Campidano di Milis community and the small town of San Vero, which was built using S'Urachi as a quarry for building material. The site, therefore, expresses an extraordinary historical and geographical depth that can be suitably leveraged (also in service of the nearby UNESCO sites), working in particular on its role as a reading device of the complex territorial relations of which it was, with all evidence, the epicenter.



Fig. 2. View from the top of the Montiferru mountain to the Sinis Peninsula

### 1.1. Between preservation and cultural identity

We had the opportunity to investigate and test design hypotheses aimed at the preservation and enhancement of the archaeological site of s'Urachi

as part of the program for cultural and educational activities promoted by the Accademia Adrianea<sup>1</sup> in the context of the itinerant Master on Museography, Architecture and Archaeology, Strategic Design and Innovative Management of Archaeological Areas. In particular, the design workshop<sup>2</sup> was proposed to the participating students as a proactive investigation of possible design solutions aimed at the direct involvement of the local community. The s'Urachi site is well-known and has been studied by the local and international scientific communities. The excavations carried out to date are partial but sufficient to envision the complex's architectural consistency, extension, and articulation<sup>3</sup>. This same awareness and knowledge, however, are often not recognised by the local community. The object of the excavations is too often completely isolated from its environmental and social context to the point that the archaeological significance of the site is often unrecognized by its local community despite its profoundly-felt connection with the Nuragic civilization. There is, therefore, a “loss of memory” that makes the processes of knowledge, protection, and enhancement challenging to transmit to an audience of non-experts; such is the case with *s'Urachi*. The Faro Convention's Article 12, “Access to cultural heritage and democratic participation,” confirms how fundamental it is to mend the relationships between the heritage and the community in which the site is situated (CoE, 2005). Therefore, it is essential to start a virtuous process for the sustainable use of the cultural assets: the economic and social aspects that leverage individual and collective participation are an opportunity to perpetuate a shared and enduring interest in the heritage itself. If appropriately used and positively integrated into this context,

cultural heritage can significantly increase the knowledge of places and the “stratified memory” of territories and cities. It can also constitute a fundamental means of cohesion and social identity, as well as become a lever for development as underlined by the UNESCO recommendations on the historic urban landscape and the Habitat III agenda of Quito (2016): cities, landscapes, and cultural/environmental heritage are not static facts but active components of the dynamics of socio-economic development (United Nations-UN, 2016). The aim of the workshops, therefore, examined nexus of the archaeological and cultural contexts, in terms of both the s'Urachi complex and of the design activities already implemented by the municipality and by the community of San Vero Milis (Oristano, Italy), initiatives designed to promote a truly integrated conservation of the site. These themes have been the subject of study and research for several years. This previous research helped offer support to the preliminary knowledge phase for any activity that involves working on the site. Today, the analysis of the state of the art of the site highlights the necessity to continue with archaeological excavation activities. In addition, it reveals the need for the asset to concretely enter the territorial system on the Nuragic presences in Sardinia, particularly the area of Oristano and the Sinis peninsula. The accessibility and safe visitability of the archaeological site of *s'Urachi* was one of the design demands posed to the students of the Master's programme, on which they were called to propose solutions and hypotheses.<sup>4</sup>

They were given constraints related to the use of the site which took into account issues related to the management of the excavations by lots.

<sup>1</sup> The Adrianean Academy of Architecture and Archaeology Onlus is a non-profit organization active in the field of research and training on the issues of enhancement and rehabilitation of cultural and archaeological heritage, operating within a broad framework of institutional relations at an international level. For more detailed information, please refer to <https://lnx.accademiaadrianea.net> (25 January 2022).

<sup>2</sup> The workshop took place from 28 August to 4 September 2021 with about 30 students in Architecture from various Italian universities.

<sup>3</sup> Please refer to G. M. Chiri in this same contribution.

<sup>4</sup> For more details, see the contributions and bibliography published in Germanà M. L., Prescia R. (2021). *L'accessibilità nel patrimonio architettonico. Approcci ed esperienze tra tecnologia e restauro*, Arteferma, Treviso, Italia.

These inputs were considered as a functional constraint for the drafting of the design proposal.

Because of the findings' fragility and the open excavations danger, the inherent inaccessibility to non-experts is a critical issue that must be solved to disseminate archaeological research and heritage to the broader public. Another determining factor to which we paid particular attention addresses a more general design quality issue. The aim here was to revive and allow access to the site in order to communicate, through architectural and formal instruments, the importance of the scientific and communicative agendas at hand, namely the continuous excavations and the possibility to host cultural initiatives in connection with other sites. The formulated design hypotheses had to consider issues related to the future management and maintenance of the site, promoting (in a spirit of compatibility and sustainability for the new facilities) the use of construction techniques and materials coherent with the fragile nature of the site. Furthermore, the awareness -within both the "host community" and by visitors to the site- of the cultural meanings of the heritage and the need for its conservation reveals a physical, intellectual, and emotional impetus for well-managed "access" to the heritage, constituting both a right and a privilege (Germanà, 2021; Arengi et al, 2011). In the formulation of the project proposals (elaborated in section 2.1), communication was deemed fundamental for the management process of the complex. These processes do not refer exclusively to the educational function of the site or treating it as an "open site" according to an idea of live restoration (Arrighetti et al, 2019) that concerns the phase of restoration and excavation -rather, it expands in scope to address a heterogeneous public, not necessarily composed of experts in the sector. This phase becomes an integral part of a cultural project through which, for example, the storytelling formula becomes a link between the asset and its users, allowing for more consistent communication (i.e. a mode of discourse that is also transmittable through the use of social

networks, in some cases through networks that are quite distant from the "cultural habits" of the community) (Morezzi & Rudiero, 2021).

This methodological perspective had to be expressed formally and figuratively in order to explore some of the infinite possible actions available. Beyond the exercise's didactic objectives envisaged by the Master's program's activities, the workshop may have constituted the first initial advancement in scientific research under two hitherto unexplored conditions. The first condition was the awareness of the historical and territorial depth of the site. The lectures and numerous inspections led by archaeologists, including the former Chief Director of the excavations Dr. Alfonso Stiglitz from the local Archaeological Museum, contributed fundamentally to achieving the goal. Dr. Stiglitz provided an excellent general framework of knowledge on which the working groups' proposals could function in awareness of the unique qualities and features of the archaeological site within its historical and geographical dimensions. The second condition was liberating the design from any financial, administrative, and, to a limited extent, regulatory constraints. In the short time available for the proposal's formulation, it was necessary to focus on the emergence of the first founding principles of the design process, postponing further considerations to another context.

Only under these conditions was it possible to safeguard the "freshness" of the hypotheses, which, although sometimes naive, served its role of a probe within the spectrum of possibilities and, more importantly, served to correctly define the landscape of the problems rather than to immediately provide workable solutions. A third question concerned the expected outcomes of the process and, in other words, the final goal of the research. Naturally, we did not expect to resolve the arrangement of the *s'Urachi* area as an episodic fact. On the contrary, it was an occasion to experiment with potentially exportable approaches within the testing ground of a workshop. The peculiarity of the whole Nuragic

heritage compared to the set of other Mediterranean archaeological remains is its regional coverage and dispersion.



Fig. 3. Zenithal view of the site

It is a geographic network of places that extensively build the landscape over time. In this sense, the design proposals aimed at enhancing the archaeological areas of the Sardinian regional territory can be considered primarily landscape designs. We felt the need to build the material conditions for the best integration of the excavation site vis-à-vis the local community while also identifying a coherent design expression for a large set of sites. This concept previously served as the basis for design research developed for the excavation site of the necropolis of Mont'e Prama. On that occasion, the project prioritised the site's accessibility and understanding while simultaneously relating itself to a broader system. It aimed at building an intermediate physical device between the local and the geographical network of Nuragic civilization sites through the Cartesian grid (Chiri, 2021). That experimentation highlighted the site as both a cultural asset of its local community and a constituent in the larger Nuragic anthropological context. This duality then emerged as a priority for successive projects that would be carried over to other areas on the "Tentative List", including that of s'Urachi.

## 2. Elements of the program

The municipal administration of San Vero Milis has long ago prepared a variant to the urban planning tool to divert the provincial road that crosses the excavation site. The old road, now abandoned, followed an ancient Roman route created

when the nuraghe was already in partial ruin. The road crosses over part of the perimeter defensive wall and covers at least two towers.



Fig. 4. The nuraghe from above

A recent loan will allow the road to be razed, and the excavation of the remaining part of the bulwark and the moat that enclosed it will follow. This project is coupled by a proposal for funding the arrangement of the surrounding areas, up to the limit of the property. Although the excavations are open on a seasonal basis, there is a clear desire to interpret the theme in a way that is as open as possible to public use and collective enjoyment. The main issue will consist in identifying the acceptable compatibility level between the excavation works and public visits. A secondary issue concerns the actual perimeter of the area and the involvement of surfaces currently not included in the potential archaeological park. The surveys carried out by archaeologists suggest the existence of a vast network of multilayered, unexcavated remains, probably distributed around the emerging element of the nuraghe in the direction of the area where the town stands: a village, perhaps a necropolis. If this were the case, a somewhat elastic perimeter would have to be conceived, ready to incorporate the inclusion of new areas, gradually removed from agricultural use, ready to be reconnected to the archaeological park. Another theme concerns the possibility of building a stable structure for exhibiting the findings or even a small museum building. The

workshop did not exclude the possibility of designing a small *antiquarium* or the location of a service or visitor center. There is already a small, well-managed archaeological museum, although its size remains critical. It is too small to constitute in itself an attractor of tourist flows, let alone a totally autonomous archaeological research laboratory. The network of regional territorial archaeological museums is commonly very fragmented, and despite some attempts to build a network between them or to centralize part of the collections, this has not happened due to the resistance of the local communities who feel expropriated of the precious findings, perceiving the sites as both part of their identity and as a touristic -and therefore economic- resource. The nearby "Giovanni Marongiu" Archaeological Museum of Cabras (OR), which houses part of the findings of Mont'e Prama such as statues from the site, is a more structured and sizable facility, but it still struggles to escape the encumbrance of the much larger Archaeological Museum in Cagliari. That said, if the possibility of creating a permanent structure was not completely excluded, then it is more likely that it will be entrusted with a function of support for the visitability and understanding of the excavations and a reference to more complete exhibitions. A further design topic concerns the formal expression and use of materials. The studies on the Nuragic civilization started systematically with the school of Giovanni Lilliu, have trickled into popular culture (especially in very recent times), also thanks to the striking discoveries of the statuary of Mont'e Prama and some -still unconfirmed- suggestive hypotheses about its origins. While this phenomenon, on the one hand, has made it possible to highlight the value of the Nuragic civilisation, on the other has produced the proliferation of images and clichés that are very strong and pervasive on the media level but not very consistent on the historical one. Hence, the caution in expressing vague assimilations with the architecture, actual or presumed, of the Sardinian ancestral past so as to avoid clumsily undermining the contribution that design can and

must make to historical understanding. Nonetheless, the history of Nuraghe s'Urachi is a history of its building material. The megalithic construction was completed in the upper parts with smaller and easily transportable stones and compressed clay bricks. Both were gradually removed for new buildings in the Middle Ages. Basalt and earth are, therefore, potentially the material on which to build a future figuration — not necessarily a unique narrative, but a powerful one.

## 2.1. Four hypotheses

In this section, we present four design hypotheses that were explored during the workshop. We believe they encompass and represent the methodological assumptions we brought to light. The first project concentrated all the service functions in a single structure, located east of the archaeological park. In this way, the building acts as a hinge between the inhabited area and the archaeological artifact in the longitudinal sense. At the same time, transversally, it looks at the landscape of Monte Arci, a legacy of the Neolithic past, and underlines the presence of the *Su Parigheddu* grove along which lies the Nuragic village. Although very characterized and formally autonomous, the design action has the advantage of incorporating the territorial and historical symbolic dimensions, undoubtedly one of the core objectives of the project. These proposed actions on the nuraghe are expressed in the definition of a new, utterly artificial accessibility plan, corresponding roughly to the horizontal section at the altitude just above the maximum height of the ruins. This expedient confers more legibility to the monument and renders it a significant tourist attraction.



Fig. 5. Team 1, proposal for catwalks over the top

The second group's proposal does not significantly differ in concept from the previous one except that it almost entirely renounces intervening directly on the nuraghe. The singular tangential element is represented by a walkway which, in tracing the path of the Roman road, approaches the height of the top of the ruin, allowing for a close view that simultaneously expresses the site's relation with the surrounding landscape. Also, in this case, a new building serves as the central element of the park, one with a contemporary design language that still makes attentive use of locally derived materials.

In the third proposal, the solution to the space of the archaeological park is not obtained through the service building. On the contrary, the proposal favors a less volumetric approach based on a simple concentric path with a direct relationship with the nuraghe. This becomes the center of the composition and of the narrative path that develops around it. However, the external area is not "other" but is somehow included as an additional element of the relationship. The fourth proposal is perhaps the most axiomatic of the projects and the one that stands out for its remarkable originality and balance. As in the previous proposal, the museum building is absent; in addition, the supporting buildings are completely ancillary, playing a secondary service role to facilitate a "pause" or orientation in the development of the spatial sequence. Although based on a similar principle as the third project, this fourth proposal makes the geographical relationship between the nuraghe and its surroundings even clearer. In this case, the circular path is not used to access the ruin but as a device for interpreting landscape relations, thus assuming a more profound and sophisticated value.



Fig. 6. Team 2, the museum and the catwalk touching the nuraghe

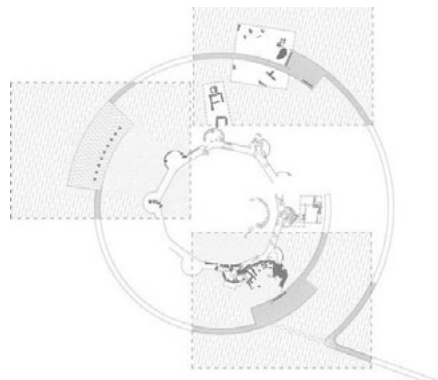


Fig. 7. Team 4, a spiral catwalk around the nuraghe



Fig. 8. Team 3, landscape design solution

### 3. Conclusions

The article describes both the methodological premises and the design studio workshop in the context of the itinerant Accademia Adrianea's Master's Program. Although none of the four proposals presented should be considered an exhaustive solution for the issues that the s'Urachi site has raised, they present some preliminary hypotheses on which to articulate future developments, ones to be fully confirmed also through the use of design exploration. First, as was already the case for Mont'e Prama, the case study confirms that parceling the territorial museum structures can be considered an added-value for the attractiveness of the locality; that said, it is not certain that this parceling constitutes the solution to the enhancement of the whole network of archaeological sites. Indeed, the digital dimension of contemporary museography allows cross-linking between collections and sources horizontally, from the most superficial and basic to the more detailed and academically-inclined ones vertically. For this reason, in a condition such as the one shown, the location of a new museum

building near the Nuraghe of s'Urachi is not a viable hypothesis to consider. Conversely, the need to formalize a sort of “narrative device” is imperative. A “narrative device”, as suggested by the philosopher Giorgio Agamben, is an object capable of interposing itself between man and space to become the vehicle of dialogue and meaning. The third question that emerged is that of the protagonism of architectural forms. It is by no means a question of supporting the cause of mimesis or rejecting *a priori* the tools of contemporary language for the solution of historical places. It is necessary and appropriate to recognize that, in this specific situation, architecture should avoid unnecessary formal expression; its design should renounce the confronting power of its signs, recognize the strength of raw materials, and subtly reinforce the geography that archaic Nuragic places still express.

## References

- Arenghi A., Della Torre S., Pracchi S. (2011). *Conservation, Accessibility, Design. Discussion and Practice*, in Kealy L., Musso S. F. (a cura di). *Conservation/Transformation*. Leuven, EAAE, pp.55-66.
- Arrighetti A., Minutoli G., Rudiero R. (2019). *Bagni di Petriolo: dalla conoscenza alla live restoration*, in Conte A., Guida A. (a cura di). *Patrimonio in divenire. Conoscere, valorizzare, abitare*. Gangemi. Roma, Italia, pp.1887-1898.
- Castangia G. et al. (2020). *Capo Mannu Project. Seconda Campagna di scavo nel sito di Su Pallosu (San Vero Milis – OR)*, in Paglietti G. et al. (a cura di). *Notizie e scavi della Sardegna nuragica*. Serri, Edizioni Grafiche del Parteolla, pp. 271-277.
- Chiri G. (2021). *Archeologies. Awakening the past*. Trento, Lislab. <http://hdl.handle.net/11584/304721>
- CoE, Council of Europe (2005), *Framework Convention on the Value of Cultural Heritage for Society (Faro Convention)*. Available on <https://www.coe.int/it/web/venice/faro-convention> (last consultation 25 January 2022).
- Van Dommelen P. et al. (2018). *Un millennio di storie: nuove notizie preliminari sul progetto S'Urachi (San Vero Milis, OR), 2016-2018*. QUADERNI Rivista di Archeologia, 29, pp.141-166.
- <http://www.quaderniarcheoaoar.beniculturali.it/index.php/quaderni/article/view/389>
- Germanà M. L., Prescia R. (2021). *L'accessibilità nel patrimonio architettonico. Approcci ed esperienze tra tecnologia e restauro*. Treviso, Arteferma, Italia.
- Germanà M. L., *Accessibilità e uso sostenibile del patrimonio architettonico. Superuser e baukultur per un rinnovamento metodologico*, in Germanà M. L., Prescia R. (2021). *L'accessibilità nel patrimonio architettonico. Approcci ed esperienze tra tecnologia e restauro*. Treviso, Arteferma, Italia. p.24.
- La Regina F. (2019). *La regola la materia la forma. Il cantiere del costruito storico e la «questione del metodo»*. Altralinea.
- Marino, L. (2016). *Il restauro archeologico. Materiali per un atlante delle patologie presenti nelle aree archeologiche e negli edifici ridotti allo stato di rudere. Il rischio nelle aree archeologiche*, Altralinea.
- Morezzi E., Rudiero R., *Accessibilità culturale e comunicazione dei beni culturali: dalla comprensione del patrimonio alla sua trasmissione*, in Germanà M. L., Prescia R. (2021). *L'accessibilità nel patrimonio architettonico. Approcci ed esperienze tra tecnologia e restauro*, Treviso, Arteferma, Italia, pp. 150-159.
- Musso S. F. (2016). *Recupero e restauro degli edifici storici. Guida pratica al rilievo e alla diagnostica*, EPC.
- Emanuele Romeo, Emanuele Morezzi, Riccardo Rudiero (2014). *Riflessioni sulla conservazione del patrimonio archeologico*, Roma, Aracne.
- Stiglitz A., *Le saline di Capo Mannu e la localizzazione del Korakodes portus*, in Mastino A. et al. (a cura di). *Tharros felix 2*, Roma, Carocci, pp. 64-84.
- Stiglitz A. (2012). *Fenici e Nuragici in contrappunto. Materiali per la formazione dell'identità sarda nel primo millennio a.C.*”, in Bastiana Cocco M. et al. (a cura di). *Trasformazione dei paesaggi del potere nell'Africa settentrionale fino alla fine del mondo antico*, XIX Convegno internazionale di studi su *L'Africa Romana*, Sassari 2010, Roma, Carocci, pp. 1609-1712.
- Stiglitz A. (2016), *Nuragici, fenici, sardi: uno sguardo da s'Urachi (San Vero Milis-OR)*, Layers, 1, 86106. <http://ojs.unica.it/index.php/layers/article/view/2569>
- United Nations-UN, (2016). *Draft outcome document of the United Nations Conference on Housing and Sustainable Urban Development (Habitat III)*, A/CONF.226/4.