ARTICLE

Archaeology and conservation at Herculaneum: from the Maiuri campaign to the Herculaneum Conservation Project

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ABSTRACT

This article looks at two periods in the history of the archaeological site of Herculaneum (Italy) and the role of the archaeologist there. Amedeo Maiuri was in charge of the first major excavation campaign that uncovered the site from 1927 to 1961, but was also responsible for the site’s restoration, presentation and maintenance. Much can be learnt from his approach, particularly with regard to site management – a fixed team of specialists continuously cared for the site – and his creation of what was effectively an open-air museum. The second example looks at the author’s experiences with the Herculaneum Conservation Project, where the emphasis is on conservation interventions rather than excavation, but where the archaeologist has an important role in the conservation team and also has the opportunity to make new archaeological discoveries. The article concludes that the role of the archaeologist must evolve to include a professional responsibility for archaeological heritage that extends beyond its excavation.

INTRODUCTION

The Roman city of Herculaneum, Italy was rediscovered accidentally in 1709 by a farmer digging a well. It has long been considered the birthplace of the discipline of archaeology as it was the location of the first systematic excavations of an archaeological site, which took place from 1738 onwards [1]. In the early 20th century, the limited open-air excavation campaign (as opposed to previous excavations by tunnel) of the 1800s was extended for the first time to include simultaneous conservation and restoration, and was led by archaeologist Amedeo Maiuri. His approach significantly affected the way the site is conserved and how the monument is presented to the visitor today. This article looks at that specific period in the history of the site and examines the role of the archaeologist in conservation at that moment in time and compares it with our experiences today of the role of the archaeologist within a project dedicated primarily to conservation, the Herculaneum Conservation Project.

EXCAVATION AND CONSERVATION IN UNISON: HERCULANEUM AND THE IDEA OF A MUSEUM CITY

One of the most noticeable features of the excavations carried out at Herculaneum by Amedeo Maiuri, between 1927 and 1961, is the way this great archaeologist organised the site works so as to tackle the excavation of about 20m of compact volcanic material from the AD 79 eruption of Mount Vesuvius effectively. Using almost exclusively personnel of the heritage authority, he managed to form a complete team that allowed him to tackle each phase of work, from excavation to restoration, and even the fitting out of the site as a type of museum [2].

At the beginning of this process a team of excavators was involved (on average a group of about 20 workers), assisted by several boys who had the task of transporting baskets of volcanic mud to small railway wagons. These were pulled by mules or horses, and used to dump the excavated material on the nearby shoreline (Figures 1 and 2). This was a perfect system for removing...
hundreds of thousands of cubic metres of mud, which, as Maiuri explicitly stated, would extend the modern town by taking from the sea. In this way he envisaged compensating the local community for those areas that had been taken from the modern town by the authorities to extend the archaeological park. At the same time that the excavations took place, masons, carpenters and restorers worked alongside the excavators. They had the task of propping the structures that were at risk of collapse as they were dug out, then carrying out immediate consolidation and underpinning work including any urgent measures to conserve the decorative features. After this first phase, carpenters, marble-workers and gardeners took care of the more definitive restoration and ‘furnishing’ of the houses with the aim of reopening them to the public. They even went so far as to replant plants and trees in the gardens and to build cases to display objects within the houses. The whole process was remarkably fast and the time taken between the excavation, the restoration and the reopening to the public, did not usually take longer than an average of two years.

This rapid opening of houses to the public, which were displayed in such a way that made Herculaneum almost an open-air museum, was also driven by the need to give immediate accessibility to the results so as to maintain a high profile for Maiuri’s work. It is important to consider that these works were taking place in the context of the 20-year Fascist period which sought to consolidate and celebrate the greatness of imperial Rome. By bringing everyone’s attention to the remarkable discoveries that were happening at Herculaneum, Maiuri guaranteed finances for continuing the excavation. As the houses were reopened to the public, the most important objects found during the excavations were placed on view inside display cases that were built in situ by craftsmen who worked continuously within the site. The exceptional state of conservation of the buildings, due to the way that Herculaneum had been buried, allowed Maiuri to create an almost ideal Roman city with his displays. The houses were conserved in every detail, the furnishings and objects from daily life were put back in place, in a way that went beyond the usual visitor experience of Pompeii [3].

Little by little the city became an open-air museum in which the finds were contextualised – not just artistic objects, but in particular those objects illustrating daily life; examples are the walnuts found in a shop on the Cardo V, and plates with remains of fruit or food (Figure 3). In addition, in order to allow visitors a better view into interior spaces Maiuri chose in many cases not to reconstruct some external walls, floor plates or balconies in their entirety. In this way wall paintings...
The damage caused by extreme temperatures, atmospheric agents, the continuous need to maintain the display cases, and the risk of theft (which was also tied to the development of tourism) led to the archaeological finds gradually being consigned to stores and nearly all the display cases being taken down (such as that seen in Figure 3).

Half a century later, as a major campaign is once again being carried out in the ancient city, this time conservation work by the Herculaneum Conservation Project, this extraordinary legacy of Maiuri cannot be ignored. As strategies are developed to make Herculaneum more legible to visitors, it is important to learn from Maiuri’s campaign, in particular his organisational
method and the presentation of the ancient city to visitors. The meticulous site journals left by Maiuri have meant that this site offers a unique opportunity for fitting-out spaces in a way that remains faithful to their original usage. While it is no longer possible to use the original objects that were found, copies can be made so as to overcome the impression of empty shells that many visitors have of the houses of this ancient city.

Archaeological evidence and visitor presentation issues evidently played an important role in conservation and restoration decision-making in the 1920s–1960s campaign of excavation and restoration. This is worthy of note and undoubtedly reflects not only the political environment of the time but the fact that the campaign was directed by an archaeologist. Comparison with the intense programme of conservation work under way since 2001 as part of the Herculaneum Conservation Project and the particular role the archaeologist and archaeological investigation plays today is of interest; the archaeologist does not head the conservation team but is proving to carry out a role as pivotal and prolific as that of the architect, engineer and conservator-restorer.

THE ROLE OF ARCHAEOLOGISTS AND THEIR CONTRIBUTION TO THE CONSERVATION OF ARCHAEOLOGICAL SITES

In the collective imagination, traditionally the greatest ambition of an archaeologist is to excavate in order to discover new traces of the past, so much so that the two terms almost became the reason and justification for every archaeological activity of note. Apart from being most people’s view of an archaeologist, it is also the major feature of archaeology perceived by young people who want to enter the profession.

Those who undertake professional training to become a ‘fervent’ archaeologist, soon realise that the real aim should be not to excavate in order to discover but to investigate in order to understand. This exposes a fundamental difference in approaches to the past, whereby excavation and discovery are only a part of much broader research activities that require a wide range of investigative approaches. In fact, in most cases the moment when the shovel enters the earth, which can be the most exciting, is only the final step in a research process that uses excavation as the verification of a hypothesis. At the same time, an excavation does not aim simply to discover but also to reconstruct the multiple aspects of life in the past through close observation and interpretation of every detail.

Modern archaeology has by now broken with the tight restrictions of the art-historical approach that led attention to be focused primarily on high-status objects, and has directed research instead towards a comprehensive analysis of ancient societies, in the attempt to understand and reconstruct the structures and superstructures of which they were composed [4].

On this basis, the natural approach for an archaeologist who is about to undertake research on a site is to begin with a desk-based assessment, gaining knowledge from past documentation, maps and discoveries. In addition, understanding of the site is increased by modern (and often non-destructive) scientific techniques, such as geoarchaeological core sampling, aerial photography, ground-penetrating radar, magnetic gradiometry, electrical resistivity surveys, etc., that contribute additional help to understanding the structure and layout of a site.

However, even with this type of methodologically correct approach, the archaeologist’s activity seems to stop at the excavation. The archaeologist, after having undertaken a series of studies and preliminary investigations, excavates a site and, by destroying a palimpsest of layers, uncovers certain levels and structures; the range of information recovered can then be correlated and processed in the quiet of an office or library.

It is only rarely that archaeologists pragmatically face the issue of afterwards, preventively organising a conservation strategy for the archaeology they uncover, so as to guarantee that what they discover is safeguarded, enhanced and made available to the public. Certainly in Italy, the afterwards of an excavation is not appreciated at university level. Many universities teach archaeological theory and methodology, and students can get training in excavation techniques, but they are rarely taught the archaeologist’s responsibility to the ancient remains they have excavated. In fact, it is interesting to note that while archaeological training may include courses in the conservation of finds and structures, it is kept separate from courses in excavation theory and methodology. In this way young archaeologists form the impression that the normal approach to an excavation is made up of a before and an after: First there is the excavation, then, when it is
over and often without the archaeologist, the conservator and the architect can organise the structural restoration. These latter figures are obviously considered to have a subordinate role to that of the archaeologist, and, using instructions often given from afar, they deal with what was excavated.

This is clearly a mistake in judgement. The correct approach should be to not plan a before and after, but to plan a during, in the sense that proper planning for an excavation must include the presence of conservators before and during the excavation. Immediate conservation work can save a notable percentage of plaster, floor, decorative elements and even structural remains that are very often already lost during excavation. The term ‘conservator’ is being used in a broad sense here, to refer not only to specialists who restore decorative surfaces but also to conservation architects for ancient buildings, or engineers who can study the best way to guarantee structural stability and water management. This approach leads to the understanding that the basis for a correct investigative methodology must undoubtedly be the intelligent organisation of the excavation team.

This is one of the key aspects of the Herculaneum Conservation Project where we have tried to encourage a genuine interdisciplinary approach where the daily issues that come up on-site, whether during excavation or conservation, are dealt with by the archaeologist, the conservation architect and the conservator-restorer, and where necessary by the structural engineer, the expert for humidity and water, the chemist and the geologist.

This approach proves advantageous in several ways. The opportunity for an archaeologist to take part in the conservation decision-making process is important, particularly in emergency situations. The archaeologist is usually the person who best knows the site and its peculiarities, and this ability is essential for deciding intervention priorities related to the historical importance or the uniqueness of the find, the decorative feature or structure. The archaeologist can also be useful in pointing out, during the conservation phase, where it is necessary to conserve specific features that are essential for reading a structure correctly, such as blocked windows, joist and scaffold holes, etc. This contribution is even more important when the history of a site is complex, for example in the case of complicated ancient stratigraphy mixed with modern restorations.

Close teamwork of this nature also guarantees future archaeologists an accurate presentation of the monument, ensuring that it retains its original aspect and the component elements that allow it to be understood. This argument is as valid for the exterior form of a monument, as it is for the individual elements of which it is composed. In fact, detailed studies of the building materials, mortars and construction techniques, carried out alongside the conservator-restorers’ and architects’ work on the structures, allow the best, and philologically most correct, structural options to be chosen.

At the same time, notable benefits for the archaeologist may come from conservation work: a conservator-restorer who analyses and works on every centimetre of a surface that needs conserving ends up being aware of construction details that would otherwise be difficult to note. Their work can also improve the understanding of decorative features, even for an archaeologist. For example, if stucco repairs are well done they enhance a decorative scheme, allowing the eye to correctly perceive the entire design, and reducing the visual disturbance that occurs when there are lacunae. Similarly, the challenges the architect raises in replacing timber lintels helps the archaeologist improve analysis of Roman construction techniques [5].

The adoption of this approach of co-responsibility in conservation work at Herculaneum has also led to more direct benefits for the advance of archaeological knowledge. A wide range of studies on water collection and disposal issues and the potential reuse of the original drainage system (made up of sewers and drainage channels) have required the archaeologist and the expert for humidity and water to work closely together. This collaboration has led to a substantial increase in our understanding of the ancient city and even a number of archaeological ‘discoveries’. Large sections of the Roman sewer system had to be cleared out and the organic waste that had been deposited in the sewers had to be mapped and removed. This opportunity to study the city ‘from below’ also allowed a whole series of building phases of the domus above to be confirmed, simply by studying the position, the dimension and the construction technique of their waste outlets [6].

In addition, the stratigraphic excavation of deposits made up of organic remains and kitchen waste in the
Insula Orientalis II sewer (Figure 6), has allowed important information to be gained on the diet of ancient Herculaneum’s population. Their removal has also allowed this key structure to be brought back into use, which will be fundamental for the channelling of modern water from all over the eastern part of the site (Figure 7).

The occasional test trench dug for specific technical checks has also been a source of interest: an example is the one carried out at the foot of the southern wing of the House of the Telephus Relief, in advance of works to construct protective roofing there [7]. This extraordinary building still stands to a height of more than 15m over the ancient shoreline, and the weight that the new roof would add rightly concerned the structural engineer, who asked for a small archaeological trench to be dug in order to check the depth of the foundations.

After the first centimetres of excavation we realised, with some surprise, that what was being uncovered were not the foundations but another arched opening. This was covered with the same fine white plaster as the façade, while the material blocking the arch had been left undecorated. Instead, in a couple of places it seemed that the plaster curved in under the small tuff blocks to show that the arch had at one point been open and only later blocked in. Slowly, as the excavation progressed, we realised that we were digging a thick ancient backfill layer made up of sand mixed with pieces of tuff, fragments of bricks and ceramics. The trench went down for more than 5m until it reached the threshold of what turned out to be another level of the structure that had been deliberately filled in by the Romans in the mid 1st century AD (Figures 8 and 9).

This minor excavation carried out for a simple structural evaluation not only provided important archaeological knowledge but also delivered important data for the geological reconstruction of the ancient coastline of Herculaneum. This new information in fact has become determining evidence for our geologists to demonstrate, for the first time, the existence of bradyseism along Herculaneum’s coast before the eruption of AD 79, which can probably be linked to Vesuvius’s first movements after a long dormant period [8].

Of course, this multi-disciplinary way of working might appear to clash with economic reality, given that...
A team made up of both excavation and conservation professionals that is available both during excavation and later during the post-excavation phase undeniably incurs a high price in the short term even if it pays off in the long term. But this simply underlines further the need for good planning before undertaking any new excavations. In fact, the position of some archaeologists seems perfectly understandable when they question whether it is right to continue to excavate within the great archaeological sites [9], when that which has been excavated in previous decades has only been partially studied, and has been ruined by the haste to uncover large areas without suitable planning for their conservation [10, 11]. Indeed, there have been cases in the past where the complexity of archaeological features exposed at some sites was such that it became impossible for them to be properly studied and published by the archaeologist who directed the excavations.

These situations often arise in periods of history linked to fervent nationalism, which has led to resources being poured into archaeology with the aim of glorifying past greatnesses, as in the example of Fascist Italy noted above [12, 13]. Similar situations have also occurred in different political moments, such as Italy immediately after World War II, when to bring a halt
to rising unemployment large archaeological areas were dug without adequate supervision or accurate documentation [14]. An emblematic case is the extremely important site of Paestum, where after the war the Southern Italy Development Fund employed dozens and dozens of workers in the excavation of the ancient city, rediscovering many structures that were often only partially excavated and left without sufficient conservation interventions and without being published [15, 16].

Interestingly, the validity of an interdisciplinary approach as a remedy to damage done in over-ambitious excavation campaigns followed by a period of neglect, can be seen at Paestum itself. Since the 1980s an Italian–French team at Paestum, led by Emanuele Greco (archaeologist) and Dinu Theodorescu (architect), has demonstrated how with cleaning and re-systemising works, along with small archaeological test trenches, it is possible to study and publish the ancient city’s buildings, which had already been uncovered for decades, but which had never had a proper interpretation or publication [17]. The next essential step on from their important experience, is to include the figure of the conservator-restorer alongside the archaeologist and the architect, because when we expose a monument after years of burial we assume the responsibility of studying it and understanding it, but we also take on the responsibility of conserving all of it and making it accessible to all.

Any new campaign in Herculaneum faces difficult challenges, not just because of the archaeological merit of the Roman city itself, but also because of the difficult responsibility any project team shoulder as successors to a conservation campaign that has taken its place in the conservation history books. The project that David W. Packard, Andrew Wallace-Hadrill and Pier Giovanni Guzzo launched in 2001 has embraced from the outset the importance of improving knowledge of the monument itself and its artefacts as a positive part of the conservation process [18]. This has placed the archaeologist on an equal footing with other members of the conservation team, and has placed the project in a strong position to encourage conservation specialists to take the archaeologist’s contribution to conservation decision-making more seriously [19]. In turn, this challenges the way archaeologists think about conservation, demonstrating that the archaeological profession must evolve to include a responsibility for archaeological heritage that extends beyond its excavation. However, this approach is not only about professional obligations to protect heritage – the most important ‘discovery’ is perhaps that an archaeologist working in conservation can gain new types of archaeological information that would not necessarily be gained from a traditional excavation campaign alone.

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3. For Maiuri’s restoration work at Pompeii, see for example, Maiuri, A. Pompei: restauri ai monumenti (1929–1930). Bollettino d’arte 2 (12) (1931).

4. As Guzzo has put it so well, there is a ‘need . . . to try and understand the general framework in which we find material, archaeological data, how it is structured, and why. If there is no attempt to link these finds to events and place these functions in context (not only materially, but also with regard to superstructure), we limit ourselves to having a series of finds – whether they are beautiful or ugly is of little importance – whose historical importance escapes us [esigenza . . . di cercare di capire come si configura, e perché, il quadro generale all’interno del quale recuperiamo dati materiali, archeologici. Se non si tenta di riportare questi ritrovamenti ad eventi e funzioni non solo materiali, ma anche di sovrastruttura, ci limitiamo ad avere una serie di ritrovamenti, che siano belli o brutti poco importa, il cui significato storico ci sfugge].’ Guzzo, P.G. Osservazioni sull’ ‘impero’ di Sibiri. Quaderni di Ostraka I (2001) 77.


9. For example, the Herculaneum Conservation Project’s director when discussing future excavation at Herculaneum noted that: ‘A mantle of over 20 metres of volcanic material protects the Villa of the Papyri from any future volcanic damage more effectively than any shelter man could design.’ See, Wallace-Hadrill, A. The Villa of the Papyri: search for it now or leave it safe for future generations? The Art Newspaper 156 (2005) 28.


Archéologie et conservation à Herculanum: de la campagne de Maiuri au Projet de Conservation Herculanum

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RÉSUMÉ

Cet article considère deux périodes dans l’histoire des recherches sur le site archéologique d’Herculaneum (Italie) et des rôles joués par les archéologues. Dans l’une de ces périodes, Amedeo Maiuri était en charge de la première grande campagne de fouilles qui a permis la mise à jour du site entre 1927 et 1961, et il était également responsable pour la restauration, la présentation et l’entretien du site. Il y a beaucoup à apprendre de cette approche, en particulier en ce qui concerne la gestion du site – une équipe permanente de spécialistes prenait soin du site en continuation – et au sujet de la signification du musée à l’air libre qu’il a créé. La seconde période correspond à l’actuel Projet de Conservation Herculanum, au sein duquel l’emphase est sur la conservation et non pas sur la fouille, mais où l’archéologue joue un rôle important au sein de l’équipe de conservation, avec la possibilité d’effectuer de nouvelles découvertes archéologiques. Cet article conclue sur le fait que le rôle de l’archéologue doit évoluer afin d’inclure une responsabilité professionnelle pour le patrimoine archéologique qui s’étend au-delà de la fouille.

Arqueología y conservación en Herculano: de la campaña de Maiuri al Proyecto de Conservación Herculanum

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RESUMEN

Este artículo considera dos periodos de la historia de la investigación en el sitio arqueológico de Herculano (Italia), y de los papeles que en ellos jugaron los arqueólogos. En uno de esos periodos, Amedeo Maiuri se encontraba a cargo de la primera gran campaña de excavación que permitió exponer el sitio entre 1927 y 1961; Maiuri era igualmente el responsable de la restauración, la presentación y el mantenimiento del sitio. Se puede aprender mucho de este acercamiento, en particular en relación con el manejo del sitio – existía un equipo permanente de especialistas para el cuidado continuo del sitio – y sobre el significado del museo al aire libre que Maiuri creó. El segundo periodo corresponde al actual Proyecto de Conservación Herculano, en el cual el énfasis se encuentra en la conservación y no en la excavación; sin embargo, dentro de este proyecto el papel que juega el arqueólogo es importante, con la posibilidad de realizar nuevos descubrimientos arqueológicos. Este artículo concluye con la convicción que el papel del arqueólogo debe evolucionar, para incluir una responsabilidad profesional hacia el patrimonio arqueológico que se extiende más allá de la excavación.