

June 2013

Planning Preservation In Pompeii: Revising Wall Painting Conservation Method And Management

Jennifer L. Wollner
Macalester College

Follow this and additional works at: <https://digitalcommons.macalester.edu/classicsjournal>

Recommended Citation

Wollner, Jennifer L. (2013) "Planning Preservation In Pompeii: Revising Wall Painting Conservation Method And Management," *Studies in Mediterranean Antiquity and Classics: Vol. 3 : Iss. 1* , Article 5. Available at: <https://digitalcommons.macalester.edu/classicsjournal/vol3/iss1/5>

This Article is brought to you for free and open access by the Classics Department at DigitalCommons@Macalester College. It has been accepted for inclusion in Studies in Mediterranean Antiquity and Classics by an authorized administrator of DigitalCommons@Macalester College. For more information, please contact scholarpub@macalester.edu.



Pompeii, since its first excavation in 1738, has been constantly explored and excavated, leaving a huge site of 66 hectares to require maintenance and restorative work. The sheer volume of this work necessitates a comprehensive and cohesive conservation approach as well as a meticulous management system. Past conservation methods have been haphazard and in some cases damaging to the site. Increasingly, it has become apparent that the problems in Pompeii are largely organizational rather than technical or financial. No method for sustainable restoration of the site has been kept in place by the site's management. In 2010, the House of the Gladiators collapsed due to rainwater damage, drawing press attention. In 2011, Pompeii returned to the spotlight when the ancient city's outer wall began to deteriorate as well. Most recently, two yards of a wall on the Vicolo di Modesto, an area excavated in the late nineteenth century, collapsed in November 2011. The constant media attention on failed conservation efforts has prompted efforts towards reorganization and prevention of future problems.¹ To forward these goals, the *Grande Progetto Pompei*² promises to evaluate the site and treat emergency work within five years, hoping to complete its first phases by 2015. This new organization for Pompeii offers hope for the preservation of decoration, but only if crucial steps are taken and funding is spent wisely. This paper aims to explore past methods of management and their effect on conservation practice and to propose a streamlined bureaucratic process in Pompeii, using wall painting as a case study for implementing new conservation practices. First, I will provide an overview of past excavation and preservation management and practices. Then, I will outline the hopes of current management schemes to organize new conservation efforts under the *Grande Progetto Pompei*. I will outline the immediate problems that need to be addressed by the new management. Finally, I will suggest methods for conservation efforts and organization structures to implement

¹ Nikhil Swaminathan and Jarrett A. Lobell, "Sites Under Threat: Historic Sites in Pompeii, Texas and the Altamira Caves," *Archaeology* 65 (2012): 31.

²"The Grand Pompeii Project," referred to in this paper as the "Progetto."

sustainable plans for wall painting conservation. The wall paintings of Pompeii provide a source of fascination for scholars and tourists alike, but they require wall repair, roof structure, and painting restoration conducted in an organized manner aimed at sustainable practice.

PAST CONSERVATION AND MANAGEMENT:

FOCUS ON TOURISM AND EXCAVATION EXPOSES THE PAINTED WALLS IN POMPEII

Past conservation efforts have failed to preserve frescoes because of their focus on tourism and emergency treatment under irresponsible spending by the site's management. Amadeo Maiuri began conservation work beginning in the 1930s, but his work was focused in specific areas of Pompeii, leaving others in disrepair. Similarly, haphazard restoration attempts continued to plague Pompeii, as conservation was taken as an emergency response rather than regular practice. The treatment of wall paintings by early excavators and conservators is reflected in which paintings are currently preserved and which ones are reduced to plaster. Understanding past practices provides the opportunity to understand the current situation and avoid past mistakes.

Amadeo Maiuri became superintendent of Pompeii's archaeological area in 1924 and maintained the position until 1962. During his time at Pompeii, important discoveries such as the Villa of Mysteries and the House of Menander were quickly excavated and immediately restored.³ Maiuri laid ground plans for early restoration work, making Pompeii and Herculaneum into a kind of "open air museum" in which objects were moved to make the houses more lifelike.⁴ Maiuri's efforts at restoration were the first attempts at widespread, inclusive work on

³ Joanne Berry, *The Complete Pompeii* (New York: Thames & Hudson, 2007), 61.

⁴ Domenico Comardo, "The Contribution of the Archaeologist to the Work on the Insula Orientalis I at Herculaneum," *Conservation in the Shadow of Vesuvius: A Review of Best Practices*, presented at a 2003

all structures instead of focusing exclusively on exceptional or interesting buildings.⁵ Rapid restoration and excavation were driven by the Fascists' pride in the Roman past. However, the fragile nature of the finds along with the destruction caused during World War II left Maiuri's public display open only for a few years.⁶ After World War II, public works efforts to remove soil and volcanic material from previous excavations began in order to provide employment and to open up the site to tourists. Few records remain from this project. The soil was used as fertilizer and the volcanic material was used to construct a motorway from Naples to Salerno. Regions I and II were rapidly excavated with incomplete reports.⁷

After Maiuri retired in 1962, many parts of Regions I and II were left exposed after excavation but remained unrestored and unpublished.⁸ Some information was later published in the 1970s, but in many cases the publications were written by people who were not involved in the original excavations.⁹ Four houses have been excavated since 1962: the House of Fabius Rufus (VII. 16), House of Julius Polybius (IX.13), the House of the Chaste Lovers (IX. 12) and the House of the Painters at Work (IX.11).¹⁰ Continued focus on new excavations has stilted basic conservation work on earlier excavations from the 1960s.

Meanwhile, Pompeii continued to gain notoriety in the world. In 1972, the World Heritage List was created by the UNESCO World Convention Concerning the Protection of the World Cultural and National Heritage. UNESCO quickly put the sites of Pompeii and Herculaneum on its list of protected archaeological sites. This marked Pompeii as a crucial part

symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, Samuel H. Kress Foundation, accessed March 11, 2013, http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf, 31.

⁵ Berry, *The Complete Pompeii*, 61.

⁶ Comardo, "The Contribution of the Archaeologist," 31.

⁷ Berry, *The Complete Pompeii*, 62.

⁸ Roger Ling, *Pompeii: History, Life & Afterlife* (Stroud, Gloucestershire: Tempus, 2005), 168.

⁹ Ling, *Pompeii*, 168.

¹⁰ Berry, *The Complete Pompeii*, 62.

of world history while allowing it to receive additional funds for cultural development. Still, by the 1980s, support for cultural heritage in Italy and around the world was dwindling, causing funds to shrink and conservation efforts to shrivel as well. During this time, Pompeii's management in the Soprintendenza Archaeologica di Napoli e Pompei¹¹ restricted excavation to "preserve the site from greater ruin."¹²

Yet, excavation had already outpaced conservation, and the workers at Pompeii began to let the site slip into decay. The World Monument Fund, a private organization for preserving cultural heritage sites around the world, added Pompeii to its "watch list" in 1996. From 1996 to 2002, the World Monument Fund offered technical and financial support on four conservation interventions. In 1997 they underwrote *Piano per Pompei* (A Plan for Pompeii). After the implementation and failure of this plan, created in collaboration with the Soprintendenza, it was noted that "perhaps the greatest need at this stage is management guidelines."¹³

In 1997, only sixteen out of seven hundred eleven staff members were architects, archaeologists, or art historians. Thirty-four were typists.¹⁴ A business study from the University of Bologna identified the main problems as ambiguity concerning specific tasks and "creative accounting" methods within the financial sector of Pompeii's management. Lack of communication between the financial sector and administrative authority has been identified as the primary problem facing Pompeii in the past, when sometimes a third of its funds went unspent. In 2008, it was determined that the Ministry of Cultural Affairs could use up to thirty

¹¹ The Italian governing structure over the archaeological sites of Pompeii, Herculaneum, and Naples, hereafter referred to as "the Soprintendenza." In other documents it is sometimes referred to as the SANP.

¹² Berry, *The Complete Pompeii*, 62.

¹³ John H. Stubbs, "The House of the Silver Wedding Anniversary: The Kress Pompeii Conservation Project," *Conservation in the Shadow of Vesuvius: A Review of Best Practices*, presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, Samuel H. Kress Foundation, accessed March 11, 2013, http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf, 38.

¹⁴ Alison Abbott, "Shoring Up the Wonders: Forty Years on from UNESCO's World Heritage Convention," *Nature* 491 (2012): 328, accessed March 11, 2013, doi: 10.1038/491328a.

million euro from the Pompeii funds if they were not already allocated, that is, assigned to projects by contract. Thirty percent of ticket sale revenue at Pompeii began to filter back to the Ministry to be used on other cultural entities.¹⁵ Meanwhile, the Italian state budget for cultural heritage has continued to shrink in recent years, going from .39% (2 billion euro) of the budget in 2000 to .19% (1.5 billion euro) of the budget in 2011.¹⁶ Staffing problems continue to plague Pompeii, since all staff, from archaeologists to ticket collectors, are guaranteed their positions as government employees for life, causing inflexibility in transitions.¹⁷ Current problems in Pompeii are thus financial, but also linked to inefficient spending and complex bureaucracies. Lack of unified efforts to conserve frescoes has left some paintings in beautiful condition, while others are barely recognizable as art. The efforts toward organization and restoration in Pompeii during the second half of the twentieth century failed to address sources of degenerative decay. Hence, the town is currently in a constant state of emergency due to inefficient management.

NEW MANAGEMENT: REORGANIZATION PLACES EMPHASIS ON RECONSTRUCTION

While past management downfalls have led to decay, new leadership hopes to use new funds to revitalize conservation efforts. New management in Pompeii, under the direction of the Soprintendenza with funds from the EU, aims to offer efficient structure, focusing on goals of conservation, while emphasizing the importance of legality and record-keeping. The *Grande Progetto Pompei*, or the Progetto, developed in 2012, has provided specific goals and guidelines for Pompeii in the coming year, specifically addressing the preservation of wall painting. The Progetto uses funds provided by Italy's national ministries as well as the European Union's

¹⁵ Luca Zan, "Renewing Pompeii, Year Zero. Promises and Expectations from New Approaches to Museum Management and Accountability," *Critical Perspectives on Accounting* 13(2002): 89.

¹⁶ Abbott, "Shoring Up the Wonders," 328.

¹⁷ Abbott, "Shoring Up the Wonders," 328.

European Regional Development Fund. The Progetto was presented on April 5, 2012 in Naples by the Italian government and the European Commission. It proposed a plan to bring Pompeii up to an optimum state of conservation and tourism by 2015. It also focuses on increasing accountability within the management structure of the site, emphasizing records and security. The Italian Cultural Ministry developed this program as a plan to use 105 million euro in EU funds from the European Regional Development fund.¹⁸ The plan was printed in a brochure available on the Cultural Ministry's website. The main goal of this brochure is to present a plan that would make Pompeii sustainable through planned conservation efforts and halting decay. The Italian ministry, in collaboration with the EU, UNESCO, and the Soprintendenza, plan to make the site economically feasible by attracting investment to Campania based on expansion of scientific and technological involvement, tightened security, and increased legality. The funds for Pompeii have been split among five Implementation Plans, with the vast majority of the money being assigned to construction works, which includes consolidation and restoration of the archaeological site. The other Plans cover surveys and diagnostics, visitor communication, security systems, and organization of the Soprintendenza. While the Soprintendenza continues to control the site's projects with EU funds, it is watched with "stern oversight" by international forces.¹⁹

Under the Progetto, money is distributed by a central authority in the Soprintendenza. The Soprintendenza calls for Invitations to Tender for specific tasks – fresco restoration, hydrogeological analysis, work in a specific region – and the archaeologists and conservationists in the field file project proposals. This ability to organize money will be the cornerstone of the success of the Progetto. This method of dividing the large project into smaller tasks prioritized

¹⁸ "Grande Progetto Pompeii," Ministero per I Bene e le Attività Culturali, accessed March 28, 2013, http://www.beniculturali.it/mibac/multimedia/MiBAC/documents/1360253572099_Pompei_brochure.pdf, 33.

¹⁹ Abbott, "Shoring Up the Wonders," 328.

by a central authority fits with Luca Zan and the University of Bologna's study which recommends the application of New Public Management to Pompeii, focusing on increased efficiency through smaller, more accountable units.²⁰ The relatively successful conservation project at Herculaneum breaks down leadership even more, assigning expert "stream leaders" in five areas of conservation: architecture, engineering, material conservation, site planning, and interpretation.²¹ This method's application promises similar results in Pompeii, securing the employment of at least twenty more archaeologists and architects in the next twenty years.²²

Central organization of money can be made even more efficient if privately funded projects can be incorporated into research as well. Many successful attempts at large scale archaeological conservation have involved private funding in recent years. A prime example is the Coliseum's restoration work, funded by an Italian shoe company. Similarly, conservation efforts in Herculaneum are funded by a philanthropic organization, the Packard Humanities Institute.²³ In 1998, Pompeii began a smaller scale privately funded project called the Kress Pompeii Conservation Project, created in collaboration with the World Monument Fund and the Soprintendenza, which focused on a single house in hopes of making it an example of a holistic and integrated approach to conservation.²⁴ Despite privately-funded efforts, however, the Soprintendenza must continue to be responsible for coordination and management of all efforts on the site. In 2003, a symposium of scholars suggested creating a database of information to be used by scholars and establishing "Principles and Guidelines for Conserving Architectural and

²⁰ Zan, "Renewing Pompeii, Year Zero," 89.

²¹ Stubbs, "The House of the Silver Wedding Anniversary," 38.

²² Abbott, "Shoring Up the Wonders," 328.

²³ Monica Martelli Castaldi, "Preserving the Decorated Surfaces of Herculaneum," *Conservation in the Shadow of Vesuvius: A Review of Best Practices*, presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, Samuel H. Kress Foundation, accessed March 11, 2013, http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf, 27.

²⁴ Stubbs, "The House of the Silver Wedding Anniversary," 38.

Archaeological Fabric of Pompeii and Herculaneum.” This organizational publication by the Soprintendenza would unify conservation efforts through clearly stated goals and methods.²⁵ The Soprintendenza must also be key in recording the before, during, and after of every intervention.²⁶ If privately funded projects are to contribute significantly to the development of Pompeii as a whole, the unity of efforts cannot be jeopardized by them. All efforts currently privately funded must be incorporated into plans put forth by the Soprintendenza to create a unified conservation paradigm for Pompeii.

CONSERVATION PROBLEMS:

NEW MANAGEMENT ADDRESSES THE CONSTANT STATE OF EMERGENCY

The organization of the Soprintendenza aims to unify wall conservation efforts to conform to sustainable and cutting-edge practices in wall conservation. Wall painting conservation methods have vastly improved over the past few decades, but the bulk of Pompeii’s walls have not yet benefitted from these developments. The new management program faces a myriad of conservation problems, many of which are interconnected, from crumbling wall paintings to water drainage. Many approaches have been proposed in the last decades concerning how to tackle these problems. Some suggest organizing by region, others by creating categories of “emergency” and “non-emergency” work. One thing is clear: the process will require a set of variously trained professionals who collaborate under a unifying vision with the goal of halting decay and repairing previous damage. On one aspect, every major plan for Pompeii in the last decade has agreed: conservation is the primary objective.

²⁵ “Symposium Conclusions,” *Conservation in the Shadow of Vesuvius: A Review of Best Practice*, presented at a 2003 symposium sponsored by the Soprintendenza Archeologica di Pompei, World Monuments Fund, Samuel H. Kress Foundation, accessed March 11, 2013, http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf, 49.

²⁶ “Symposium Conclusions,” *Conservation in the Shadow of Vesuvius: A Review of Best Practices*, 49.

When planning for Pompeii's conservation, the Cultural Ministry and the Soprintendenza have the benefit of observing the Herculaneum Conservation Project, which has already begun implementing a long-term, sustainable conservation plan under the direction of Andrew Wallace-Hadrill, the Packard Humanities Institute, the British School of Rome, and the Soprintendenza. They use a four-pronged approach which studies archived material to determine past conservation efforts and the original state of the ruins, a pilot project for modeling further restoration, focus on immediate emergency procedures, and finally scientific studies for sustainable practice.²⁷

The focus on "emergency works" requires specific definition in order to be a manageable step in the process of creating a sustainable Pompeii. Because of the sheer size of the site, emergency procedures could very well never end. Indeed, until the new millennium, major projects at Pompeii were treated as emergency response without focus on creating a paradigm for future problem solving. The Herculaneum Conservation Project has listed several specific procedures under "emergency works," including structural consolidation (especially for buildings in immediate danger of collapse), securing decoration, restoration of rainwater collection, and study of secondary sources of decay.²⁸ In observing pilot projects and initial attempts at emergency reconstruction, the conservators and management need to collaborate in order to construct a plan for future upkeep.

²⁷ Castaldi, "Preserving the Decorated Surfaces of Herculaneum," 27.

²⁸ Castaldi, "Preserving the Decorated Surfaces of Herculaneum," 27.

STEPS TOWARD SUSTAINABLE CONSERVATION: OBJECTIVES SHIFT TO RECONSTRUCTION,
ROOFING, RAIN DRAINAGE, AND REPAIR FOR WALL PAINTING

In order to make lasting repairs to the wall paintings in Pompeii, leadership needs to observe current efforts and implement an orderly plan for continual preservation. The first step in preserving wall paintings is, of course, insuring the wall is structurally sound. Preventing further collapse and negative press is a priority for safety, morale, and the good of the wall art. The second step is roofing to begin to protect the plaster and paint from the elements and create the possibility for future humidity control. Since rainwater is a primary concern, preventing further rain damage from above is key. Then rainwater, which damages the painting from below as well, must be controlled by renewing drainage systems that have fallen into disrepair. Only after these three immediate concerns are dealt with can the painting be restored more completely.

Stabilizing the paintings' chemical and biological degradation allows the restoration work performed on it to last. If conservation were compared to medicine, this approach would be considered "holistic medicine," addressing the causes of illness rather than only treating symptoms as they arise. This "holistic" approach to conservation, which addresses causes of decay while increasing the site's ability to resist future decay provides a lasting and financially sustainable solution to the problem of wall painting degradation.²⁹ This "holistic and integrated" approach has been echoed in recent studies in Pompeii, such as the Kress Pompeii Conservation Project.³⁰

The first step in protecting wall painting after assuring that the wall will not collapse is protecting the wall with roofs, with priority given to walls that are in danger of collapse and

²⁹ Castaldi, "Preserving the Decorated Surfaces of Herculaneum," 27.

³⁰ Castaldi, "Preserving the Decorated Surfaces of Herculaneum," 27.

breakage due to trampling by tourists.³¹ The roof structures suggested by engineers and conservationists would have to be stable, but also fall into line with conservation best practices by adhering to principles of total reversibility. In order to avoid damage to the ancient walls, these roofs would have modern supports, as opposed to previous efforts which have placed heavy modern materials on the ancient walls and thereby damaged them.³² Instead, the new roof structures should be non-intrusive, versatile, reversible and self-standing. They would have enlargeable and adaptable dimensions and fit a modular design with easy assemblage to accommodate the large area of the Pompeii archaeological site. Current research conducted by the MIUR (Ministero Istruzione Universita Ricerca) has recommended an aluminum structure with a tough glass covering and stainless steel bolts and hinges.³³ The creation of roof and reinforcement structure would also allow for the possibility of humidity regulation to prevent the plaster of the frescoes from peeling off the walls.³⁴ Meanwhile, ancient walls would be reinforced using only mortars mixed on site, with a focus on truth to ancient appearance and materials.³⁵

The “heavy rain” problem that has caused walls to collapse in Pompeii could be solved by improving both the roof structures and the drainage system. The current system remains ineffective as upheaval of floors has shifted the runoff of water and the ancient drains have been

³¹ Castaldi, “Preserving the Decorated Surfaces of Herculaneum,” 27.

³² “Symposium Conclusions,” *Conservation in the Shadow of Vesuvius: A Review of Best Practices*, 49.

³³ Maria Rosario Motolese, “A Lightweight Covering System for Protection of Archaeological Sites and Remains: Testing a Prototype for a Newly Excavated Area in Pompeii,” *Conservation in the Shadow of Vesuvius: A Review of Best Practices*, presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, Samuel H. Kress Foundation, accessed March 11, 2013,

[http://www.wmf.org/sites/default/files/wmf_publication/](http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf)

[Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf](http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf), 15.

³⁴ Jens-Arne Dickmann and Felix Pirsén, “La Casa dei Postumii (VIII. 4,4.49) And Its Insula: Present State and Future Prospects for Conservation and Presentation,” *Conservation in the Shadow of Vesuvius: A Review of Best Practices*, presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, Samuel H. Kress Foundation, accessed March 11, 2013,

[http://www.wmf.org/sites/default/files/wmf_publication/](http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf)

[Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf](http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf), 11.

³⁵ Castaldi, “Preserving the Decorated Surfaces of Herculaneum,” 27.

blocked. Most conservators favor repairing and restoring the ancient drains, both for the practice of minimal intervention and for the authenticity of presentation. However, according to a more recent study by Eric Poehler, the studies of drains in the 1980s by L. Richardson, Jr. and in the 1990s by H. and L. Eschebach disagree on drainage structure and contain glaring omissions.³⁶ Poehler suggests that rainwater in Pompeii was controlled through roofs, gutters, cisterns, and drains. Most buildings shed water into the streets. He argues that paving stone ramps, sidewalk ramps, and curbstone blockages were used to control water flow within the city. Individual sewers escorted water out of town through a defined pathway based on the natural hills and basins within Pompeii's walls.³⁷ Pompeians collaborated with their topography, so any attempt to restore these drainage systems should follow a similar model.

The final step in the preservation of wall painting in Pompeii focuses on restoration and reinforcement of the painting. It would begin with art historical analysis and recording of the current painting condition. Currently, conservationists consider it best practice not to use any artificial surface coatings to support the original painting. Instead they do genuine consolidation supportive work, using only materials that match the ancient ones. Supportive coating may be used but later removed in the cases of extremely fragile paintings, which require the support of the coating to be grouted. This non-interventionist policy falls in line with conservation best practices by being reversible and true to the original work. This step would also evaluate biological and chemical problems that cause decay in the painting.³⁸ Cleaning is not considered

³⁶ Poehler E.E., "The Drainage System at Pompeii: Mechanisms, Operation and Design," *Journal of Roman Archaeology* 25 (2012): 95-120.

³⁷ Poehler, "The Drainage System at Pompeii," 117.

³⁸ Castaldi, "Preserving the Decorated Surfaces of Herculaneum," 27.

an emergency process, but routine cleaning of all previously restored works would prevent future damage.³⁹

PRIORITIZING ORGANIZATION: HOW TO PUT PLANS INTO PRACTICE

The practices of the previous section will only be effective if administered by a unified organizational program. The project of preserving Pompeii's walls is dependent on the ability of management to orchestrate a unified but efficient method for executing its projects with the appropriate experts. I propose that the Soprintendenza create standardized guidelines and goals based on the current state of research in Pompeii. For instance, standardized roofing structures should be decided upon by the Soprintendenza. A set of criteria for the preservation of paint should be established. Then, the Soprintendenza would be in charge of orchestrating efforts based on these regulations. Meanwhile, I suggest that the individual projects be executed by teams assigned to the specific areas of Pompeii. These areas could be organized by region, but each region would be equipped with an architect, painting conservator, masonry restorer, engineer, and chemist. As a team, these experts would work within their region to address specific problems with the goal of lasting restorative practice. They would address emergency situations first, but then address the sources of decay within Pompeii. The goal here is to avoid over-bureaucratization, which has burdened Pompeii and other European historic sites for decades.⁴⁰ Simplification of management is crucial. The Soprintendenza should unify goals, control funds, and house records. The current proposal of setting specific goals through "Invitations to Tender" allows for step-by-step goals. As long as communication remains open

³⁹ Castaldi, "Preserving the Decorated Surfaces of Herculaneum," 27.

⁴⁰ Denis de Kergorlay, "The Role of Association in the Protection of Europe's cultural Heritage," in *Cultural Heritage in the 21st Century: Opportunities and Challenges*, ed. Monika A. Murzyn, and Jacek Purchla (Kraków: International Cultural Centre, 2007), 248.

between experts in the field and management teams concerning immediate goals, this measure should bring a focus to Pompeii's conservation efforts.

CONCLUSION

With extensive review of organizational structure and focus on step-by-step conservation practice with the aim of sustainability, the wall decorations of Pompeii can be preserved for future academics and tourists alike to admire. Looking forward, there is hope for Pompeii to be sustainably and continuously preserved. It may seem like a utopian dream when the scope of the work to be done is realized. If this work is not completed, Pompeii may be seriously forced to consider John Dobbins's recommendation of reburial and a one hundred year moratorium on excavation; when all else fails, reburial of select *insulae* would protect them from vegetal growth, weather conditions, earthquake damage, and volcanic eruptions.⁴¹ Jeannette Papadopoulos, the archaeological superintendent, has described Pompeii as being in "a constant state of emergency."⁴² In many cases this is true. The early, rapid excavations of Pompeii ensured that the amount of excavated material would overpower the efforts to conserve the art exposed. These problems have been consistently compounded by financial mismanagement. The *Grande Progetto Pompeii* produced by the EU and Soprintendenza promises a reorganization and commitment to unifying efforts at conservation. A more efficient organizational system has the power to develop sustainable plans to preserve wall painting focused on structural stability, roofing, drainage, and restoration. Through an efficient management system and the help of a series of experts, these steps can be taken in order to revitalize fresco preservation at Pompeii, despite the immense amount of work to be done.

⁴¹ "Conclusions of the Symposium," *Conservation in the Shadow of Vesuvius: A Review of Best Practices*, 49.

⁴² Swaminathan and Lobell, "Sites Under Threat," 31.

If the decay can be rectified efficiently, and constant upkeep practices are put into place as paintings are restored, then Pompeii can be saved. This program is a difficult transition for those who work at Pompeii – it forces site management to focus beyond the aesthetics, publicity, and tourism that have fueled the site for so many decades. With a focus on efficiency and long-term planning, the new management of Pompeii has the chance to provide a long-term commitment, benefitting tourism, education, and archaeology alike.

Bibliography

- Abbott, Alison. "Shoring Up the Wonders: Forty Years on from UNESCO's World Heritage Convention." *Nature* 491 (2012): 328-329. Accessed March 11, 2013. doi: 10.1038/491328a.
- Berry, Joanne. *The Complete Pompeii*. New York: Thames & Hudson, 2007.
- Castaldi, Monica Martelli. "Preserving the Decorated Surfaces of Herculaneum." *Conservation in the Shadow of Vesuvius: A Review of Best Practices*. Presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, and Samuel H. Kress Foundation. Accessed March 11, 2013. <http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf>.
- Comardo, Domenico. "The Contribution of the Archaeologist to the Work on the Insula Orientalis I at Herculaneum." *Conservation in the Shadow of Vesuvius: A Review of Best Practices*. Presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, and Samuel H. Kress Foundation. Accessed March 11, 2013. <http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf>.

Summary of the Proceedings and Papers Presented at the Symposium Conservation in the Shadow of Vesuvius: A Review of Best Practices. 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, and Samuel H. Kress Foundation. Accessed March 11, 2013.

<http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf>.

Dickmann, Jens-Arne, and Felix Pirsen. "La Casa dei Postumii (VIII. 4,4.49) And Its Insula: Present State and Future Prospects for Conservation and Presentation." *Conservation in the Shadow of Vesuvius: A Review of Best Practices*. Presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, and Samuel H. Kress Foundation. Accessed March 11, 2013.

<http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf>.

"Grande Progetto Pompeii." Rome, Italy: Ministero per i Beni e le Attività Culturali, 2012. Accessed online 28 March 2013. <http://www.beniculturali.it/mibac/multimedia/MiBAC/documents/1360253572099_Pompei_brochure.pdf>.

de Kergorlay, Denis. "The Role of Association in the Protection of Europe's Cultural Heritage." In *Cultural Heritage in the 21st Century: Opportunities and Challenges*, edited by Monika A. Murzynand Jacek Purchla, 247-250. Kraków: International Cultural Centre, 2007.

Ling, Roger. *Pompeii: History, Life & Afterlife*. Stroud, Gloucestershire: Tempus, 2005.

Motolese, Maria Rosario. "A Lightweight Covering System for Protection of Archaeological Sites and Remains: Testing a Prototype for a Newly Excavated Area in Pompeii." *Conservation in the Shadow of Vesuvius: A Review of Best Practices*. Presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, and Samuel H. Kress Foundation. Accessed March 11, 2013.

<http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf>.

Poehler, E.E. "The Drainage System at Pompeii: Mechanisms, Operation and Design". *Journal of Roman Archaeology* 25 (2012): 95-120.

- Stubbs, John H. "The House of the Silver Wedding Anniversary: The Kress Pompeii Conservation Project." *Conservation in the Shadow of Vesuvius: A Review of Best Practices*. Presented at a 2003 symposium sponsored by the Soprintendenza Archaeologica di Pompei, World Monuments Fund, and Samuel H. Kress Foundation. Accessed March 11, 2013. <http://www.wmf.org/sites/default/files/wmf_publication/Conservation%20in%20the%20Shadow%20of%20Vesuvius%20a%20Review%20of%20Best%20Practices.pdf>.
- Swaminathan, Nikhil, and Jarrett A. Lobell. "Sites Under Threat. (Historic Sites in Pompeii, Texas and the Altamira Caves)." *Archaeology* 65 (2012): 31.
- Zan, Luca. "Renewing Pompeii, Year Zero. Promises and Expectations from New Approaches to Museum Management and Accountability." *Critical Perspectives on Accounting* 13 (2002): 89-137.