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## Excavation and conservation at Pompeii: a conflicted history<sup>1</sup>

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Abstract: The discovery of Pompeii, even more than that of Herculaneum, presented the Neapolitan antiquarians and the Bourbon Court, already engaged in financing the first exploits in archaeology of the young Kingdom of Naples, with an entirely new set of problems, new even compared to an Italian tradition of the excavation of antiquities by now several centuries old, particularly in Rome and its neighborhood, as at Hadrian's villa at Tivoli. There is no doubt, in the light of its history that the conservation of Pompeii is a problem of such a size and from such ancient roots as to require, beside such specific interventions, long-term structural solutions.

The discovery of Pompeii,<sup>2</sup> even more than that of Herculaneum,<sup>3</sup> presented the Neapolitan antiquarians and the Bourbon Court, already engaged in financing the first exploits in archaeology of the young Kingdom of Naples, with an entirely new set of problems, new even compared to an Italian tradition of the excavation of antiquities by now several centuries old, particularly in Rome and its neighborhood, as at Hadrian's villa at Tivoli.

The depth of the ruins and their wonderful preservation suggested that rather than expose them, as at Rome, they should follow the example of the Herculaneum excavations, using shafts and tunnels to mine the ruins, a method used three decades before by the prince d'Elboeuf,<sup>4</sup> and more recently by the Spanish military engineer Rogue de Alcubierre.5Niccolò Marcello Venuti, the librarian of the King and a fine antiquarian, argued for exposure of the ruins, at Herculaneum as well: "I would have wished – he reminded his friend Anton Francesco Gori in April 1748 - that all that beautiful Theater could be excavated in apricum [in the open air]...; I also craved for digging to start from the seaside, but I had no such authority to work in my way." Only an open air excavation would give the actual view of the ancient city re-emerging (fig. 1), the feature that was the most fascinating for many scholars. Thus, among the first to visit the excavations, in 1739, the French President Charles de Brosses wrote to the great



Fig. 1 - A fantasy picture of the discovery of Herculaneum at open air.

<sup>1.</sup> This text is the translated, updated and expanded version of DE Caro 2014.

<sup>2.</sup> For the last survey of the enormous literature on the ancient city see GARCIA Y GARCIA 1998. See now also the ongoing project for a Pompeian literature online: www.pompeiana.org. A short history of the Pompeian excavations, in Zevi 1981. See also De Caro 1995. The majority of the documents on the history of the excavations of the Bourbons period were collected by Fiorelli 1860-64; see also PAGANO 1997.

<sup>3.</sup> Ercolano 1991.

<sup>4.</sup> PAGANO 1993.

<sup>5.</sup> cfr. Strazzullo 1982; Murga 1964.

naturalist Leclerc de Buffon:<sup>6</sup> "there is nothing in the world more singular, than to have found an entire city under the earth." Even more visionary was Scipione Maffei in 1747, when he wrote: "O what a great fortune of our times it is that there was discovered not one or another single ancient monument, but a whole city! [...] It would be desirable above all, that they decide to work from above, lifting, and carrying away that mountain of ash [...] An enormous undertaking indeed, but a little one for a powerful king and provided with heroic spirit as he is [...] in this way, we will revive the dead city, which, after a thousand and seven hundred years, will see the sun again [...] To the greatest benefit of the country, all the men of learning of Europe will flock to Naples [...] Proceeding in blind and narrow tunnels, much will be inevitably spoiled and destroyed, neither will you ever see a noble building in its entirety nor its elevations, nor you will know how and where the many statues. and the other ornaments were situated [...] It will be also inevitable to cut many objects into pieces, in order to remove them from their places and carry them away. So much has happened to many painted walls [...]. On the contrary, clearing and leaving everything in its place, the whole city would be an incomparable Museum."<sup>7</sup> In 1750 Maffei applied the same ideas to Pompeii, saying to one of is Neapolitan guests, that "if these discoveries, really rare and amazing as they are, were not covered again, [even] in his already decrepit and dilapidated age, he would put himself in a litter to have the pleasure, before dying, of seeing these miraculous remains, uncorrupted, and authentic, of noble antiquity."

But most of the antiquarians, Italians and foreigners, supported the opposite option, considering the huge mass of volcanic material that should have to be removed, the presence of the modern town of Resina above the ancient city, elements that made any open air excavation too expensive. So Gabriel Richard (1748) stated: *"only an extreme love for antiquity could inspire a similar idea... "<sup>8</sup>* and Winckelmann himself thought that the idea was quite silly, writing to the Count of Bruhl *"but about the unveiling of the entire city, I would invite those who wish for this to reflect, that since the houses were crushed by the enormous weight of the lava, you would not see anything but the ruined walls ... and what advantage? What to see old ruined walls ... just to satisfy the ill-timed curiosity of few".<sup>9</sup>* 

Thus the decision was made to continue mining Herculaneum through tunnels (fig. 2) that now followed,

now pierced the walls, looking for paintings, statues and other ornaments to be exhibited in the new Museum Herculanense that the King had established in his new Royal Palace on the seaside of Portici.<sup>10</sup> This method aimed at the excavation of objects to collect, without too much regard for the structures from which they were extracted; and as was traditional in all the excavations for antiquities since the Renaissance, this was also applied in the first phase to the excavations of Pompeii, which started, as we known, in 1748.11 Here on the hill of the "Civita" the situation was more favorable than at Herculaneum, with open countryside rather than modern settlements above it, and with the ruins buried by a much thinner and finer volcanic materials. Thus the excavations were much easier and it was possible to carry out an open-air excavation, even though the cost of expropriating the land was still a consideration. To avoid this cost for

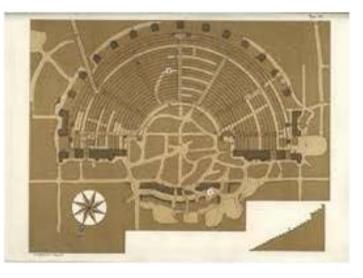


Fig. 2 - The tunnels of the excavations of the Theater of Herculaneum

<sup>6.</sup> DE BROSSES 1973, ON 30 NOVEMBER 1739.

<sup>7.</sup> ZEVI 1980: 61; MAFFEI 1748: 33-36.

<sup>8.</sup> ARCHITETTI FRANCESI 1981: 22

<sup>9.</sup> Letter to the Earl of Bruhl, Winckelmann 1960; see also Architetti Francesi 1981: 22. On Winckelmann and Pompeii, cfr. Kunze 1982. 10. Zevi 1988: 20-21; Allrogen-Bedel and Kammerer Grothaus 1983: 83-128; Cantilena Porzio 2008; d'Alconzo 2009.

<sup>11.</sup> Evidences of excavations before 1748 were already quoted by FIORELLI 1860-64, II, 1862: 15 ss. On some of them: DE CARO AND D'AMBROSIO 1987.

a few years the diggers proceeded in the usual way, renting only the areas they intended to explore for the time of the excavations. After recovering the ancient objects and emptying the buildings of whatever was considered interesting, the ruins were reburied and the land returned to the owners. From the 23rd of March 1748 onward this happened in the Amphitheater, in the so-called Villa of Cicero, in the house of Julia Felix,<sup>12</sup> in shop V.1.32. Excavators jhopped around from site to site, without any clear strategy, in search of possible precious artifacts. Apart from some objects of great value, such as the mosaic *emblemata* by *Dioskourides* or the painted figurines of dancing Maenads and Satyrs that thrilled Winckelmann (who described them as "*light as Thought and beautiful as if from the hands of Graces*"- *flüchtig wie ein Gedanke, und schön, wie von der Hand der Gratien*),<sup>13</sup> in these early years Pompeii repaid the investment with few works of art comparable to the extraordinary wealth of sculptures and paintings discovered in Herculaneum,<sup>14</sup> and this disappointment led the excavators to stop the undertaking after two years. The break lasted a good five years, during which digging moved, in search of a better luck, to Gragnano and the villas of *Stabiae*, equally despoiled and reburied, while diggers continuing to rummage through Herculaneum in underground tunnels.

Finally the decision was made - and this time definitively - to go back to Pompeii, starting in 1754 at the Herculaneum Gate, and encouraged by the discovery (1763) of the first inscription that explicitly confirmed that the city they were digging was really the famous Pompeii cited by the texts. From 1763 onwards the excavators finally began to leave the excavated buildings uncovered. The same method of excavation was meanwhile improved, thanks to the contribution of new technicians who had joined the Spanish military engineers, as the French Pierre Bardet<sup>15</sup> and the Swiss Karl Weber, praised by Winckelmann for his "*clever principles.*"<sup>6</sup> A debate between Weber and the restorer Paderni is a good example of the different points of view of those who aimed to detect and study the ancient buildings and those who still cared only for the artifacts.<sup>17</sup> So Paderni writes in 1761: "*[Weber] is stubborn in mapping… [Herculaneum], Pompeii and Stabiae, claiming through his Swiss reasons these maps to be more necessary and to have more relevance than any monuments or artifacts that you could find… "<sup>18</sup>* 

The opposition between the two points of view was stark, all the more so in that now, left in sight and stripped of their decorations and their furnishings, the ancient structures of Pompeii appeared just as ordinary masonry,<sup>19</sup> covered with painted plaster which soon discoloured, so far from that idea of the "*incomparable Museum*" that Maffei had envisioned. And their excavation was a task so different from "*the glorious restoration*" of the ancient monuments that in 1751 Pancrazi had celebrated in the frontispiece of his "*Antiquities of Sicily*" and as one of the special virtues of King Charles,<sup>20</sup> not by chance portrayed with the digging tools at his feet on the "*Prodromi*" of the "*Antichità di Ercolano*". In contrast to the structures, the artifacts extracted from the excavations and entrusted to the Museum restorers exercised a safe and durable fascination. The restoration technique of the paintings had become impeccable: the paintings were cut and mounted on slate supports, according to the method of detachment widely practiced in Rome, where most recently, in 1721, Francis

20. ZEVI i 1988: 13; ALLROGGEN-BEDEL 1991.

<sup>12.</sup> PARSLOW 1988.

<sup>13.</sup> ALLROGGEN-BEDEL 1990.

<sup>14.</sup> One of the few remarkable statues found in these early excavations was the so called Archaizing Diana from the House VII, 6, 3. The history of these excavations has been reconstructed by DEL CARMEN ALONSO -. LUZÓN 2015.

<sup>15.</sup> ZEVI 1980: 61.

<sup>16.</sup> PARSLOW 1991.

<sup>17.</sup> Strazzullo 1982; de Vos 1991.

<sup>18.</sup> Fonti documentarie, 1979: 88. In a letter on 12 August 1760 Tanucci wrote to the King Charles III that Paderni disagreed with Weber saying that the latter kept busy the workers to draw his imaginary plans and hindered to get the desired fruit from the excavations "Veber discorda da Paderni, e questo dice, che il gusto di Veber in far piante immaginarie occupa la gente e impedisce il frutto dell'escavazioni" (DE Vos 1991: 111, note 15). Nevertheless we should remember that in 1740 it had been just Paderni to request that the situation of the excavated sites "*la situazione dei luoghi*" be carefully surveyed (DE Vos 1991: 104).

<sup>19.</sup> The judgment on the Pompeian architecture had soon become severe; particularly it was compared with the monuments of Rome. Thus Goethe in his diary on 11 March 1787 complained that the houses of Pompeii looked more like maquettes and dolls houses than to real buildings "*mehr Modell und Puppenschrank als Gebäude*». And Charles A. Amaury- Duval would observe in 1829 that "*in Pompeii, everything is nice, but nothing is beautiful; there are often some taste, grace, never grandeur or majesty… others are amazed by the pleasantness, the decor, the comfort of every house, by the beauty and the splendor of the paintings after 17 centuries, by the solidity of the construction, and especially by their elegance in a city which is yet so small. They are full of enthusiastic admiration, and find that the most modest work of the ancients is, in comparison, a reason for us to blush and to recognize our inferiority. I would be tempted to side with these last ones" (ARCHITETTI FRANCESI 1981: 87, 89, transl. Author).* 

I Farnese had the frescoes from the Domus Transitoria on the Palatine hill detached. The most brilliant example of this technique in Pompeii was the detachment in 1755, carried out by Joseph Canart,<sup>21</sup> of the entire wall of the *tablinum* from the *praedia* of Julia Felix (**fig. 3**), an exploit then repeated at a distance of about a century, with the detachment of the whole mosaic of Alexander in the House of the Faun.<sup>22</sup> The problem of the



Fig, 3 - The wall of the tablinum of the praedia of Julia Felix, detached as a single piece in 1755.

protection of the painted surfaces was also quickly resolved with the adoption in 1750 of a varnish invented by the Special Artillery Commissioner Stefano Mariconi,<sup>23</sup> based on a mixture of beeswax in an alcohol solution that has proved so far to be effective in keeping intact the colors of the vast majority of detached frescoes.<sup>24</sup> But the true problem was the number. Just as it would be impossible for the few available restorers to cope with the restoration of the mass of materials that were taken in the excavations – to the point that it was even decided to melt the "*useless*" fragments of bronze objects<sup>25</sup> - so even more unthinkable seemed the conservation of the most part, in quantitative terms, of painted plasters and floors left *in situ*. Rather, the fear that by bribing some guards or workers some collectors could get hold of some fragment of ancient painting left *in situ* led to the decision (20 April, 1761) to destroy with picks "*useless ancient colored plasters*", i.e. the paintings not reputed

<sup>21.</sup> On Canart, STRAZZULLO 1982: 243. It was Paderni who requested and obtained that Canart detached the entire wall (DE Vos 1991: 112).

<sup>22.</sup> MELILLO S.d.

<sup>23.</sup> CANTILENA 1992; D'ALCONZO 2002.

<sup>24.</sup> On the problem of the restoration of the paintings and sculptures ZEVI 1980: 59; ZEVI 1988: 22-25.

<sup>25.</sup> The scandalous event was the treatment of the quadriga found in the theater of Herculaneum. Its metal – according the Winckelmann's accusation in his letter to the Earl of Brühl – had been used for casting, in addition to two big portraits of the King and of the Queen, the famous "Mazzocchi" Horse, that was in the truth a patchwork of pieces from many different statues and painted gypsum. The defense on behalf of the members of the Royal Herculaneum Academy was written by Ferdinando Galiani and by the Director of the Royal Museum of Capodimonte, Mattia Zarrillo: *Giudizio dell'abate Winckelmann intorno alle scoperte di Ercolano contenuto in una lettera ad un amico, libretto anonimo stesa da F. Galiani e M. Zarrilli*, Napoli 1765.

worthy of the royal collections. We must nevertheless remember that in the face of the wave of criticism that such barbarity raised, this order was soon revoked by the royal edict of 12 November 1763.<sup>26</sup> But in general they were satisfied just to patch up the walls to avoid their collapse, to restore the wooden lintels in the rooms to support the overlaying masonry, to fix the plaster with metal clamps, at most, to cover the top of the walls, straightened by horizontal cuts, with sloping tiles to prevent the rain infiltration. These proceedings proved completely insufficient for paintings left in place, and their rapid degradation troubled the visitors accustomed to appreciate their shining colors as soon as they emerged from the soil. In 1782 the Swedish Admiral and Earl Carl August Ehrensvärd writing to his friend Louis Masreliez after a visit in Pompeii recalled having seen the "terrible spectacle" of the pavements in mosaic and of the wall paintings destroyed by the frost.<sup>27</sup> A few years later, in 1786, the Polish Prince Stanislaus Poniatowski, nephew of the last Polish King Stanislaus II, noted: "I found - - that the paintings of this lovely building [the Temple of Isis], as well as all the others, had suffered since 1765 when I was here, in such a manner that they are almost unrecognizable. The scant care they have for the maintenance of these buildings makes it possibly a good thing for the Arts that excavations are so slow and that many buildings that were brought to light have been reburied."28 An early example of a temporary shelter is a wooden structure with a thatched roof (the so called "lupinati" quoted by the reports of the Soprastanti),<sup>29</sup> erected on the temple of Isis and known from a Desprez's drawing<sup>30</sup> and a Philipp Hackert painting (fig. 4),<sup>31</sup> but these were a kind of protection not only rarely adopted, but also absolutely unstable and

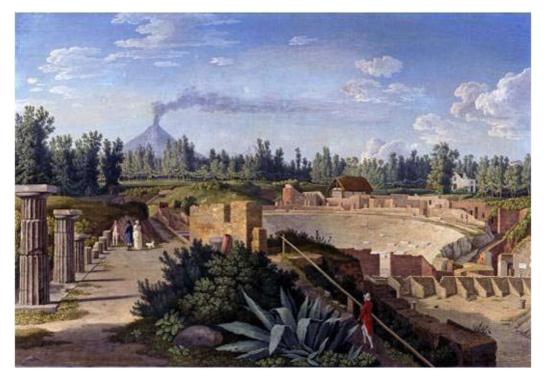


Fig. 4 - The straw shelter over the temple of Isis, Ph. Hackert 1793.

30. LOUIS-JEAN DESPREZ, *Isis Temple in Pompeii*, Nationalmuseum Stockholm, in POMPEI E L'EUROPA 1748-1943:18 and 67, Cat. N. 1.12 a. 31. Cfr. *View of the Great Theater of Pompeii* (1793), gouache on pen, Klassik Stiftung Weimar, Graphische Sammlungen (Stolzenburg *et al.* 2008: 309).

<sup>26.</sup> ZEVI 1980: 58.

<sup>27.</sup> OLAUSSON 2015: 56 and note 9.

<sup>28.</sup> BILINSKI 1982.

<sup>29.</sup> From 1765 the Minister Tanucci ordered La Vega to provide some protection to the paintings "which should remain in the temple of *Isis*". And La Vega answered that he would "build for the paintings in the portico a shelter of the same kind that I believe should be done for the temple, but with a lighter wooden structure and with a cover of straw instead of brick tiles, as it is usual for the huts" ("un coperto.. della stessa forma che stimo doversi fare il tetto, solo con la differenza di farlo di legno più leggiero e di mettervi invece di tegole delle stoppie, come si sogliono fare le capanne": STRAZZULLO 1982 B: 266-267. The pictures of Desprez and Hackert show that finally also the shelter on the temple remained covered by straw.

inadequate, a sign that the battle for the preservation of the paintings *in situ* was intended to be completely lost, at least until the decision, at the end of the following century, to install more effective shelters or to rebuild the ancient roofs.

In the end, from the very beginning, the Bourbon excavators had resigned themselves, even without explicitly saying so, to the slow, inevitable loss of the decorations left in place, believing that the only possible protection, the one that would ensure the perpetual preservation of what was dug, was graphic documentation and subsequent publication in the "*Antichità di Ercolano*". The care for this activity was absolute, with accurate survey and measurements, carried out by skilled draftsman before the detachment of the selected panels (e.g., in the temple of Isis (fig. 5)), a quality of documentation that still made it possible to reconstruct in a model the original state of the decoration about two and a half a century after the excavations.<sup>32</sup>

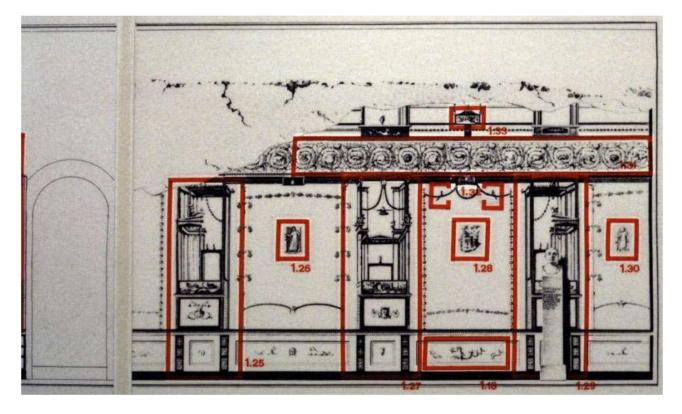


Fig. 5. A drawing of the wall paintings with the indication of the panels removed to the Naples Museum.

There was, however, a basic reason for this resignation, namely the endemic shortage of financial resources. The cost of the excavations in fact fell, like that of all the other Royal Sites, on the budget of the Royal Household, as the King was the private owner both of the excavations and of the museum. Despite the regime of absolute monarchy, it was impossible for the King to spend much more even though it exposed him to sometimes fierce criticism from his guests, as happened during the visit of the Archduke and Holy Roman Emperor Joseph II of Austria to his brother-in-love, the King of Naples Ferdinand IV. The two sovereigns visited Pompeii on April 6<sup>th</sup>, 1769 accompanied by the Queen Maria Carolina, the Austrian Ambassador Count Kaunitz, the English Ambassador William Hamilton,<sup>33</sup> and provided of the learned guide of the antiquarian-adventurer Pierre d'Hancarville. "*Their Majesties came in the first place to the Quarter* [the so-called Gladiators Barracks, the *porticus post scaenam* behind the Theater NdT], and they wanted to examine all its parts with attention [...] The Austrian Sovereign observed with pleasure the building, but regretted that they had not also removed the

<sup>32.</sup> For the use of models to document ancient architecture among the travelers of the Grand Tour, and a a model in cork of the same complex executed in 1785 by G. Altieri for the King of Sweden, see Kockel 2015, and fig. 275. 33. cfr. KNIGHT 1990; JENKINS 1996.

earth covering the middle of the courtyard. From this place their Majesties went to the West in a house where ... as by a previous order of H.E. the Marquis Tanucci the number of workmen had been increased a few days since,... they watched with pleasure the digging, and after a short time a bronze vase emerged [and many others things]. [The Emperor] congratulated the King for having made this day such a good hunt... then he asked La Vega how many workmen were employed in that work, and having learned that they were 30, he said to the King, how he could allow that such a work go so feebly. And when he was answered that little by little everything would be done, the Emperor added, that there was not in Europe, in Asia, in Africa and in America a similar thing, and that this was a very special honor to the Kingdom; then he asked the King about who was in charge of these antiquities, and he was told it was the Marquis Tanucci. Her Majesty the Queen showed the same displeasure, and together they urged the King to put more labour into this work ...<sup>"34</sup> This was not a job for 30 workers, but "a work to employ three thousand men": such was the severe final judgment of the young Archduke. Some years afterwards the King of Sweden, Gustav III, visiting Pompeii on 12 February 1784, was also disappointed by the slowness of the excavations.<sup>35</sup>

The idea of digging the whole of the city quickly was not only held by Emperors and Kings but was also shared by many travelers, like the Englishman John Moore (in Naples in 1770-75), who criticized the Bourbon court for their lack of strategy, "they dig only to chase treasures. If the attention of the King was less sensitive to precious artifacts, the city [Pompeii] would be now completely unearthed. The beggars of Naples could accomplish the work in a year's time".<sup>36</sup>.

This criticism about the slowness of the excavations did not take into account either the foreseeable impossibility of conserving the city, especially if excavated in such hurry, or the poverty of the Kingdom (beyond the misleading opulence of the Royal palaces like Caserta or Capodimonte). The Prime Minister, Marquis Tanucci, while appreciating antiquity as a well educated man, was fully aware of the limited resources in Naples. So when the Ambassador of Naples in Paris Ferdinando Galiani informed him of the French criticism of the slow pace of the publications of the antiquities discovered, he replied: "... we [Neapolitans are poor, and we can't follow in their footsteps a rich Nation (the French) until we bleed ourselves dry [just to satisfy their wish for more copies of the Antiquities]."<sup>37</sup> For the same economic reasons it was decided to employ children in the excavations alongside adult workers and Tunisian slaves: on October 29, 1763, in view of the excavation of the Herculaneum Gate, the order was given "to choose, in addition to the workers of the excavation of Pompeii, fifteen children paid one carlino a day." Soon they would be joined by women, to the delight of the picturesque sensibilities of foreign painters. But even the workers of Pompeii, complain that they are, in Torre Annunziata, in dire need from hunger, as they cannot have bread, rarely paying four grana the eight-ounce piece..."

Despite these difficulties, however, the excavations were no longer just a King's whim. The antiquities around Vesuvius had become an obligatory stop on the Grand Tourparticularly since the Museum of Portici was picked out by such famous travelers as Goethe in his "*Journey in Italy*" (he was in Naples in 1787) as "*the alpha and omega of all collections of antiquities*"<sup>38</sup> and Vesuvius started to be studied by amateur scientists like William Hamilton or depicted by specialized painters such as Pierre Volaire, . This indisputable international prestige was not accompanied, however, by a real consensus of Neapolitan society, not only of the largely illiterate populace, but also of those same educated and enlightened people who hoped for deep reforms capable of raising the Southern population from misery and who saw in the archaeological excavations a strategy of the Court to deter foreign visitors from understanding the most urgent problems of the Kingdom<sup>39</sup>. Thus Ferdinando Galiani wrote in a letter to the physician Antonio Cocchi "*The ultramontane*"

<sup>34.</sup> FIORELLI 1860-64, under the date.

<sup>35.</sup> OLAUSSON 2015: 56 reports a passage of the letter of the King to the Earl G. P. Creutz "the day before yesterday I was in Pompeii. There is nothing more fascinating than this discovery and it's really sad that they do not work with a greater ardor". And, writing to his sister: "I regret that the excavations of these interesting and unique memories are not yet completed."

<sup>36.</sup> FINO 1988: 20, note 10.

<sup>37.</sup> Ajello 1988: 55.

<sup>38.</sup> J.W. Goethe, Italienische Reise, Goethes Werke, Hamburger Ausgabe,. E. Trunz (ed.), 2. Aufl. Hamburg 1961, vol. 11,: 198; http:// nemet.ektf.hu/files/konyvek/goethe\_italienische\_reise.pdf. In the 70ies of the XVIII century Henry Swinburne described with admired words the richness of this new collection in his Travels in the Two Sicilies: *"lamps in endless variety, vases and basins of noble dimensions, chandeliers of the most beautiful shape…*" (TREVELYAN 1977: 63).

[the Northern visitors] - come into a city whose government, characters and political system are the only things worthy of study, and well, they do nothing but go to see four bricks and marbles in Pozzuoli and Portici, four burned stones on Vesuvius and the Solfatara; they spend one day in S. Martino, a night at the theater, and in eight days they have hurried through everything. Come then, my dear Cocchi, to see this country in the way it should rightly be seen. You, who have an healthy intellect, you will find pleasure finding the hidden causes of many strange phenomena, and you will not feel harassed if the stones of Herculaneum miss a distinguished interpreter and the cinerary urns of the tombs of the Nonii are so broken as to be eternally wept for as lost. I write this because I begin to be tired of the complaints of the learned travelers... "

The idea of digging all the ancient city as fast as possible remained in the background in the French period as well<sup>40</sup>. Apart from the rushed excavations carried out by General Championnet at the time of the ephemeral Neapolitan Republic in 1799<sup>41</sup>, the second Herculaneum Academy (1787) tried to rationalize the excavation work with powerful earthworks to complete the large buildings left half -filled, such as the Theater (1792-93) or the Odeion (1793-1795) and they went so far as to experiment with explosives in areas free from structures in order to dig faster.<sup>42</sup> At the request of the new King Joseph Bonaparte, the Chief Superintendent of the Royal Museum and of the excavations of the Kingdom, Michele Arditi,<sup>43</sup> prepared a new plan of Pompeii with a large project of expropriation and a resumption of excavations on the via Consulares and the Street of tombs. To remove the earth from the excavations, they decided to use, instead of wheelbarrows, whose maintenance was expensive, a chain of buckets operated by children,<sup>44</sup> who, in addition to their low cost, in this way would be removed from idleness and could harden "*their limbs to fatigue to gradually become useful farmers for the countryside, and able to defend the fatherland*". But once again, the funds allocated were not sufficient to

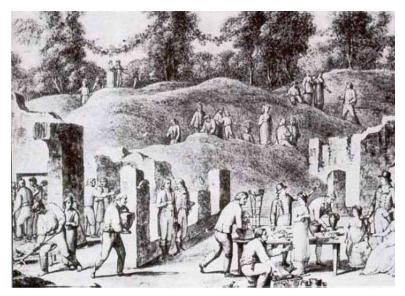


Fig. 6. An excavations in Pompeii at the presence of the Queen Caroline Bonaparte Murat.

the project: "the work continues – states a record on February 10, 1808 - but the workers are missing, unable to exist without weekly wages, nor do I have the courage to force them." At the end of the reign of Joseph Bonaparte (1808), only the houses of Sallustius, of Apollo and that of Baker had been dug.

The new royal couple, Joachim Murat and his wife Caroline Bonaparte, addressed the theme of Pompeii with the urge to show in this field too the benefits of the *"French system"*. It was above all Caroline's "anticomania" (she will be mocked as *"the Queen of Pompeii"* by the pro-Bourbons), that had a decisive influence (**fig. 6**).<sup>45</sup> Thanks to substantial new funding for the excavations, from 1809 on a hundred workers dug there, with the intention, explicitly declared by the rulers in a visit on October 3, 1809,

42. L. Martorelli, in POMPEI 1748-1980: 44.

43. On this figure see TAGLIALATELA 1995.

45. DE CARO 1998; IROLLO 2012.

<sup>40.</sup> On this period, see ARCHITETTI FRANCESI 1981.

<sup>41.</sup> VAN ANDRIGA 2015: 91. The Neapolitan Republic lasted from 25 January to 23 June 1799. The former Director of the Bourbon excavations, F. La Vega, reported after that the French had excavated over the course of three months (11 February-mid April) with an average of 1000 workers that he would be willing to dig the whole city, but without any care of the conservation works. *"II giorno 11 Febbraro di* esso anno 1799 s'intraprese lo scavo di Pompei dalla Repubblica Francese, in forza della disposizione del generale Championnette, e fu così continuato per fin circa le metà di Aprile dello stesso anno. In tale opera furon impiegati quando più quando meno, mille operai, e mostrarono essi Francesi, come corse fama, di volere in poco tempo scoprire del tutto quell'antica città."

<sup>44.</sup> VAN ANDRIGA 2015:95, the human chain to remove the soil from the excavations was called an anthill in Pompeii, because of the similarity with the ants *"mi ricordo che in Pompei vien detto lavorare a formicajo, presane dalle formiche la somiglianza"* (FIORELLI 1860-1864, VOL. I:183).

to see " the entire city dug up promptly" "wiping out" the earth mass quickly, even "in three or four years" according to the Queen,<sup>46</sup> Caroline added to the State funds 2000 ducats a month from her personal funds to speed the excavations by engaging hundreds of workers - the record is 624 in mid-September of 1813 for the excavation of the Amphitheatre. In March 1814, 25 carts were at work, replacing the bucket chains. These large expenditures also caused a change in the administrative management: in 1811, after a vain resistance, antiquarians had to accept the idea of "Roads Engineers," chosen by the "perverse practice of the reverse auction," considered a danger for the safe carrying out of the excavations and of the restorations. The winner of the tender, the contractor Giuseppe dell'Aquila would then be reconfirmed for decades, to fuel long suspicions about the correctness of his management and rumors about the real causes of poor maintenance.

Caroline would even get from her husband a regiment of sappers (Mazois counted up to 1500), who, however, were used in the excavation of the Amphitheater and of the city walls as it was deemed prudent to avoiding using this not entirely reliable staff on the ancient houses. (**fig. 7**). The strategy was, however, very clear. As Charles de Clarac, the painter who tutored the king's sons, wrote in 1813: "... *it is very interesting to* 

know the perimeter [of the city]; on the other hand it will be a great advantage in order to speed the excavations." <sup>47</sup> Such an undertaking required a systematic approach. Thus Arditi declared the urgency of an inventory of the site: "... we could not expect to find in Pompeia things really very precious as artistic masterpieces; the most substantial point is to bring to light all the perimeter of the city and to know exactly its dimension [...] it will be fine to give a name to each city district, to the streets and to the houses and to give a number to these [...]; it

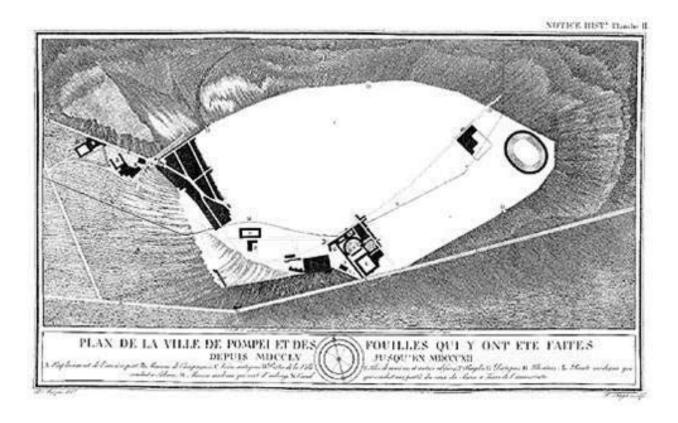


Fig. 7. The excavation of the city wall under Murat.

<sup>46.</sup> FIORELLI 1860-1864, at the date 3 October 1809. Some days before, on 28 September, in his letter to the Minister Capecelatro, Arditi had set out his clear program, aimed not at searching for objects but at discovering the ancient city, which should be considered the most interesting monument: "... *Ia principale mia idea* [è] *posta nel dissotterrare la città, e non già nel trovare oggetti antichi. La città che dopo duemila anni vien fuori si deve tenere senza dubbio pel maggiore e pel più interessante monumento" (ibidem: 231 ss.).* 

<sup>47.</sup> Biography in a note in Architetti Francesi 1981: 287; another one by N. Monteix, in C.Barbillon, Ph. Sénéchal (curr.), Dictionnaire des historiens de l'art actifs en France de la Révolution à la Première Guerre Mondiale (1789-1920), http://www.inha.fr/resources/publications/ dictionnaire-critique-des-historiens-de-l'art/mazois-françois.html.

would be necessary, as the excavation progresses, to have an exact inventory [...]. It would be necessary to have, one day, a map of all the houses in the city.<sup>748</sup>

The Queen's architect, François Mazois, did excellent work in his surveys and in his studies of graphic restoration, establishing the basic tools for those "Essays of Restoration", to which the "*French Winckelmann*", Quatremère de Quincy, the Secretary of the Académie des Beaux-Arts,<sup>49</sup> pushed the scholars of the French Academy<sup>50</sup>, although he himself found the Pompeian architecture of poor quality. Beside the scientific studies, more immediate measures for the preservation of the structures were also taken. Thus Minister Zurlo, concerned about the conservation of the excavations of Pompeii and the consistent abuse in the restorations of extensions and additions that threatened to obscure the ancient parts, created in 1813 a Commission consisting of three archaeologists (Michele Arditi, Carlo Maria Rosini and Francesco Maria Avellino) and three architects (Francesco Carelli, Francesco Maresca and Raffaele Minervini). The Commission drew up a Rule<sup>51</sup> that paid particular attention to the preservation both of "*any piece of ancient plaster*" by copper clamps and edge strips of modern mortar, and even of bare walls, that, should it be necessary, could also be covered with new plaster.

After his return in 1815, King Ferdinand of Bourbon did not want to appear to have beenoutdone on Pompeii's stage by his French predecessors so that, despite the lack of funds that obliged the improvident decision to return to private hands the areas of the city expropriated by the French,<sup>52</sup> great amounts of digging took place (**fig. 8**), completing the excavations of the Forum, of the Forum Baths, of the Temple of Fortuna Augusta, and finally joining the two worksites of the Theatres and of the Tomb Road (**fig. 9**). Nor were the

(Translation by the Author:

52. Adamo Muscettola 2001.

<sup>48.</sup> Letter to the Earl Zurlo, in Carteggio, Archivio di Stato di Napoli, Ministero dell'Interno, inc. 7, dated 1812, fasc. 1007, quoted in Architetti Francesi 1981: 30, note 90

<sup>49. &</sup>quot;Pompei era soltanto una città di terz'ordine; non era in luoghi come quello che gli artisti più famosi ambivano far mostra del loro talento. Pompei non avrebbe avuto né le opportunità, né i mezzi, per innalzare quei grandi monumenti in cui l'arte può sfoggiare tutte le sue risorse. Vi si trovano, infatti, più o meno, tutti gli edifici che caratterizzano le grandi città, ma, per così dire, al diminutivo, sia nel modulo compositivo, sia infine per la qualità e la taglia dei materiali impiegati." FINO 1988: 28, nota 21.

<sup>50.</sup> ARCHITETTI FRANCESI 1981.

<sup>51. 1.</sup> Si desidera, che qualunque pezzo di vecchio intonaco si ritrovi sia gelosamente conservato, e non parendole sufficiente il circondarlo con intonaco nuovo propone, che si faccia uso de' chiodi di rame inventati da Carlo Maratta, non già di quelli di ferro soggetti ad una pronta decomposizione, che si sono finora adoperati in Pompei. Quest'operazione è precisamente necessaria per gli intonachi dipinti, che fanno la maggiore bellezza della distrutta Pompei.

<sup>2.</sup> L'intonaco nuovo, col quale si circonda l'antico dovrà esser composto con ottima calce, e con arena, e dove si tratta d'opere rispettabili, anche con polvere di marmo, affinché riesca perfettamente solido e tale che impedisca alle piogge di penetrare nell'intonaco antico.

<sup>3.</sup> Si prescrive di usare tutta la possibile economia nel rivestire le vecchie mura d'intonaco nuovo. La Commissione ha riconosciuto la necessità pe' muri molto corrosi, e d'opera incerta, e per questi suggerisce, che vi si lascino degli spazi non coverti, i quali faccian conoscere il genere di costruzione dell'antico muro e diano ora sicuro argomento come distinguerlo. Per quelli poi di mattoni e ad opera reticolata, e altri che siano perfettamente nobili, la Commissione opina di non rivestirli.

<sup>4.</sup> Affinché vi sia una perpetua distinzione tra la parte antica e la parte restaurata, propone la Commissione che una linea di permanente colore o serpeggiante o retta secondo l'andamento del restauro vi sia sempre impressa ... e che sulla faccia della parte ristaurata si metta in volgare Italiano la data del mese, e dell'anno, preceduta dalla parola RESTAURO intera o mezza.

<sup>5.</sup> Che in generale tutti gli intonachi si eseguano con buona calce e ottima arena affinché non accada l'inconveniente che tra poco tempo le nuove ruine si confondano, e imitino le antiche. Per la qual cosa si userà anche la diligenza praticata finora di lasciare i nuovi intonachi in uno stato di rozzezza, affinché si discerna la modernità del lavoro.

<sup>1.</sup> We desire that any piece of ancient plaster found be jealously conserved, and if it is not deemed sufficient to surround it with new plaster, we suggest the use of the copper clamps invented by Carlo Maratta, instead of the iron ones subject to a rapid decomposition, which have so far been used in Pompeii. This operation is specifically required for the painted plaster, which forms the greatest beauty of the destroyed city of Pompeii.

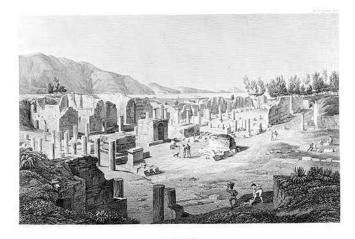
<sup>2.</sup> New plaster, with which to surround the ancient one, should be made up with excellent lime, and sand, and in the case of excellent works of art, even with marble powder, so that it becomes perfectly solid and can inhibit rainfall from penetrating the ancient plaster.

<sup>3.</sup> We prescribe all the possible economy in covering the ancient old walls with new plaster. The Commission recognized the need for walls which are badly eroded, and in opus incertum, and for these suggests leaving some areas uncovered, through which it would be possible to recognize the type of construction of the ancient wall and to have a clear evidence to distinguish it. For the wall in brick and in opus reticulatum, and others that are perfectly noble, the Commission thinks it best not to cover them.

<sup>4.</sup> In order to have a perpetual distinction between the ancient and the restored part, the Commission proposes that a line of permanent color, meandering or straight according to the way of the restoration, should be imprinted forever... and that on the face of the restored area should be put a label in vulgar Italian with the indication of the month and the year preceded by the word (whole or half) RESTAURO.

<sup>5.</sup> We prescribe that as a general rule all plasters be executed with good lime and excellent sand so to avoid the inconvenience that in a short time the new ruins be confused, and imitate the ancient ones. To that effect it will also be used the -so far- practiced diligence, to leave the new plaster in an unfinished state, so that the modernity of the work is discernible...).

works limited to digging: in 1823 3,000 additional ducats were allotted for the restoration of the ancient buildings according to a plan proposed by Michele Arditi and Antonio Bonucci (fig. 10). One year later a special Commission chaired by Carlo M. Rosini was established to set new "*Instructions*" for the restoration



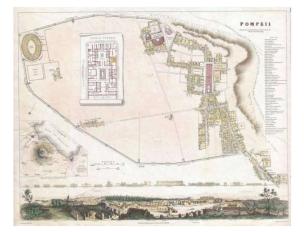


Fig. 8. The excavation of the Forum.

#### of the buildings of Pompeii that remained in force until the unification of Italy.53 In addition to some practical

(Translation by the Author:

Fig. 9. Plan of the excavated city in 1832.

<sup>53. &</sup>quot;1. Qualunque muro appartenente ad edifizi che andranno da oggi innanzi a scovrirsi in Pompei non si dovrà altrimenti disterrare se non da ambe le facce, in pari tempo, e gradatamente.

<sup>2.</sup> Nel momento dello scavo l'Architetto Direttore, ai termini del regolamento in vigore, dovrà fare un'esatta annotazione delle parti distaccate degli edifizi, indicando la situazione delle medesime, la loro forma, le dimensioni, ed ogni altra circostanza necessaria a non far perdere le tracce dell'antica struttura di detti edifizi, come sono i vani delle porte e finestre, i buchi ove eran fitti i legnami stessi, e cose simili. Vi accompagnerà eziandio i disegni e le piante, come si sta ora eseguendo.

<sup>3.</sup> Al momento stesso che si scovriranno i muri si dovrà fare sugli estremi un intonaco per evitare le degradazioni che potrebbero derivare filtrandovi le acque. Si dovranno eziando diligentemente fermare con grappe di bronzo a punta aguzza gli antichi intonachi dipinti o non dipinti, qualora non si trovino ben attaccati a' muri, affinché non vadano a rovinare. L'architetto Direttore n'esaminerà lo Stato, e, calcolata la spesa occorrente, domanderà a questa Reale Segreteria e Ministero di Stato l'autorizzazione per farle eseguire.

<sup>4.</sup> Le restaurazioni si distinguono in urgenti ed ordinarie, e queste in piccole e importanti. Le restaurazioni urgenti sono dirette a non far crollare i muri ed altre parti d'antichi edifizi, applicandovi i puntelli o altri mezzi dell'arte, e queste restaurazioni sono interamente affidate alle cure e diligenza dell'Architetto Direttore, il quale solo ne rimane responsabile essendo autorizzato a fare per questa parte tutto ciò che giudicherà opportuno dandone però immediatamente conto al Ministero. Le restaurazioni ordinarie di picciol momento consistono nel rifare qualche piccola parte di muro e nel rimettere a suo luogo i pezzi smossi e distaccati. Le importanti nel ricostruire qualche porzione d'antico edifizio, nel rifarne la covertura e simili.

<sup>5.</sup> Niuna delle restaurazioni ordinarie potrà eseguirsi prima che la commissione abbia dato il suo parere e sia stato questo approvato. Quindi l'architetto Direttore farà conoscere alla Commissione con suo motivato rapporto le restaurazioni da eseguirsi, unendovi le piante, i disegni e le annotazioni delle quali si è fatta parola nell'art. 2°. La Commissione si riunirà in uno de' locali del Real Museo due volte al mese, per farne l'esame e proporne l'occorrente. L'architetto Direttore potendo interverrà nelle sessioni e prenderà parte alle deliberazioni. I pareri della Commissione saranno distesi in fogli separati comprendendo in uno le restaurazioni piccole ed in un altro le importanti, indicando in ambedue la spesa.

<sup>7.</sup> Qualora la Commissione creda necessario che due de' suoi componenti, cioè un socio dell'Accademia Ercolanese ed un altro di Belle Arti si portino a Pompei nell'atto che si eseguano le restaurazioni importanti onde osservarne l'andamento ne farà rapporto a questo Ministero per mezzo del Presidente della Società Reale ed attenderà l'approvazione".

<sup>1.</sup> Whatever wall belonging to buildings that should be henceforth discovered in Pompeii, this should be excavated in no way other than on both sides, at the same time, and gradually.

<sup>2.</sup> In the moment of the excavation the Architect Director, under the terms of the Regulation in force, shoud provide an exact record of the detached parts of the buildings, indicating the site of the same, their shape, size, and any other circumstances needed not to lose the evidence of the ancient structure of these buildings, how the doorways and the windows are, where are the holes for the timbers and the like. He will also add drawings and plans, as happens now.

<sup>3.</sup> In the same time that walls are excavated, on their extremities a plaster should be applied to prevent degradations that could result from penetration of rainwater. The ancient plasters, painted or unpainted, if they are not firmly attached to walls, should also be carefully held firm by sharp pointed bronze clamps, so that they do not get ruined. The Architect Director will examine their condition, and after calculating the necessary expenditure, will apply to this Royal Secretariat and the Ministry of State the authorization to execute them.



Fig. 10. Workers putting a tiles cover on the top of the walls (L. von Zanth, ca 1822-24).

conservation measures that were established - tiles and mortars for the tops of the walls, clamps, etc. - (fig. 11), these Instructions were primarily aimed at delimiting the field of discretion of the Architect Director, who could authorize only "*urgent restorations, aimed at avoiding the collapse of the ancient walls and other parts of ancient buildings, applying props or technical means*", while any other issue had to be submitted to the Ministry

<sup>4.</sup> The restorations are divided into urgent and ordinary, and the latter into small and important. The urgent restorations are aimed at avoiding the ruin of the walls and other parts of ancient buildings, by applying props or other artifices, and these restorations are entirely entrusted to the care and diligence of the Architect Director, who alone remains responsible. In this part he is authorized to do everything that he considers appropriate and should only report directly to the Ministry. Ordinary restorations of small importance consist in rebuilding some small part of a wall and in putting back in its place pieces moved away and detached. Important restorations consist in the reconstruction of some ancient building, in the reconstruction of their roofs and the like.

<sup>5.</sup> No restoration of the ordinary kind can be executed before the Commission has given its opinion and this has been approved. Therefore the Architect Director will explain to the Commission by a reasoned report the restorations to be carried out, adding plans, drawings and notes as quoted in previous art. 2. The Commission will meet twice a month in one of the rooms of the Royal Museum, to revise the projects and propose the necessary. The Architect Director, when he can, will be present at the sessions and take part in the deliberations. The opinions of the Commission will be recorded on separate sheets, one for the small restorations and another one for the important ones, in both of them with indication of the expenditure.

<sup>7.</sup> If the Commission deem necessary that two of its components, i.e. a member of the Herculaneum Academy and another of the Fine Arts Academy, should transfer to Pompeii when the important restorations are carried out in order to observe their progress, it will request it reporting to this Ministry through the President of the Royal Society and will wait for the approval).

Some of the decisions of the Commission, regarding the restorations to the Forum's buildings, are still preserved. In particular a decision of 1830:

<sup>&</sup>quot;I. Doversi restaurare la porta pubblica verso il sobborgo Augusto Felice, rifare la parte caduta della volta, e costruirvi un lastrico al di sopra di lapillo battuto. Doversi fasciare le lesioni nelle volte delle terme. Doversi riguardare come ben eseguito il ristabilimento delle colonne ne' portici della casa del Centauro cogli stessi pezzi antichi, e rifatte le mura del sotterraneo.

<sup>2.</sup> Non doversi poi eseguire alcun restauro ne' alle volte del sotterraneo medesimo, tranne quei rinforzi dettati dall'arte per non farle crollare né alla Casa di Meleagro, nè alla cella del tempio di Venere oltre a quelli già eseguiti.

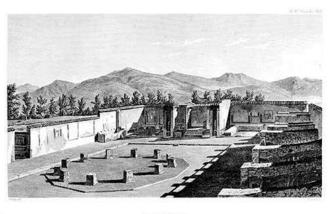
<sup>3.</sup> Per ciò che riguarda la riparazione delle fabbriche in qualche sito del Foro, nella strada che vi conduce ed altrove, doversi fare soltanto ciò che strettamente occorre per non farle rovinare ed eseguirsi per norma generale il meno che sia possibile".

#### and the Commission itself.

Equally interesting are the Instructions given in 1828 for the restoration of the excavations of Herculaneum,<sup>54</sup> then restarted for the first time in the open air (the House of Argos and the House of Aristides). The discovery of the timber-framed masonry and of clear elements of the upper floors, which are typical of the

situation in Herculaneum, suggested some more specific instructions: How "small walls or partitions, only used for internal divisions, when they are no longer able to stand, should be rebuilt to the same height of about 6 palms " or "upper floors should be rebuilt in the areas that most require it: in the remaining parts only new planking will be adapted " and "on one single occasion only, a small upstairs room should be covered by a roof to the original dimensions and pattern, so that an indelible and sure record of this interesting and hitherto questionable element of ancient architecture be preserved".

At Pompeii, too, roofs were an issue. The idea of protecting some buildings of the site by stable roofs or even by complete reconstructions had been in the air for a long time, especially for *"touristic"* purposes. Thus Stanislaus Poniatowski (visiting Pompeii in 1785-86) wrote: "... it would be a good thing, if they had restored in the best way



SET OF PARTIENS.

Fig. 11.The Macellum, an example of setting up a site after excavation

the Barracks, the Theatre , the temple of Isis , a country- and a city house, leaving in its place what had been found; and to erect in a well-chosen site a building in which all the ancient artifacts of this site could be deposited with explanations that recalled exactly the provenance; and to build a comfortable hotel, and to give to the national and foreign visitors the freedom to see, draw and measure everything; thus the country

<sup>54. 1.</sup> Gli architravi antichi debbono essere rimpiazzati co' nuovi in tutte le parti ove sostengono delle fabbriche. Per tale operazione si debbono queste demolire (se ciò fosse inevitabile) e poscia riedificare per l'altezza di circa palmi 6, onde il disegno dell'antico edifizio non resti perduto.

<sup>2.</sup> Le colonne debbono essere ripristinate co' loro medesimi pezzi, ed i capitelli ristaurati ne' siti ove sono meno danneggiati, sul modello delle parti conservate.

<sup>3.</sup> Le piccole mura o telajetti, serviti per la sola divisione interna e che non potessero più sostenersi, verranno rifatti per la stessa altezza di circa palmi 6, e per lo stesso motivo.

<sup>4.</sup> I pavimenti delle stanze superiori verranno ricostruiti nelle parti che più lo richiederanno: pel rimanente vi si adatterà di nuovo soltanto il tavolato.

<sup>5.</sup> Per una volta sola si coprirà d'un tetto sulle misure e sul modello antico, una stanzina del piano superiore, affinché rimanga un monumento indelebile e sicuro di quest'interessante e finora dubbiosa parte dell'antica architettura. Translation by the Author:

I. The public gate toward the Augustus Felix suburban neighbourhood should be restored, the fallen part of the dome should be reconstructed, and a floor should be laid above the beaten lapilli layer. The cracks in the vaults of the Baths should be consolidated. The restoration of the columns in the porticos of the House of the Centaur using the ancient pieces of them, and the reconstruction of the basement walls should be regarded as well executed.

<sup>2.</sup> No restoration should be undertaken in the vaults of the aforesaid basement, except those reinforcements technically required to prevent them from collapsing, nor in the House of Meleager, nor in the cell of the Venus Temple in addition to those already made.

<sup>3.</sup> As regards the repair of the buildings in a certain site of the Forum, in the road leading to it and elsewhere, only what is strictly necessary to prevent them from spoiling should be done and that following the general rule of minimal possible intervention

<sup>1.</sup> The ancient lintels must be replaced by new ones in all the parts where they support constructions. For this operation it is permitted to demolish them (when this is unavoidable) and afterwards to rebuild them to the height of about 6 palms, whereby the shape of the ancient building be not lost.

<sup>2.</sup> The columns must be restored using their same pieces, and the capitals restored in the less damaged parts, on the model of the preserved parts.

<sup>3.</sup> Small walls or partitions, only used for internal divisions, when they are no longer able to stand, should be rebuilt to the same height of about 6 palms and for the same reason.

<sup>4.</sup> The upper floors should be rebuilt in the areas that most require it: in the remaining parts only new planking will be adapted.

<sup>5.</sup> On one single occasion only, a small upstairs room should be covered by a roof to the original dimensions and pattern, so that an indelible and sure record of this interesting and hitherto questionable element of ancient architecture be preserved.

would be given a lot of money and taste ...<sup>755</sup>. In his turn, in his "Voyage à Costantinople, en Italie et aux îles de l'Archipel" (Paris 1798) Chateaubriand had imagined<sup>56</sup> "leaving the things in the sites where and how they had been found, reconstruct roofs, ceilings, floors and windows to prevent the degradation of paintings and walls, all this within a general plan to make a great Pompeian "Museum of the Domestic History of the Roman People".

This idea was now gradually returning into vogue now that the Northern tourists, especially the British, were returning in large numbers to Pompeii,<sup>57</sup> provided with excellent new guidebooks such as the W. Gell's *Pompeiana*,<sup>58</sup> To support the growing "*tourist*" attractiveness of the site, the staff responsible for Pompeii began to think of leaving valuable paintings *in situ* under shelters. It was decided in this way in 1820 that a painting of Mars and Venus, should be left in place and protected by "*a box on the wall where it exists, to be opened at will*". In the following year, having decided to leave *in situ* other paintings, they put in wooden gates to prohibit entrance into unguarded houses. It is perhaps no coincidence that one year after the enactment of the new regulations for the ruins of Pompeii, and the first draft of the Regulations for the Royal Bourbon Museum in 1829, a general make-over of the excavations was carried out by consolidating the plaster and the walls (**fig. 12**), covering the paintings with a protective varnish using the new recipe invented by the Neapolitan painter



Fig.12. Clamps securing the plasters in the rear of the Capitolium.



Fig. 13. Slate copy of the dedicatory inscription at the entrance of the Temple of Isis.

Andrea Celestino, putting plates with names and numbers on the streets and houses, repositioning *in situ* slate copies of the most important inscriptions and gypsum replicas of the most beautiful statues from Pompeii in the Naples Museum (fig. 13). Even the local service structure was improved. At the suggestion of the Royal Academy of Archaeology, in 1824 a small restoration workshop was created in the excavations to restore the bronze objects before sending them to Naples, and a room was set up for the draughtsmen. In the meantime, far from Pompeii, the "*Essais de Restauration*" of Foreign Architects<sup>59</sup> started to be reflected in daring real reconstructions of Pompeian houses: so the *Pompejanum* (fig. 14) erected in 1841 in Aschaffenburg on the

<sup>55.</sup> BILINSKI 1982: 75.

<sup>56.</sup> ARCHITETTI FRANCESI 1981: 43; ZEVI 1980: 62; DE CHATEAUBRIAND 1947: 69; GALLETIER 1934. On the history of this idea, recently MILANESE 2015. Among the first, and in a less poetic way, the idea had been advanced by the Earl of Salisbury in his visit to the Portici Museum in 1791 (FINO 1988: 31 and note 28): to return to life an unearthed city would be a simpler and more beautiful idea. If all this furniture and these implements, at which we look emotionless ranged along the clean walls of a Museum crammed like an immense deposit of trinkets, had been replaced in good order in the houses of Pompeii, the illusion would be created in its entirety, and everything would arouse a greater respect and a stimulate greater curiosity (paraphrase by the Author).

<sup>57.</sup> SALMON 2000; DE CARO 2015.

<sup>58.</sup> GELL,-GANDY 1817-1819., Pompeiana: the Topography, edifices, and ornaments of Pompeii, London 1817-1819. See also DESSALES 2000; DESSALES 2015: 120.

<sup>59.</sup> For the French, see ARCHITETTI FRANCESI, 1981; DESSALES 2015: 122.

Main for Ludwig of Bavaria,<sup>60</sup> in imitation of the house of the Dioscuri, or, the famous Maison Pompéienne (or Villa Diomède) built in Paris in 1854-59 in avenue Montaigne by A.-N. Normand and M. Rougevin for Prince Jerôme Napoleon, or the contemporary dining room of the Princess Matilda, in rue de Courcelles, in the same style.<sup>61</sup>

The political crisis of 1848 rang the alarm about the problems of the excavations. The King was obliged to accept to set up a Special Committee "of learned people and egregious artists" to "procure a reorganization



Fig. 14. The Pompejanum in Aschaffenburg

and reforms in Royal Bourbon Museum and in the Excavations of antiquities of the Kingdom" which produced a draft proposal of an "Organic Law for the Royal Museum of Antiquities and the Excavations", which was never issued because of the violent end of the constitutional attempt. The Commission, very strict with the renovations and roofing projects in Pompeii<sup>62</sup>, dictated some specific articles of the Regulation on the way of carrying out the restorations, which constitute evidence of some "best practices" of the time (tiles at the top of the walls, propping, clamps for the plasters, seasonal straw protections for the most important paintings and sand covering for mosaics)<sup>63</sup>.

<sup>60.</sup> SINKEL 1964.

<sup>61.</sup> On this topic, recently MANGONE 2015

<sup>62.</sup> Among them that painting, deemed "indecent" by the Acting Architect Director Carlo Bonucci, in the recently excavated house of M. Lucretius (or of the Suonatrici, IX, 3, 5)

<sup>63. 194.</sup> Come saranno interamente scoverte le mura, di un edifizio [...] verranno preservate nella parte superiore con tegole, o da uno strato di malta o d'asfalto, affinché l'acqua non filtri nelle pietre e le sconnetta. Si avrà speciale cura dell'Architetto perché il motivo de' ruderi non sia deturpato con improprio aggiustamento di linee.

<sup>195.</sup> Le mura, che minacciano di cadere saranno subito puntellate per rinforzarle con fabbrica di mattoni o di pietre secondo il bisogno, ed il luogo.

<sup>196.</sup> Gli intonachi che daranno sospetto di volersi distaccare dalle pareti, vi saranno fissati con grappe di rame a punta aguzza, o con lacerti di malta o d'asfalto come sarà praticato all'estremo d'ogni altro intonaco quando si crederà opportuno.

<sup>197.</sup> Sul fine d'ottobre d'ogni anno le pareti che han maggiore bisogno di cura o di cautela per sceltezza, ed importanza de' dipinti o per la loro finezza saranno coperte di stuoie di paglia con armatura di legno di tal guisa che non tocchino le dipinture.

<sup>198.</sup> Anche i pavimenti in musaico o in marmo saranno nella medesima stagione autunnale coverti col lapillo o arena che darà lo scavo stesso; e come le pitture saranno scoverti ed esposti all'aria pel giorno 15 Aprile". Translation by the Author:

<sup>194.</sup> As they will be entirely uncovered, the top of the walls of a building [...] will be conserved aby putting tiles on them, or a layer of mortar or asphalt, so to avoid the rainwater from filtering among the stones and disconnecting them. The Architect should have a special care not to disfigure the shape of the ruins by an improper adjustment of the lines.

<sup>195.</sup> The walls that threaten to collapse will be immediately shored up to strengthen them with brick or stone structures, according to the need and the site.

<sup>196.</sup> The mortar suspected of an imminent detachment from the walls should be fixed at their ends by copper clamps with sharp points, or by strips of mortar or asphalt; this should be carried out with any other plaster when it seems necessary.

<sup>197.</sup> At the end of October of every year the walls that have a greater need of care or caution because of the quality, importance and refinement of their decoration should be covered with straw mats in a wooden framework arranged as not to touch the paintings.

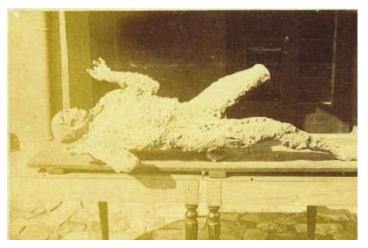


Fig. 15. The invention of the casts of the Pompeians' bodies.

Although the planned Excavations Reform ended together with the constitutional government, the need for a general rethinking remained. It was left to one of the protagonists of the Commission of '48, Giuseppe Fiorelli, to accomplish some of its goals after Italian Unification.<sup>64</sup>

Engaged in proving its superiority over the previous Italian kingdoms, including in the field of the protection of antiquities, the new Italian government, established by the Piedmonteses in 1861, allocated 110,000 Lira per year for the restarting of the excavations of Pompeii, almost in the manner of Caroline Murat, with as many as 512 workers. One year later King Vittorio Emanuele II personally inaugurated the new excavations of Herculaneum (1868), and provided 30,000 Liras of his personal fund to

enhance the work of the excavations in Pompeii. In Italy and abroad, the Pompeii excavations now became the spearhead and the benchmark of the new Italian archeology and the symbol of the revival of the full potential of the Nation.

Guarantor of all this was Giuseppe Fiorelli<sup>65</sup> appointed as Superintendent by the new government, a man of proven liberal and philo-Savoy ideas. Of positivist culture, he had in mind an extensive overhaul, in the technical and scientific sense, of the excavations, even by



Fig. 16. The excavations of Pompeii in Fiorelli's days.

creating a school in Pompeii for teaching a new national archeology, freed from the dominant academic and antiquarian learning. It is in this context that we should see many measures such as the drafting of a new geodesic plan by Girolamo Tascone in 1872, the new nomenclature of the whole city, and even the new technique of the famous gypsum casts of the bodies of the dead Pompeians (fig. 15).<sup>66</sup> During this period the use of photography for documentary purposes was consolidated (after its initial use for "artistic" and "touristic" purposes) (fig. 16)<sup>67</sup>, the *Soprastanti* were required to dig from the top of the ground down, and to observe and

<sup>198.</sup> Also the mosaic or marbles floors should be in the same autumn season covered with lapilli (pumice stones) or sand produced by the excavation itself; and, like the paintings, they should be exposed to the air and uncovered before April 15<sup>th</sup>"

<sup>64.</sup> MILANESE e1999.

<sup>65.</sup> FIORELLI 1867; FIORELLI 1994; CENTENARIO FIORELLI, 1999; OSANNA 2015.

<sup>66.</sup> Recently Pucci 2015.

<sup>67.</sup> ASCIONE 1990, DE CAROLIS 2015; STEFANI 2015.

to register in the "Giornale degli Scavi", the Excavations Journal"68 even the smallest details because they would serve for the reconstruction of the ancient buildings, although Fiorelli still preferred graphic documentation.69

Fiorelli showed a great prudence, even restraint, in the restorations, limiting himself to a very few interesting

anastyloses such as the portico of the temple of Apollo (fig. 17)<sup>70</sup>. Eugene E. Viollet-le-Duc's praise of Fiorelli is significant<sup>71</sup>: he says that the new excavations at Pompeii after 1860 are "directed and performed methodically and (...have the quality...) of preserving evidence that in other times was overlooked. The care is pushed as far as possible, and so the results are really instructive. Past mistakes have been corrected and we begin to have a pretty good idea of the construction of these houses and the way in which they were fitted with wood paneling and furniture."

And yet it will certainly not have escaped Fiorelli, engaged in the elaboration of the famous cork model of



Fig. 17. The anastylosis of the entablature of the Apollo temple portico.

Notwithstanding the focus on the most accurate restorations, it was accepted that, in case of urgent need to save paintings or mosaics considered of particular importance, they could continue to be removed from the buildings and sent to the Naples Museum, on the decision of the Council of the Superintendence and upon proposal of the Inspector assigned to the Excavations.

70. In his youth he shared the Chateaubriand's idea of a fully "restored" house in Pompeii. In the projected Law of reform of the excavations of Pompeii and the Naples Museum in 1848, under article 205-206 he wrote "*in Pompei sarà compiutamente restaurata una casa, le cui dipinture saranno fatte dai disegnatori del luogo. Si rimetteranno al loro posto gli oggetti rinvenuti e se vi si trovarono ossa se ne ricomporranno gli scheletri. Questa casa sarà mostrata come modello di un edificio pompeiano…*" (a house will be completely restored in Pompei and its paintings will be executed by the local draughtsman. The objects found will be replaced in their sites, and if human bones were found, the skeletons will be reassembled. This house will be shown as a model of a Pompeian building). (Osanna2015: 230-231: Trans. Author).

71. A fantastic reconstruction drawing by him of the House of Cornelius Rufus (1880) in MANGONE 2015: 129. On Pompeii as source for contemporary architecture, MANGONE-SAVORRA 2006.

<sup>68.</sup> CASTIGLIONE MORELLI DEL FRANCO 1991.

<sup>69.</sup> In his report of 1873 (FIORELLI 1873: 85 ss.), Fiorelli points out the caution to be used during the excavations ".. qualsiasi pezzo di marmo, di pietra o di intonaco, che mostri di essere stato divelto dal suo posto primitivo nell'atto dello scavo, sarà immediatamente collocato al suo posto con calce, con grappe di ferro, o con altri modi richiesti dal bisogno [...] i mattoni interi, le pietre, i marmi ...verranno serbati per poi essere adoperati ne' restauri. Le mura dipinte, appena scoverte, dovranno essere con diligenza ripulite e nettate con ferri e spazzole a tal uopo destinate [...]. E' vietato di lavorare o graffiare con ferri qualunque oggetto, dovendo solo essere nettato dalla terra che lo circonda" (any piece of marble, stone or plaster, showing itself, at the moment of digging, to have been torn from its original place, will be immediately replaced in its position by means of lime, iron clamps, or other ways required by the need [...] the unbroken bricks, stones, marbles ... will be stored to be later reused in the restorations. The painted walls just discovered, must be diligently cleaned and netted with tools and brushes designed to this purpose [...]. It is forbidden to work or scratch with iron tools any ancient object, having only to be cleansed from the soil surrounding it; translation by the Author). In the following report sent to the Minister of the Public Instruction in 1885 (FIORELLI 1885: 58), he is very prudent regarding the restorations by reconstruction, stating that in view of them very accurate preliminary studies needed to be carried out: "Occorre che ai restauri degli edifici riconosciuti degni di tutela procedano i necessari studi storici ed artistici, affinché coloro che devono attendervi, possano trasportarsi nell'età in cui quelli furono innalzati e giudicare pienamente della loro esatta reintegrazione" [...]la conservazione dei monumenti e degli oggetti riuscirà completa quando sarà preceduta dall'opera di ricognizione piena di tutto ciò che forma il soggetto della scienza; senza di che è assolutamente impossibile decidere di ciò che si debba conservare, e del modo di effettuarlo" ("It is necessary that the restoration of the buildings deserving protection should be accompanied by the appropriate historical and artistic studies, so that those tasked to carry them out can transport themselves to the period when those buildings were erected and fully judge on their exact reintegration "[...] The conservation of the monuments and of the objects will fully succeed only when it will be preceded by the work of full examination of all that forms the subject of science; without that it is absolutely impossible to decide what it should be conserved and in which way". Translation by the Author).

the excavations of Pompeii in the Naples Museum (fig. 18)<sup>72</sup>, how, except for those preserved in the Museum, most of the Pompeian paintings and mosaics could not be reproduced in miniature on the cork walls because they went already lost, and of them only the drawings and watercolors in the Archives remained. The only ones to survive were those conserved indoors or protected in a timely fashion by canopies: for example, the walls of the Baths, or the tablinum and other rooms in the House of the Hunt (VI, 4, 48), or the rear wall in the garden of the House of Sallustius, or of that of the Little Fountain (VI, 8, 23), or the peristyle of the House of the Dioscuri (VI, 9, 6).

Both because of these conservation needs, but perhaps also under the thrust of the contemporary, successful "Pompeianist"



Fig. 18. The Great Model of Pompei





Fig. 19. Alma Tadema's Pompeii

Fig. 20. Fausto and Felice Niccolini's Pompeii (ca 1890)

paintings, such as the famous ones by Alma Tadema (**fig. 19**)<sup>73</sup>, or those by the more modest but very popular Italians Fausto and Felice Niccolini (**fig. 20**), the disciples and successors of Fiorelli, Michele Ruggiero (1875-1893) and Giulio de Petra (1893-1901), increasingly took the initiative of rebuilding the spaces and volumes of the ancient buildings, covering them with new roofs imitating the ancient ones<sup>74</sup>. At first, this happened only

<sup>72.</sup> KOCKEL 2015.

<sup>73.</sup> ALMA-TADEMA 2007; a photograph of the painter studying in the house of Sallustius in PESANDO 2003: 138; DE CARO 2015: 105; POMPEI E L'EUROPA 1748-1943: 294, cat. n. 3.10A.

<sup>74.</sup> To cover these roofs were used at first ancient tiles found unbroken in the excavations, without caring too much if they were removed

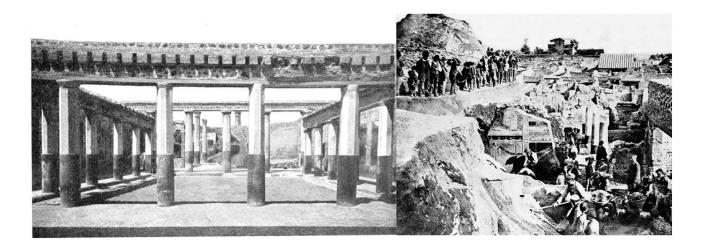


Fig. 21, Excavation and restoration of the House of the Silver Wedding (between 1891 and 1908).

for isolated examples: the atrium and the Corinthian Hall in the House of the Silver Wedding (V, 2, i, excavated from 1891 to 1908) (**fig. 21**), some rooms of the House of the Centenary (IX, 8.6; excavation: 1879, 1881, 1902). Then, more and more systematically the issue of the full stylistic reconstruction was addressed: thus in the House of the *Vettii* (VI,15,1; excavated from 1894 to 1895), where not only the walls and roofs were rebuilt, but also the marble and bronze sculptures were left in place in the garden (**fig. 22**), in its turn replanted on the lines of the ancient plantings, while the fountains were put back into operation, as a plaque in honor of the Minister Guido Baccelli affixed on the dining room wall of the house proudly states. The example of this restoration was followed few years later in the House of the Golden Cupids (VI, 16, 7). According Antonio Sogliano, this new style of restoration had returned to Pompeii its "*artistic and archaeological interest*"<sup>75</sup>. Not only art: the repositioning of the "*cave canem*" mosaic in the House of the Tragic Poet had increased, on its own, the revenue from tickets, from 60,000 to 100,000 Lira!

The premise of the new policy was the alleged ability not only to understand scientifically the ancient structures, enabling their faithful rebuilding,<sup>76</sup> but also to maintain them on-site and with them the architectural decorative elements with the same effectiveness as a museum, and, of course, with a far greater appeal to

visitors.77. Moreover the new policy multiplied the size of the required maintenance, because of the increased

from the true findspot. Between the end of the Nineteenth and the early Twentieth century a plant was installed in the excavations to produce concrete "flat and curve tiles imitating the ancient". Sogliano reports that for the restoration of the House of the Silver Wedding «in mancanza di tegole antiche se ne vanno costruendo delle simili in Pompei, con notevole economia di prezzo su qualunque riproduzione industriale. Ne occorrono circa ottocento, e già 250 son pronte e tali, che, se per forma e colore imitano perfettamente le antiche, restano al contrario sempre da queste distinte pei materiali onde son composte e che sono il cemento idraulico, la sabbia ed il lapillo locale» (lacking ancient tiles, new ones similar to them are being made in Pompeii, with a considerable saving of money on any industrial reproduction. About 800 are needed, and 250 are already ready and such that, if the shape and color perfectly imitate the ancient, on the contrary they remain always distinct because of the materials by which they are composed: hydraulic cement, sand and local pumice stone (lapilli). Transl. Author).CITAtion needed!

<sup>75.</sup> So Sogliano 1902. The archaeologist Antonio Sogliano, Inspector and, since 1905, Director of the Excavations, was the true theoretician and executor of these new restorations: Sogliano 1901; Sogliano 1904; Sogliano 1906; Sogliano 1907; Sogliano 1908; Sogliano 1909.

<sup>76.</sup> Unfortunately the documents reporting the excavations and restoration/conservation works written by the Soprastanti do not allow us to assess this ability: Thus e.g. Esposito-Rispoli, 2009, IN PARTICOLAR: 127: "Nelle relazioni di scavo custodite presso l'archivio della Soprintendenza Archeologica di Pompei le notizie concernenti lo scavo e alle prime opere provvisionali per proteggere le strutture e le decorazioni sono quasi del tutto assenti. È molto più facile apprendere dello stato di salute degli operai addetti allo scavo, o anche degli animali da soma utilizzati per trasportare i carrelli pieni di lapillo. Altre volte le relazioni sono costellate di semplici elenchi degli operai o delle effettive giornate di lavoro" (In the excavation reports kept in the archives of the Archaeological Superintendence of Pompeii entries related to the excavations and to the first provisional works to protect structures and decorations are almost entirely absent. It is much easier to learn about the health of the workers involved in the excavation, or even of the pack animals used to carry the trucks filled with pumice stones. In some other cases the reports are dotted with mere lists of the workers or of the actual work days. Translation by the Author).

<sup>77.</sup> In this period to protect the paintings glass sheets were used and clothes to be lifted through racks. They also moved from the use of metal clamps to the so called "lacertini" or "solini", concrete mortar strips to secure the edges of the ancient plasters and prevent the infiltration of rainwater. (SogLIANO 1909: 18-19, 25).

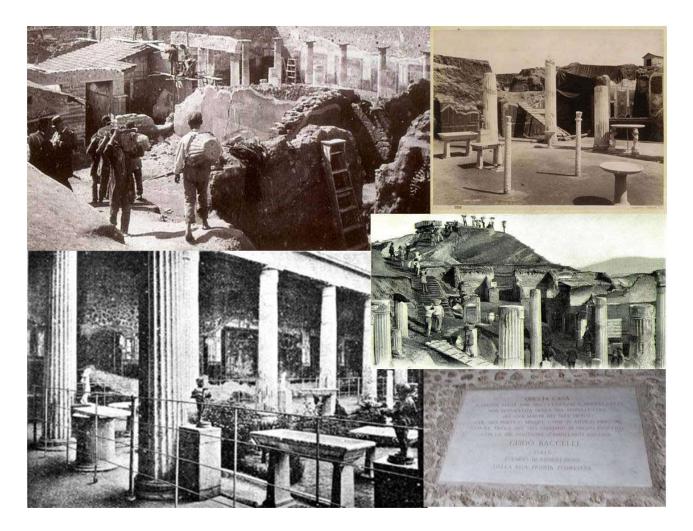


Fig. 22, The new restorations by reconstruction: the House of the Vettii (excavated 1894-1895).



Fig. 23. Example of iron shelters for mosaic fountains.

number of structures involved, both ancient and modern. Thus, although it would have been wiser to limit severely the new excavations, fitting them to the real maintenance capacity, the desire of both the Ministry and the archaeologists to dig ever more was stimulated by the great international echo that accompanied each new discovery. And when all was said and done, those generations had a great confidence in the future of the young Nation.

Similarly they trusted in the new modern materials, especially iron, used in the shelters over the mosaic fountains (in the House of the Scientists, VI,14, 43, excavated 1845 (fig. 23); in the House of the Arches IX, 7, 20, excavated 1879); in the belts to strengthen unstable structures, in lintels with iron beams instead of wooden ones (although covered with wood), in the frames supporting the marble furnishings left in place (fig. 24 a, b, c). The reinforced

concrete used in floors and lintels was also new, but, alas the use of local volcanic pumice stone in the mixture instead of gravel, turned out to be a huge mistake, because the porosity of the pumice has caused, over time, the oxidation of the iron frames and the collapse of the structures. Another mistake was the introduction of asbestos-concrete, the so called Eternit, then a new technology (patented by the Austrian Ludwig Hatschek in 1901) which we now know to be toxic. Beside the materials some new techniques were updated such as the lead sheets inserted at the base of painted walls to protect them from rising damp.

Far more questionable was the political choice permitting all excavations outside the State-owned archaeological area of the ancient city to be carried out by private individuals with the same predatory criteria used by the first diggers of Bourbon times: they dug only to extract valuable artifacts to be sold on the international market, minus the portion owed to the State for the Naples Museum, and then reburied the

### remains they had stripped bare.

Among the new elements of this period, we must recall the interest of the Director of Excavations (since 1905), Antonio Sogliano, and of Paolo Orsi, Special Commissioner in Naples and Pompeii in 1901, in studying the pre-Roman city's history through stratigraphic excavations (such as those newly carried out by Giacomo Boni at the Roman Forum in Rome), a branch of studies alternative to the excavation of the Roman city in extension (and certainly less critical for conservation).<sup>78</sup>



Fig. 24. The use of iron in restorations: chains, lintels, supports.

As at Herculaneum, at Pompeii the excavations of the late nineteenth and early twentieth century had provided evidence for second floors in many houses. This important element was exploited to the maximum

<sup>78.</sup> SOGLIANO 1937; thus by instance DE WAELE 2001: 339 ss. (1889: excavations by Sogliano in the Doric Temple; 1905: prehistoric excavations by Innocenzo Dall'Osso).

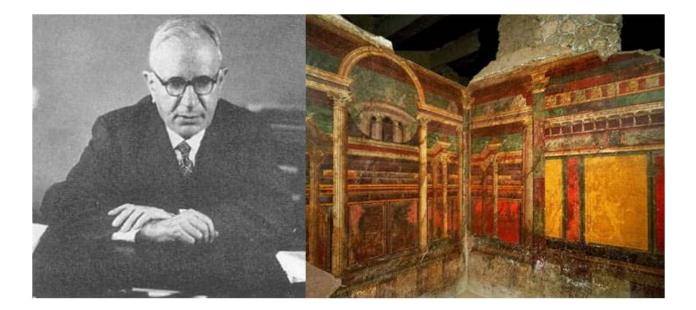


Fig. 25. Amedeo Maiuri's excavations and restorations: the Villa of the Misteries

in the campaign of excavations and restorations carried out by Vittorio Spinazzola (1911-1923) along the Via dell'Abbondanza<sup>79</sup>, an excavation aimed not at exploring the individual houses in depth, but only in revealing their façades along the main street of the city and rebuilding this picturesque urban setting, with its electoral propaganda posters, advertisements, the arcades of the upper floors<sup>80</sup>, the protruding prospects and the balconies of the houses, the shops fronts with the actual artifacts found there exhibited in glass showcases<sup>81</sup>.

The result was a deep change in the image of Pompeii. The comparison with the almost-bare first section of the same street excavated in the Bourbon period shows how much had been lost in the previous excavations. Nevertheless, the decision to leave unexcavated the areas behind the facades would result in serious conservation problems, problems which are still unresolved.

The new excavation methods were applied on a large scale by the successor of Spinazzola, Amedeo Maiuri (1923-1967) both in Pompeii<sup>82</sup> and in Herculaneum (fig. 25)<sup>83</sup>. In his very extensive excavations, he not only resumed the systematic exploration of whole houses, but also practised on a large scale the reconstruction

<sup>79.</sup> Cfr. SPINAZZOLA 1953; DELPINO 2001. In the first part of his work (SPINAZZOLA 1953: 18-32) he describes punctually his excavation and restoration methods in Pompeii. The cornerstones of them were: «1. *Precisione e limitazione dell'obiettivo o degli obiettivi dello scavo, e continuità così nel proseguirli come nell'ubicazione di esso» ; 2) «Cognizione ed impostazione dei problemi della ricerca, e fede in essa»; 3) «Scavo sistematico per strati, con esame, avvicinamento e ricostruzione immediata, per strati, degli elementi architettonici rinvenuti e fotografati «in situ», e prima e poi»; 4) «Impiego delle maestranze e tecnica dello scavo e dei restauri». Translation by the Author: "1) Accuracy and exact definition of the excavations objectives, and continuity, both in carrying out and in positioning them; 2) "Recognition and establishment of the research problems, and faith in it"; 3) "Systematic excavation by layers, with examination, approach and immediate reconstruction, by layers, of the architectural elements found and photographed in situ, and before and after; 4) "Utilization of the workers and excavation and restoration techniques"). Spinazzola had also proposed a diversification of restoration types. Where there were sure elements available for a faithful reconstruction of the ancient buildings, then it was the reconstruction of the floors and of the structures located on the upper floor was permitted. Where, on the contrary, there were no sure elements to carry out a scientifically reliable reconstruction then only protecting shelters were acceptable , using materials completely different from the ancient ones, such as roofs of tiles or metal sheets resting on steel beams, which should however, suggest in a way, the general frame of the ancient roof. 80. Such reconstructions had had antecedents in those executed in Sogliano's time, like the balcony of the House of the Cenacolo (V 2, g).* 

<sup>81.</sup> See the example in the Asellina's *thermopolium*, where, as soon the excavation ended, all the objects and the pottery found in the shop were exhibited on the selling counter, inside a glass showcase in an iron frame. (see the pictures in Pompeii Superintendence Archive C438, C517, C568).

<sup>82.</sup> MAIURI 1928; MAIURI 1939; ZEVI 2001.

<sup>83.</sup> MAIURI 1929; MAIURI 1933; MAIURI 1936; MAIURI 1958a; MAIURI 1958b;. CAMARDO 2006. IN HERCULANEUM MAIURI LARGELY APPLIED THE CRITERION TO RELOCATE *in situ* the objects he found, not without some "environmental" and a bit hazardous reconstructions: Guidobaldi 2003; CAMARDO IN PARTICULAR: 74-81.

of the ancient buildings<sup>84</sup>. The result, in terms of image, had a great impact on Fascist propaganda, offering Pompeii as a virtuous example of the regime's ability to manage cultural heritage both in terms of protection and in terms of touristpromotion (**fig. 26**)<sup>85</sup>. We should remember, for example, that in 1934 the Torre Annunziata – Castellammare section of the Circumvesuviana railway was opened, with a new station at the excavations, named "Villa of the Mysteries", to make it easier to get to Pompeii from Naples. Maiuri himself promoted new popular activities in the excavations, adding lighting (**fig. 27**) for night visits and the use of the theaters for staging ancient dramas.

Among the restorations executed in the period before World War II, notable is the reconstruction, in 1934, of the upper part of Tower XI of the city-walls – the so-called tower of Mercury -, already studied by Mazois. Its top terrace was made accessible so that it could serve as a scenic lookout over the ruins and the surrounding countryside.

Both Spinazzola and Maiuri were supported by very good technicians, such as the engineers Salvatore Cozzi and Luigi lacono and by skilled draughtsmen and worksite assistants. Thanks to government support they were able to pay substantial attention to maintenance, cared by for by teams of masons, paintings and mosaics conservators, carpenters, blacksmiths, plumbers, and gardeners. Their techniques were often antiquated - a the use of a wax solution to coat the frescoes, actually the old Bourbon method in which petrol or formaldehyde had simply replaced alcohol, but all in all they were tested and they worked - or at least they



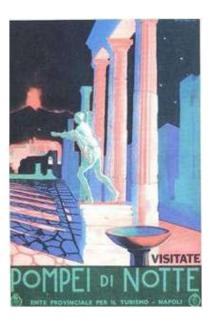


Fig. 27. Nightlighted Pompeii.

avoided further damage.

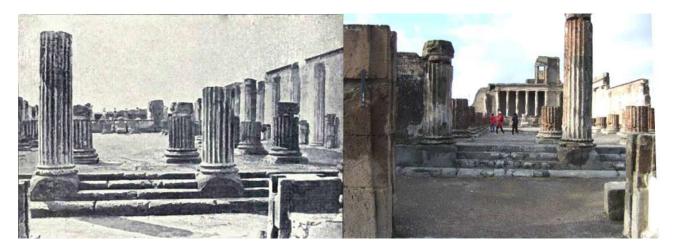
Fig. 26 Pompeii and the Fascism. A visit of hierarchs.

The Second World War marked a break in the excavations but not in the restoration activity, even if, given the shortage of resources, this was concentrated on the anastylosis of part of some great monuments

85. SARFATTI, 1924.

<sup>84.</sup> On the occasion of the restoration of the Istacidii Tomb, Maiuri observed (cfr. MAIURI 1939; NOTE 63: «*il dubbio può solo affacciarsi quando da un restauro di protezione si passi ad un restauro di ripristino, dove la sola norma da seguire è dettata dall'esperienza di chi abbia educato l'occhio all'ambiente edilizio e urbanistico di Pompei, legge suprema e inderogabile essendo quella dell'onestà senza camuffamenti del nuovo per l'antico».* ("The doubt can only arise when we pass from a protective restoration to a reconstruction restoration, where the only rule to follow is dictated by the experience of those who have educated their eyes to the built and urban environment of Pompeii; the supreme and imperative law being that of honesty, without camouflage of the new for the ancient" (translation by the Author).

(the tomb of *Istacidii*<sup>86</sup>, the *tribunal* of the Basilica (fig. 28), the portico of the Forum). The lack of resources, however, meant that the restoration entailed the use of precarious solutions, such as the reuse in reinforced concrete of iron nails rescued from old gates and floors. A mention should finally be made of the devastating



Flg. 28. The "Wartime Restorations" by Maiuri: the tribunal of the Basilica, before and after.

effects of the repeated bombing that, aiming at a German division alleged to be stationed in the ruins, struck Pompeii in September 24 1943 to 26, with more than 150 bombs, provoking destruction in the Forum, the Antiquarium and in various houses of the city (fig. 29)<sup>87</sup>.

The unsustainable choice of expanding the excavated area was repeated after the Second World War when a new large-scale program of excavations as a way to create jobs for the unemployed was launched, not only outside the walls to clean up the great spoil heaps of the previous excavations, but also inside them, in the *Regiones* I and II, increasing by about one third the exposed area. Among the accompanying measures, the idea of selling the pumice (lapilli) from the archaeological layers covering the ruins to private quarry companies, authorized to take it out with the trucks from well inside the same ancient houses, caused serious damage and left a situation of incompleteness that has prevented restoration until few years ago, when it was possible to resolve it, if only partially.

The Irpinia earthquake of 1980-81 marked a dramatic watershed<sup>88</sup>. Not so much for the actual damage,

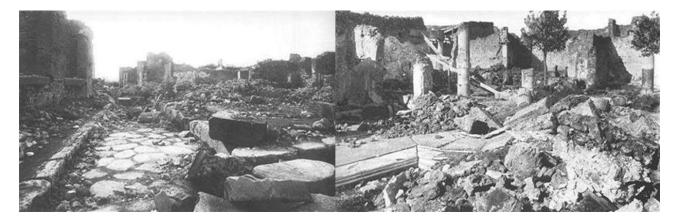


Fig. 29. The bombing in 1943.

88. On the damage to cultural heritage provoked by this earthquake, PROJETTI 1994. For the damages in POMPEII 1982.

<sup>86.</sup> MAIURI 1947; RISPOLI 2001.

<sup>87.</sup> GARCÍA Y GARCÍA 2006; GARCÍA Y GARCÍA 2015.

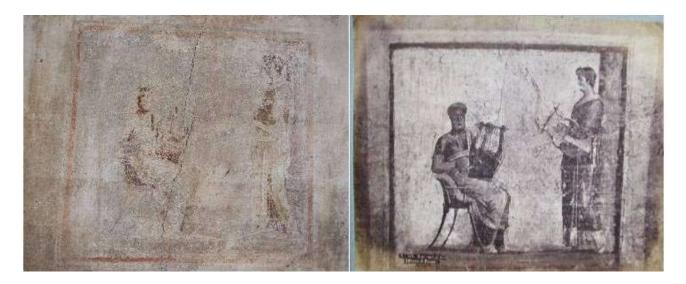


Fig. 30. The loss of unsheltered frescoes. A fading painting in the House of the Citarist.

resulting only in a few collapses, but more in a general weakening of the already crumbling walls of the city. Moreover, for the first time, taking a cue from some previous systematic initiatives, such as a general photo campaign promoted by the Istituto Centrale del Catalogo, and the National Photographic Cabinet<sup>89</sup>, it was possible to make an exact evaluation of the whole situation. For the first time the systematic survey of the damage and the computer processing of the quantitative data allowed us (I served then as Director of the Excavations<sup>90</sup>) to show that Pompeii had been excavated too much, and that the most of it had been lost (about 80% of paintings and the floors found since the beginning of the excavations) and that the cost of the conservation of the surviving structures, including those reduced to bare ruins, was well above the current budget availability (fig. 30). The continued prevalent use of the excavations for profit, with a strong emphasis on tourist use, had not helped to improve the situation. In fact, internal maintenance was almost abandoned; masons and conservators had almost disappeared, replaced by custodial staff, while the increased number of visitors - currently running towards 3 million per year - further aggravated the problems: wear, graffiti on the plasters and eroded floors, added to the problems of invasive vegetation<sup>91</sup>, unchecked borders of the unexcavated areas (fig. 31), resistance to weathering and uncontrolled hydrogeology<sup>92</sup>. This longstanding maintenance crisis has produced in recent years periodic episodes of collapse of structures. The response has been wholly inadequate for the resumption of a smooth and continuous maintenance program: Instead, a number of special laws have solved some local issues but have left unresolved the general, systemic problem. The effort to rationalize maintenance initiated by P. G. Guzzo<sup>93</sup> was interrupted at the end of the term of that Superintendent, and the recent experience of the Special Civil Protection Commissioneers in Pompeii, has been dedicated mainly to enhancing touristic use through "events"<sup>94</sup>. Luckily, in the meantime the excavation of new

<sup>89.</sup> Pitture e pavimenti, 1981-1986; Pompei. Pitture e mosaici 1990-1999.

<sup>90.</sup> DE CARO 1983.

<sup>91.</sup> Sul problema, vedi già Maiuri 1978; Ciarallo 2004:

<sup>92.</sup> See the Michele Cordaro's considerations on the need to carry out a mapping research of the subsoil of Pompeii, to recover, besides archaeological data, information on the geological stratification beneath the city and, above all, on the water collecting and draining systems: CORDARO 2001.

<sup>93.</sup> FRANCHI DELL'ORTO 1990; LONGOBARDI-MANDARA 1997; GUZZO 1999; GUZZO 2003; GUZZO 2007; LONGOBARDI 2002; RISPOLI-DE CAROLIS-PAONE 2007; ESPOSITO-RISPOLI 2009, in particolar: 127-133.

<sup>94.</sup> See a comment by Guzzo (2010: 7): "Tutti ricordiamo che, secondo Winckelmann, gli ingegneri militari dell'esercito borbonico stavano al compito loro affidato di scavare Ercolano e Pompei come i granchi alla luna. In questo primo decennio del XXI secolo, più di due secoli e mezzo dopo quell'inizio, la situazione descritta dal Sassone sembra ripetersi con maggiore enfasi e una patina tecnologica, ma con simili proporzioni. Generali dell'aereonautica e soccorritori in caso di catastrofi naturali sono stati incaricati di prendersi cura di Pompei: stanti le rispettive formazioni professionali non potevano che tentare di o trasformare un'antica città in una caserma, oppure in una caricatura di se stessa, così da abbagliare gli occhi di quanti desiderano essere solamente sbalorditi.." (We all remember that, according Winckelmann, the military engineers of the Bourbons army stood in the same relationship to the task assigned to them to excavate Herculaneum and Pompeii as crabs were to the moon. In this first ten years of the 21st century, two and half century after that beginning, the situation described by the Saxon seems to repeat itself with a larger emphasis and a technological patina, but on a similar scale. Generals of the

areas have been progressively reduced to a very few and slow cases like that of the House of Julius Polybius (IX, 13, 1-3), and the complex known as the House of the Chaste Lovers (IX, 12, 6, 7, 9), where the partial reconstruction of the buildings is still protected by a canopy waiting for a final solution according to new criteria that would take into account the problem of maintenance<sup>95</sup>.

Upon enrollment of Pompeii in the UNESCO list of World Heritage in 1997, the evaluation of the Committee on the conservation aspects took into account the many critical issues resulting from the history of the site,<sup>96</sup> but it considered them with generous optimism based on recent technical progress rather than the actual capacity to put conservation and maintenance back on the road to long-term sustainability. Aside from journalistic exaggerations, often moved by issues far from those

Property area	surf.	mq	862.000
Excavatedarea	surf.	mq	501.000
(inside city-walls)			452.000
Anc. walls	surfaces	mq	242.000
ldem	volumes	m3	55.000
Painted decorations	Surfaces	mq	17.000
Plasters	surfaces	mq	20.000
Pavements	surfaces	mq	12.000
Roofs and shelters	surfaces	mq	20.000
Visitors in 2013		n.	2.443.325

31. The figures of the conservation issue in 1997 (after G. Longobardi, Pompei sostenibile, Rome 2002)



32 The last excavations in Pompeii: the House of the Chaste Lovers (IX, 12, 6).

of cultural heritage conservation, such an optimistic view has been put in question by events such as the

Air Force and rescuers for cases of natural disasters have been assigned to care for Pompeii. Given their professional training they could only try to transform the ancient city into a barracks or a burlesque of itself, such as to dazzle the eyes of those who only wished to be stunned." (translation of the Author).

<sup>95.</sup> See BELLOMO, M., 1999: 63-64. A recent dissertation at the Architecture Faculty of the Turin Politecnico has counted in Pompeii about 150 buildings with total or partial roofs or shelters of 29 different types, using different materials (*www.architesi.polito.it/pdf/SalassaCM\_Ir.pdf*); see also the lectures at the Bologna Conference of 2000 (http://www.arch.unipi.it/arco/novita/giornata.html).

<sup>96. &</sup>quot;Both sites, and Pompeii in particular, illustrate the evolution of conservation techniques over the past two centuries. The degree of reconstruction and the use of materials such as concrete and steel in restorations and reconstructions carried out before the 1980s would not be acceptable if performed today; they are, in fact, being replaced progressively by modern techniques and materials. It may be argued, however, that these early restorations have a historicity of their own which is worthy of some form of conservation. The wall paintings were in the past generally conserved using organic materials, which have caused little, if any, damage to them. However, the techniques used for remounting them using concrete were harmful, and a new method using instead aluminum and plastic, developed by the *Istituto per il Restauro* in Rome, is now being applied progressively to all the paintings. There are serious structural problems at both sites resulting from a variety of factors, such as inappropriate materials, rising damp, and rain and wind attack, and these were exacerbated by the 1980 earthquake... Several new approaches are being implemented at Pompeii. Instead of concentrating on single buildings, restoration and conservation are being directed to entire quarters of the ancient town, consisting of one or more *insulae*, so as to achieve a more integrated result."

collapse of the Schola Armatorum November 6, 2010 (fig. 32).

There is no doubt, in the light of the history that we have briefly related, that the conservation of Pompeii is a problem of such a size and from such ancient roots as to require, beside such specific interventions as those that will be carried out in the framework of the ongoing "Great Pompeii Project" funded by the European Union and the Italian Government, long-term solutions that can only be organizational.<sup>97</sup> An organization designed to recover, in modern and updated forms, this wealth of experience dedicated to stable maintenance. We should also consider, if it proves to be necessary, drastic measures such as re-burying some areas. This work should be carried with the careful attention that John Ruskin recommended. I have had the good fortune to learn from an old worker on the Excavations: "Take care of your monuments and you will not feel the need to restore them. Throw some lead sheets on the roof: a few leaves swept in time from the gutter will save the roof and the wall. Keep an eye on the old building with loving care, protect it the best you can at any price from any squandering influence. Count the stones and watch them; encircle it with an iron belt where it is breaking up, support it with wooden props where it declines. Don't fret because of this: it's better to have a crutch than only one leg. Do all this assiduously, with tenderness and with reverence and and many generations will be born under its shadow."

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<sup>97.</sup> For an updated summary of the last years, see ERBANI 2015 with a critical opinion of the weak organizational approaches to the issue of the conservation.

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