

ON A GIANT'S SHOULDERS: THE SICILIAN MUMMY EXPEDITION OF ARTHUR AUFDERHEIDE (1922-2013)

Dario Piombino-Mascoli¹ and Albert Zink²

¹ Department of Anatomy, Histology and Anthropology
Faculty of Medicine, Vilnius University, Vilnius, Lithuania
dario.piombino@mf.vu.lt

² Institute for Mummy Studies
European Academy of Bolzano, Bolzano, Italy

PIOMBINO-MASCALI, D. AND ZINK, A. (2021). On a Giant's Shoulders: The Sicilian Mummy Expedition of Arthur Aufderheide (1922-2013). *Canarias Arqueológica*, 22: 563-570.
<http://doi.org/10.31939/canarq/2021.22.46>

Abstract. This article is an account of Arthur Aufderheide's Sicilian Mummy Expedition, carried out in March of 2008, and of his significant contribution to the development of mummy studies in Sicily.

Keywords. Mummy studies. Heritage. Aufderheide. Sicily.

I. INTRODUCTION

«Bernard of Chartres used to say that we are like dwarves perched on the shoulders of giants, and thus we are able to see more and farther than the latter. And this is not at all because of the acuteness of our sight or the stature of our body, but because we are carried aloft and elevated by the magnitude of the giants» (Pioreschi, 2003, 709).

The medieval English author and educator, John of Salisbury, used this passage attributing an original perception of intellectual progress to Bernard of Chartres, a French philosopher and scholar, to explain a simple concept. Bernard of Chartres believed that progress was a continued acquisition by modern thinkers, who advanced their thinking based on previous achievements, despite their “smallness”, if compared to ancient achievements. Similarly, modern mummy science is particularly indebted to American pathologist Arthur Aufderheide, a giant in the field of medicine, whose contribution to the discipline left an indelible mark on all of us (Nystrom, 2014). This short article summarises an experience that the authors shared with the late Professor Aufderheide, which allowed them to gain important information about the Sicilian mummies.

2. HOW IT ALL STARTED

The first author of this paper met Professor Aufderheide in August of 2006, after a short correspondence. The mummies of Sicily had undergone little investigation aside from some dissections at Comiso in 1987 (Fornaciari, 1998). D.P.M reached out to the professor seeking some advice on the subject, and as a result developed a profound interest in these remains. Professor Aufderheide became an enthusiastic supporter of the research, and invited him to present the preliminary results at the Paleopathology Association European Meeting in Santorini. On that occasion, contacts were also made with the second author of this paper, an expert in ancient DNA analysis and soon-to-become scientific partner of the project. Our small group was interested in carrying out studies on those precious remains, neglected in many respects for centuries. Therefore, we met again in February of 2007 in Teguise, Lanzarote, at the World Congress of Mummy Studies. During that exciting conference, a meeting of vital importance was held with Chris Sloan, a writer and art director with National Geographic, who indicated the possibility of involving the world-renowned American science institution as a supporter of this project. In July of 2007, the founding of the first Institute for Mummy Studies at Bolzano, headed by Dr Zink himself, provided a unique opportunity for the formalization of this specific long-term project. Therefore, after obtaining permission from the various stakeholders and the local institutions, we launched the “Sicily Mummy Project”. Exactly one year after that last mummy meeting, in February of 2008, D.P.M. joined the Bolzano group for a four-year post-doctoral position. Around the same time, he obtained a competitive grant from National Geographic

to arrange the first mummy expedition, inviting both Aufderheide and Zink to join as members for this pioneering exploration of the Sicilian mummies.

3. IN SICILY

A month later, in March of 2008, we gathered in Catania's international airport, accompanied by Susan Welchman, photo editor for National Geographic, and professional photographer Gianluca Colla. Soon after, we were also joined by British author Adrian Gill, who would cover the story for the general public (Gill, 2011). The following day, we inspected the first collection of mummies at Savoca, a medieval town located on a hill overlooking the Ionian Sea (Fig 1). After viewing the remains in silence, Aufderheide said: «Dario, I think you have a lot of work to do here». The 16 subjects, temporarily contained in plywood coffins, were carefully inspected and minimal sampling was carried out. During that time, Professor Aufderheide pointed out how pseudopathology and taphonomic factors frequently render interpretation of soft tissue remains problematic (Aufderheide,



Fig. 1. The three members of the scientific expedition in the crypt of the Mother Church of Savoca.



Fig. 2. Professor Aufderheide inspecting one of the mummies in the crypt of the Mother Church of Piraino.

2003). Another important aspect of relevance for Sicilian mummy studies was the definition of these findings as “spontaneous-enhanced”, meaning obtained through natural desiccation. This was done by using the related preparation rooms located in the crypts, but also by filling the cavities with foreign material through areas where there was loss of substance (Piombino-Mascali, 2018). The second collection was that of Novara di Sicilia, in the Nebrodi mountains, where six mummies are held in the Mother Church’s subterranean chamber. In this picturesque town we speculated on the importance of the environmental conditions conducive to the mummification process, as suggested by the presence of some dead cats that had been mummified after being trapped in the crypt. Soon after, we headed to the historic town of Piraino, located on a hill overlooking the Tyrrhenian Sea (Figs 2-4). There, the pristine condition of many of the 26 remains seen in the crypt enabled Aufderheide to observe some pathological features, such as pleural adhesions on a mummy and the presence of a coprolite (Nystrom & Piombino-Mascali, 2017). The final mummy set to be inspected was in the Capuchin Cata-



Fig. 3. The members of the mission together with Father Calogero Musarra, Archpriest of Piraino, inspecting an archival source.

combs of Palermo, the former capital of Sicily, where 1284 mummies are shown along the sides of the crypt corridors (Piombino-Mascali, 2018). There, anthropogenic mummification was evident. False eyes and eye caps, make-up, and injection sites for chemical preservatives were observed in many of the mummies (Piombino-Mascali, 2017a). After viewing the preparation room, Aufderheide was able to revise his interpretation of the mummification mechanism at Palermo that he made initially during a visit 20 years prior. In the preparation chamber, bodies were laid inside cells on terracotta grids for a period of about a year. Therefore, the pathologist suggested that the gravel-like limestone present inside the draining facility was responsible for the desiccation of the body (Aufderheide, 2003). However, limestone is not commonly present inside the draining facilities, and by the time we re-inspected the ceramic grid present in one of the cells, the residual materials had been removed, indicating that the cause of mummification at Palermo remains largely due to environmental factors (Piombino-Mascali, 2018). Lastly, one more investigation concluded this important mummy mission: viewing Alfredo

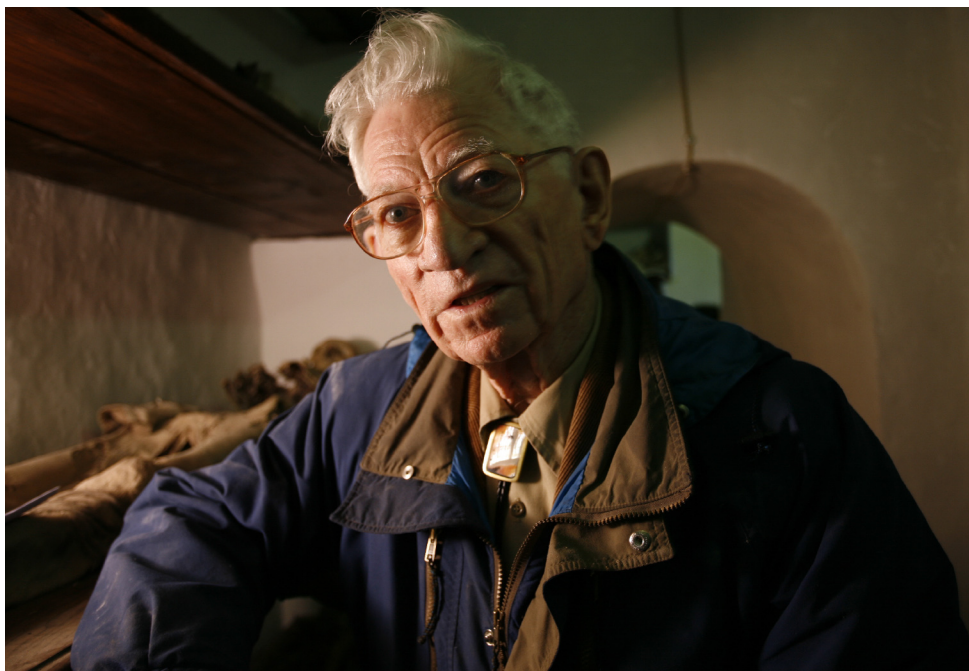


Fig. 4. An image of Professor Aufderheide in the crypt of the Piraino Mother Church.

Salafia's memoir, access to which was possible thanks to a relative of the embalmer's second wife (Fig. 5). Salafia was known for having prepared, among others, the body of little Rosalia Lombardo in December of 1920, and his written notes were instrumental for revealing the importance of embalming as a funerary practice in early 20th century Palermo and New York (Piombino-Mascali, 2009).

At the end of this final mission, considering that this was his last field activity, Professor Aufderheide donated his dissection kit to one of us: that kit could not have potentially been useful for any other sampling campaign, bearing in mind that dissections in Sicily were not allowed. In January of 2017, this set of tools was placed on permanent exhibition in the town museum of Savoca, where this extraordinary experience was initiated.

Although Arthur Aufderheide declined the invitation to travel back to Sicily in July of 2008 to carry out a radiological study of the remains, in September of the same year he accepted an opportunity to join an embalming experiment in Rosemont near Chicago, a project that was headed by Melissa Johnson Williams, exec-



Fig. 5. An image of the members of the expedition with Anna Filippone, a relative of Salfia's second wife.

utive director of the American Society of Embalmers. This resulted in him being awarded an honorary membership of the aforementioned society. Both this experiment and other footage that had been taken in July were eventually included in a National Geographic Explorer documentary titled "Italy's Mystery Mummies," directed by Ron Bowman, which first aired in February 2009.

4. THE LEGACY

During our precious time spent together, Arthur Aufderheide had expressed concern about two main issues of mummy studies: the lack of universal standards, and the need for a peer-review process for much of the research published. Efforts are currently being made to address these issues, and ensure that mummy science retains a high standard of scientific ethics and rigour. The many exceptional contributions of this scholar and his wife, Mary (Piombino-Mascali, 2017b), as well as his generosity and guidance offered to younger scholars, make Arthur Aufderheide

an example to follow, an inspiration, and a leader within our discipline, which involves a unique combination of physical anthropology, archaeology and medicine (Aufderheide, 2003). The absence of Art and Mary is painful, but the many doors they opened to the past continue to illuminate. It is our duty, now more than ever, to keep those doors open.

ACKNOWLEDGMENTS

We are grateful to the National Geographic Society, the American Society of Embalmers, and the Department of Cultural Heritage and Sicilian Identity. Dr Heather Gill-Frerking generously edited previous drafts of this paper.

BIBLIOGRAPHY

- AUFDERHEIDE, A.C. (2003). *The Scientific Study of Mummies*. Cambridge: Cambridge University Press.
- FORNACIARI, G. (1998). *Italian mummies*. In: Cockburn, T.A., Cockburn, E. & Reyman, T.A. (eds), *Mummies, Disease, & Ancient Cultures*. 2nd edition. Cambridge: Cambridge University Press, 266-281.
- GILL, A.A. (2011). *A.A. Gill is further away*. London: Weidenfeld & Nicholson.
- NYSTROM, K. (2014). *Aufderheide, Arthur Carl*. In: Cardin, M. (ed.) *Mummies Around the World: an Encyclopedia of Mummies in History, Religion, and Popular Culture*. Santa Barbara: ABC Clio, 13-15.
- NYSTROM, K. & PIOMBINO-MASCALI, D. (2017). *Mummy studies and the soft tissue evidence of care*. In: Tilley, L. & Shrenk, A.A. (eds), *New Developments in the Bioarchaeology of Care*. Cham: Springer, 199-218.
- PIOMBINO-MASCALI, D. (2009). *Il maestro del sonno eterno*. Palermo: La Zisa.
- (2017a). *The Lovely Bones: Capuchin Catacombs of Palermo*. In: Rodriguez-Maffiotte Martin, C. (editor), *Athanatos. Inmortal. Muerte e inmortalidad en poblaciones del pasado*. Tenerife: Cabildo de Tenerife, 127-131.
- (2017b). Mary Aufderheide 1923-2017. *Paleopathology Newsletter*, 180: 25-26.
- (2018). *Le catacombe dei Cappuccini. Guida storico-scientifica*. Kalós: Palermo.
- PRIORESCHI, P. (2003). *A History of Medicine*. Volume 5, Medieval medicine. Omaha: Horatius Press.