



Design by Le Corbusier 1931  
Courtesy Carmine Gambardella

Le Vie dei  
Mercanti

XVIII INTERNATIONAL FORUM

# WORLD HERITAGE and CONTAMINATION

ARCHITECTURE|CULTURE|ENVIRONMENT|AGRICULTURE|HEALTH|ECONOMY  
LANDSCAPE|DESIGN|TERRITORIAL GOVERNANCE|ARCHEOLOGY|e-LEARNING

Naples 11 - Capri 12|13 June 2020

## Discovering, preserving and communicating the past. Synergies and divergences between archaeology, restoration and museography to make the legacy from the past accessible to all

**Michela Benente<sup>1</sup> Valeria Minucciani<sup>2</sup> Melania Semeraro<sup>3</sup>**

<sup>(1)</sup> Department of Architecture and Design, Politecnico di Torino, Torino, Italy

michela.benente@polito.it

<sup>(2)</sup> valeria.minucciani@polito.it

<sup>(3)</sup> Archaeologist and conservator of Mostra Archeologica of Chieri, Torino, Italy

melaniasemeraro@gmail.com

### Abstract

The paper aims to investigate the overlapping, collaborative and even contrasting characteristics among the three different disciplines: Archaeology, Restoration and Museography.

As archaeologists share the view that the public's "enjoyment" of the archaeological heritage in situ could jeopardize its integrity, paradoxically the surest way to preserve an archaeological site is by backfilling. The only architectural intervention in an archaeological site is to introduce a protective element, but this often distorts its identity: therefore, the possible compromise for a "direct" fruition of an archaeological site is its restoration, although it has been intended in different ways over time. The past must be preserved and protected keeping in mind the centrality of people (to whom the preservation of the past is addressed) too often forgotten or postponed due to other urgencies. It should also be underlined that conveying these often fragile remains to the future depends on their acknowledgement as elements of cultural identity.

In recent decades, however, new ways of intervening have emerged, in order to preserve but also to communicate in the best possible way the cultural significant and contents of the archaeological heritage, making them truly "accessible" and dialoguing with the city and with the present.

The paper cites some significant case studies to investigate the potential of a real disciplinary contamination between the three above mentioned fields.

**Keywords:** communication, accessibility, cultural context

### 1. Introduction

Archaeology is a discipline that studies a particular field of cultural heritage, which is by its nature fragmentary and mute. Its aim is to make the finds speak in order to reconstruct the history of ancient civilizations. The accessibility to the cultural contents of an archaeological site, as well as to a collection of movable finds, is complicated because deciphering requires specialized knowledge and skills that the general public does not have.

Furthermore, archaeological heritage is composed of three kinds of finds: the movable finds, which are typically small objects originally created to be moved; the immovable finds, which are typically architectural structure and infrastructure rooted in a specific place from which they could not be moved; lastly, the finds that were originally immovable by nature but become, in practice, movable as a result of events or simply due to the passing of time, i.e. they were moved and relocated to another place: these are typically architectural fragments or pieces of larger structures.

Moreover, archaeological finds are rarely completely intact: at best, they preserve their shape and do not have signs of mutilations, but they may have been altered in color and material.

It's reasonable to assume that these three macro categories present different degrees of difficulty in communication and understanding.

Apart from excavating finds, the archaeologist has the great task of studying, interpreting and popularize them.

The restorer has the difficult task of preserving the object in its authenticity, which, as we know, has been interpreted over time according to different points of view.

The museographer, finally, faces the challenge of presenting and communicating the exhibits to a wide and varied public, so that it can put into practice its cultural value as a testimony.

Naturally, each discipline has its own tools, methodologies and parameters, but these three disciplines must converge in making the archaeological heritage available to the public. In this task the different instruments, methodologies and disciplinary parameters mentioned above must find a mutual contamination. According to writers, it is precisely the lack of success in this respect since the beginning, the reason for the poor accessibility of the archaeological heritage in numerous cases, despite the musealization of sites, the creation of archaeological parks and new archaeological museums.

## 2. Archaeology, Conservation and Communication: the archaeological museums

In an archaeological museum these disciplinary overlaps must become particularly evident.

By its nature, the museum's mission is divided into three directions: the preservation of objects, their display and finally the communication of their contents. The last two must be addressed to the public without any discrimination or barriers.

If, therefore, the archaeological museum is the place where the encounter between remote and present past takes place and where people meet objects. The museography is the field where this encounter is planned and implemented in order to make the heritage accessible to all, to contribute the human promotion, always ensuring the preservation of the archaeological finds.

In fact, it is clear that the conservation of objects is an indispensable prerequisite and at the same time a guarantee that the museum must be able to ensure, as well as the knowledge of the contents. The stories that the archaeological object can tell is essential for the museum's mission of "communication". The different ways used to display a Roman amphora - the container par excellence most used for transport of the goods whose shape was studied for the loading in the hold of the ships - in a museum is a particularly significant example.

See the case of an exhibition where different types of amphorae are placed on the wall in rows interleaved with each other (fig. 1): the choice of this display is influenced by "antiquarian" tradition but also by the approach of Heinrich Dressel (1845-1920), the first archaeologist who studied and distinguished these containers proposing a table with 45 different types (fig. 2) [1]; perhaps the interleaved disposition also wants to recall the idea of the stowage in the ships. Here a distance is necessarily created between the object and the visitor.

Furthermore, as regards the communication of cultural and narrative content, this solution is mostly oriented towards the aesthetic and formal contemplation of the objects and any kind of information is delegated to short captions that without a good guide do not allow a conscious accessibility to the finds.



**Fig. 1** (left): Display of amphorae at the Archaeological Museum of Gozo (Malta)

**Fig. 2** (right): The tab. II in CIL drawn up by H. Dressel in 1899



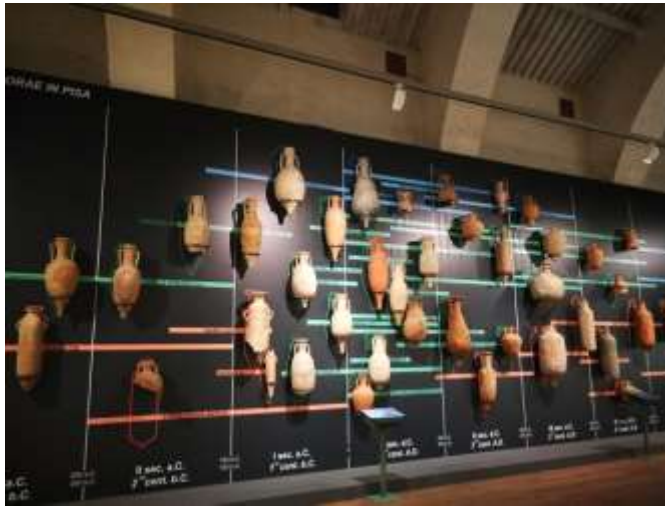
**Fig. 3** (left): Display of amphorae studied by H. Dressel, recently restored, at the Mercati di Traiano Museo dei Fori Imperiali in Rome (Italy)

**Fig. 4** (right): Display of amphorae at the Roman naval Museum in Albenga (Italy)

Without a good external support, this exhibition does not allude to any narration: in this case the "cultural content" of the find appears cryptic, as the sole prerogative of archaeologists and specialists. It seems that the cult of the beautiful object simply "displaying" it (though not exasperated) prevails over its communication. Instead, in the case of the new set up of Dressel's amphorae unearthed at *Castro Pretorio* in the 19th century (fig. 3), the choice of exhibition in the *Cisterna* of the *Convent of Santa Caterina da Siena* (in the complex of *Trajan Markets*) is a conscious, deliberate reference to the model of Dressel's CIL drawings, in which amphorae regain their historical as well as archaeological value. However, if the connection with the model is immediate for an archaeologist, the understanding for the visitor is still delegated to a very explicative text.

In the *Roman Naval Museum* in Albenga (fig. 4), now under restoration, the arrangement of the amphorae – mostly based on the results of the Nino Lamboglia's pioneering underwater research (1950) [2] – alluded clearly to their function, as objects intended for transport: the visitor can understand, without long captions, the reason for the amphorae shape and how they were crammed into the holds of the ships. Of course, in this case the storyline created by the exhibition is very synthetic and simple, lacking in communicating the additional information needed by the visitors in order to access and understand all the other stories that the amphora can still tell. However, the scenographic effect facilitates memorizing and understanding of the simple concept expressed by the displayed object.

The intervention of the archaeologist is instead very evident in the *Museum of Ancient Ships* in Pisa (fig. 5), where an exhibition wall is dedicated to all the amphorae here known, shown in a sort of synoptic panel of great interest, which does not renounce to a scenographic effect due to a careful museographic design, while touch screens allows the audience to consult short information on foodstuff and provenance. In this case, the amphorae are part of a wider ranging storytelling that culminates in a very suggestive reconstruction of the main wrecks accidentally unearthed with their loads in late nineties in Pisa. Instead of using an abundance of texts, the exhibition plan provides with an intense, very conscious use of replicas placed side by side to the original finds, as in the case of the *Alkedo*, a ship from diporto with twelve oarsmen but reminiscent in form of a warship, whose name *Alkedo* (Seagull) is engraved on a wooden tablet. The restored ship is placed side by side to the armed and with tree raised replica (fig. 6). The explanation of the ancient techniques of navigation, of the systems of orientation, whose development is entrusted to a planetarium, and of the naval routes, is a nodal point of the exhibition, as well as the description of the life on board realized thanks to the support of the material culture (food, cooking, lighting, games, religion, rituals etc) [3]. In this case the story revealed to the visitor is about the usage context of the amphora, arousing the visitor's interest and curiosity. The exhibition choice has tried to remove as much as possible the barriers that separate the visitor from the finds, trying to give the impression that finds are "at hand". The aim declared by the curator is precisely to overcome the concept of the sacredness of the exhibition and restore the value of the archaeological finds as an historical testimony of a narrative close to the visitor [4]. In this case conservation requirements have been well integrated with archaeological expertise. This combine has allowed the museographic design to identify solutions that are certainly "communicative" and involving for the public: far from exhausting communication, these expedients are very useful to keep the visitor's curiosity alive and to facilitate his or her approach to the finds, providing him or her with an accessible interpretative entrance key.



**Fig. 5** (left): Display of different kind of amphorae at the Museum ancient Ships in Pisa (Italy)

**Fig. 6** (right): The replica of Alkedo at the Museum ancient Ships in Pisa (Italy)



**Fig. 7:** Display of re-used amphorae at the MAC in Chieri (Italy)

See also the case of Chieri's MAC (fig. 7), a small exhibition space, curated in 2009 by the *Soprintendenza per i Beni Archeologici del Piemonte e del Museo Antichità Egizie* [5], aiming to balance communicative needs without sacrificing the richness of the archaeological content, rather exalting it. Here it is evident how the knowledge of the archaeologist was put at the service of communication, renouncing the use of technical and specialized details large inaccessible to a wide audience. The experience of fruition is focused on organizing a story around the life of the object (amphora), which although created for a specific purpose (container to transport) had a second life as a recycled object (it was in fact reused for the drainage of the ground but also as a cinerary urn): in this case, an archaeological object represents for the public something unexpectedly topical.

Many other cases illustrate the different ways in which the "amphora" object could be explained, narrated, staged or contextualized, and how the conservative, scientific and divulgative aspects are not safeguarded in the same way: for example, a scenic and captivating exhibition might be inaccurate from an archaeological, scientific point of view. In any case, every solution mainly aimed at providing an appealing experience to arouse the visitors' interest and encourage their involvement, are welcome, but in these cases, more than ever before, the scientific supervision of the archaeologist must accompany the museographic design.

### **3. Archaeology, Conservation and Communication: the archaeological sites**

With the appropriate amendments, the same can be said for archaeological sites (i.e. the immovable heritage), that need to be protected from the weather but also left explore by the public. With reference to the first request, the protection structures very often alter the perception of the site and often undermine its identity; with reference to the second one, the contact between visitors and archaeological remains could be risky for both.



**Fig. 8:** Viehmarktplatz in Trier (Germany)

Given that in many cases the lack of funds generates precarious projects without the necessary technical and formal care, this more affects the sites in suburban contexts. In fact, the "musealization" of multi-layered urban sites has not the only purpose of protecting remains but it must reconcile many functional needs, safeguarding the remains but also ensuring the communication of their meanings and their relationship with the present city. In this case museography in turn contaminates itself with urban architecture, but must leave such signs that they are not only noticed but also understood by people.

Regarding this first type of cases, i.e. archaeological sites located in an urban context, two significant examples can be reported, dating back a few years ago. The first is the project of the Viehmarktplatz in Trier by Oswald Mathias Ungers (1988-1996) on the ruins of a public thermal building from the 3rd century AD (fig. 8). The genesis of the project is rooted in the identification of historical paths, so that so that the square is paved in such a way that it reflects both the Roman street grid (red granite, along the north-south / east-west directions) and the contemporary urban structure [6]. The site is protected by a sort of huge showcase, which also allows passers-by to observe the ruins from the outside and from different perspectives, while, in the reflection effects, the glass now mirrors the contemporary city, now it allows to see the ruins below. The strong communication idea is therefore based precisely on the need for protection (the building-showcase) and on the archaeological evidence whose interpretation suggested the concept. The architecture-museography has therefore interpreted these two instances, reconciling them in a solution which, not without problems, nevertheless has a clear character.

The second case is located in Barcelona, and it is related to the musealization of the Roman Necropolis in Villa de Madrid square, by BCQ ARQUITECTOS (1998-2003): about 70 tombs dating back to the first and second centuries AD are lined up along a curvilinear pathway (fig. 9). The project remodels the square, to descend to the archaeological level, while an external section with a portico overlooks, like a belvedere, the level of the finds. Above the archaeological area a cor-ten pedestrian walkway joins the two fronts of the square, in continuity with today's streets as the functional needs of the city must always be respected. The entrance to the archaeological area does not correspond to the original one: there is therefore the intention to build an entrance-passage from contemporary to ancient times, following modern rules. A ramp allows access to the archaeological site and a line, paved in basalt stone tiles and parallel to the tombs, evokes and marks the route of the ancient Roman burial route. The terrain, sloping towards the archaeological area, evokes green hills, with four green wedges limited by geometric contours in cor-ten, to recall a landscape condition and return the ruins to their original distance from the city. The project is both refined and well rooted in archaeological interpretation, however the aerial walkway emphasises a sort of incommunicability between the two levels.

The square is failing to generate emotional reactions or knowledge on the level of memory, leaving them to the information supports that overwhelm the semantic significance of the architecture and depriving its role. In other words, the project concerns the urban and landscape aspects, superimposed on the archaeological interpretation, but the central pivot of museography is lacking [6].

As far as extra-urban archaeological sites are concerned, the conservation and enhancement requirements usually prevail since there is no need to take into account the complex requirements of urban life, which often overwhelm archaeological interest the chance to carry out more far-reaching interventions.



**Fig. 9:** Villa de Madrid Square, Barcelona (Spain)



**Fig. 10:** Archeological site of Echternach (Luxembourg)

The accessibility of this heritage, both physical and cultural, is nevertheless much more difficult to achieve, because the remains are fragmented and the terrain uneven, and because their silence must be filled with many contents. Archaeologists, who are familiar with histories and hypotheses of such sites, rarely find valid help in a truly museographic design approach: that is, appropriate to protect and preserve them but at the same time to enhance and make them more decodable.

It can be stated that hardly ever an intervention of protection and musealization can also be reversible and non-invasive. In most cases it is a question of reaching an acceptable compromise. The design attitude is also strongly conditioned by the cultural context in which the intervention is carried out: for instance, in the archaeological site of Echternach (a Roman villa in Luxembourg) the communicative intent clearly overcame the purist nature of the archaeological conservation: in particular, the masonry segments have been levelled out and the surfaces have been paved with different colours in order to facilitate the interpretation of the site (fig. 10). In addition, on the basis of a column found *in situ*, hypotheses were made and a small courtyard surrounded by copies of that original surviving piece, which was located in the archaeological museum at a certain distance, was recreated [7].

Of course, the approach of the intervention is also proportionate to the value of the site: from this point of view Franco Minissi's intervention in the Roman villa of Piazza Armerina, in Sicily, still represents a reference of fundamental importance. In the transparent roof the visitor could recognize the ghost of the ruined villa, and he or her finally was able to interpret its external and internal spaces, while the exceptional mosaic floors were actually protected and daylight could illuminate them enhancing their colours. The large complex was certainly impressive, but in a strange way it could not be defined as invasive.



**Fig. 11:** Villa del Casale, Piazza Armerina (Sicily): on the left, the solution of Franco Minissi, evoking the ancient Villa, protecting mosaics, allowing an involving visit; on the right, the current situation, the current situation, following Guido Meli's project

Today, after it has been removed (unfortunately it was in a very poor state of maintenance, and some scholars had pointed out the risk for the mosaics deriving from the greenhouse effect) we can say without fear of being denied that it was the best possible compromise between several requirements: protection and conservation, archaeological interpretation, communication and enhancement of the site (fig. 11).

The intervention that replaced the Minissi work, a rude and opaque container, devoid of any interpretative capacity for the visitor, offers him few and sloppy views and, above all, shockingly fails the protective objective: the huge and invasive (in this case they are) wooden structures that support the vast roof are the ideal shelter for hundreds of pigeons, that daily cover the priceless mosaics with guano.

#### 4. The last contamination: Archaeology, Restoration, Museography and ICT

The potential for further contamination with the field of ICT, in particular with virtual reality, augmented reality and mixed reality, is also rich.

The subject would deserve much more space, but here it is interesting to mention one of the first experiences of "virtual restoration", that is an experimentation carried out within a European project (V-MUST.NET, coordinated by CNR, 2011-2015) [8], in which virtual reality was adopted precisely at the crossroads between the disciplines of restoration, archaeology and museography: starting from an important body of finds preserved in Vatican museums, concerning the Regolini Galassi Etruscan tomb in Cerveteri, whose movable objects are displayed in showcases, the research group has carried out on them a virtual restoration by recreating three-dimensional models representing the same objects in their original state, i.e. perfectly preserved. Without therefore altering the physical object in any way, the visitor could understand it in its integrity. The research further exploited virtual reality to recreate the original context of the objects, that is the Etruscan tomb: by offering the visitor the opportunity to "move" inside the tomb, which was presented to him still intact and without profanation, he could also rediscover all the objects that he had previously observed, from the real world, in the showcases (fig. 12).

In this case the contamination between restoration and archaeology is clear, and as already pointed out, it opens new perspectives also in displaying to the public: due to its nature, the research project did not particularly take care of the museographic aspect, even if the temporary station that had been set aroused the curiosity and interest of visitors. Communication, which as we recall is the main and undeniable mission of the museum, would have required a more integrated project with the other parts of the museum. In fact, often the new technologies in museums seems to be intended as a total substitute for other types and means of communication, sacrificing the relationships between the parts and undermining the physical environment where (it is to be remembered) the visitor's experience takes place.

These technologies are also very effective in reconnecting archaeological sites to objects preserved in museums. The sites deprived of movable objects, for conservation reasons, are silent witnesses of a culture of the past that only thanks to technology can return to shape a unified frame. Furthermore, the mediation of contents through ICT is a means to limit the anthropic impact on the sites (and therefore promoting their conservation) at the same time guaranteeing the fruition even in conditions where the site cannot be visited



Fig. 12: Virtual reality experimentation at Musei Vaticani on an Etruscan tomb (V-MUST.NET European project)

## 5. Conclusions

The different disciplinary objectives of Restoration and Conservation, Archaeology and Museography do not always suggest mutually compatible solutions.

In the last decades many interventions have been carried out in order to find the best compromise between these different instances, but it should be remembered that if Cultural Heritage is not made accessible (in a physical sense but especially in a cultural sense) to everyone, it loses an important part of its value and meaning. So far, interventions on archaeological finds, museums and sites have been increasingly intended as the fruits of interdisciplinary exchanges, but it is probably still too early to mention a proper and veritable *contamination*, which nevertheless could develop its great potential especially from the point of view of the public's experience of archaeological heritage. The importance of making cultural content accessible online is very relevant today, but in order to be meaningful they must be derived from disciplinary contamination.

## Bibliographical References.

- [1] DRESSEL, Henrich. *Corpus Inscriptionum Latinarum*, vol. XV, 2. Berlin: 1899, tab. II
- [2] PALLARÉS, Francisca. *La nave romana di Albenga*, in *Naviga Fundo Emergunt. Mostra di archeologia sottomarina in Liguria* (Genova, 15-24 Ottobre 1983). Albenga: Tipografia F.lli Stalla, 1983, p. 45-55
- [3] DI PUOLO, Maurizio, RANGHI, Anna. *Note sul progetto di exhibition design*, In CAMILLI, Andrea (ed). *Guida all'esposizione. Le navi antiche di Pisa*. Ospedaletto (Pisa): Pacini Editore Srl, 2019, p. 27-29
- [4] CAMILLI, Andrea. *Scelte museali ed esposizione*, In CAMILLI, Andrea (ed). *Guida all'esposizione. Le navi antiche di Pisa*. Ospedaletto (Pisa): Pacini Editore Srl, 2019, p. 25-26
- [5] GABUCCI, Ada, PANTÒ, Gabriella. *Chieri. Archeologia di una città nata da sé stessa. Guida Breve*. Chieri: Mariogros Industrie Grafiche S.r.l., 2009
- [6] BAGNATO, Vincenzo. *Nuovi interventi sul patrimonio archeologico. Un contributo alla definizione di un'etica del paesaggio*, Universidad Politécnica de Cataluña E.T.S.A. de Barcelona. Barcellona 2013
- [7] MINUCCIANI, Valeria, LERMA, Maddalena. *Belgio e Lussemburgo, musealizzazioni fra archeologia romana e medievale*, in RUGGIERI TRICOLI, Maria Clara, *Musei sulle rovine*. Milano: Lybra Immagine 2007
- [8] PESCARIN, Sofia et al.. *Keys to Rome. Roman Culture Virtual Museums*. Roma: Ed. CNR ITABC 2015