

HAWARTE

CONSERVATION OF A MURAL

Ewa Parandowska

A team of restorers,¹⁾ working from April 20 to May 21, 2002, concentrated on preparing a fragment of a wall painting with a representation of Mithra-Helios, currently stored at the National Museum in Damascus, for exhibition in the Archaeological Museum in Hama. Work also proceeded on hundreds of detached fragments recovered from the fill during previous excavation seasons at the mithraeum in Hawarte and preserved in the museum stores at Hama and Afamia.

1) The joint Syro-Polish team was headed by Mrs. Ewa Parandowska, restorer, and included Ms Nada Sarkis, restorer from the National Museum in Damascus, and Ms Magdalena Muc and Mr. Cristobal Calaforra-Rzepka, wall-painting restorers from Poland.

TRANSFER OF THE MITHRA-HELIOS WALL PAINTING

The wall painting brought from Damascus to Hama was part of a larger scene representing Mithra as Helios. It had once decorated the eastern wall of the main room of the mithraeum in Hawarte.

It had been cut from the wall before 1998 and separated from the earlier paint layer. Both layers, each about 0.2-0.5 cm thick, had been backed with gauze and transported on a plaster bedding that was profiled to correspond to the original curve of the wall in the mithraeum (*Fig. 1a*). The condition of the upper paint layer was evaluated as fairly good, while the surface of the lower one, covered with a thin coating of lime plaster, was full of cracks and gaps that made it generally illegible. After preliminary treatment involving cleaning and consolidation, it was possible to distinguish the colors and the composition of the painted scene.

With the objective of preparing the Mithra-Helios wall painting for future display as a self-standing panel, more attention was given to the preservation of the original curve of the wall and providing a geometric background and frame.

The first step was to dust the surface using natural brushes and *wishab* sponges. A 30% solution of ethanol in water was tamponed on to clean the painted surface chemically. A detached fragment of the mural representing the moon, found in one of the boxes, was fixed and glued to the rest of the scene. The cracks and empty spaces were filled with newly prepared stucco (1:1:1.5 parts of fine sand-calcium carbonate-PRIMAL AC-33).

In order to prepare the new background the entire painted surface was first protected with Japanese tissue, followed with two layers of gauze and canvas glued with polyvinyl alcohol in water. A polyethylene

sheet was used to isolate the facing from the wet gypsum applied on top as the new plaster bedding, reinforced with linen flocks and wooden bars. This was then turned upside down, opening the way to the preparation of a supporting construction composed of several layers.

The reverse side of the painting was impregnated with PLEXTOL B-500. A layer of cotton gauze and another of canvas were stuck with PRIMAL AC-33 (1:1 solution in water). This was followed by a layer of ground (calcium carbonate with 60% polyvinyl acetate), leveled with a thin layer (0.2 cm) of the same putty with sifted sand. A sheet of polystyrene foam (1 cm thick) was glued with polyvinyl acetate as an intervention layer, permitting the reinforced original painting to be detached easily, if need be, from the composite structure.

Another two layers of canvas were stuck with polyvinyl acetate to the intervention layer. This was followed with another layer of mortar (polyvinyl acetate with calcium carbonate) and finally a thick layer of shellac in ethanol. Sand was spread while the resin was still liquid in order to form an abrasive surface for better adhesion of the next layer of fiberglass fabric. This fabric was stuck with an epoxy resin EPIDIAN 5, used also to fix the honeycomb aluminum panels on top. Panels had to be cut to adjust them to the size of the painting and left under pressure until the resin dried.

When the opportunity for reversing the transfer presented itself, the facing was removed from the paint surface with hot water compresses which dissolved the polyvinyl acetate.

The edges of the original painting were reinforced with strips of gauze and PRIMAL AC-33. The empty spaces and gaps on the

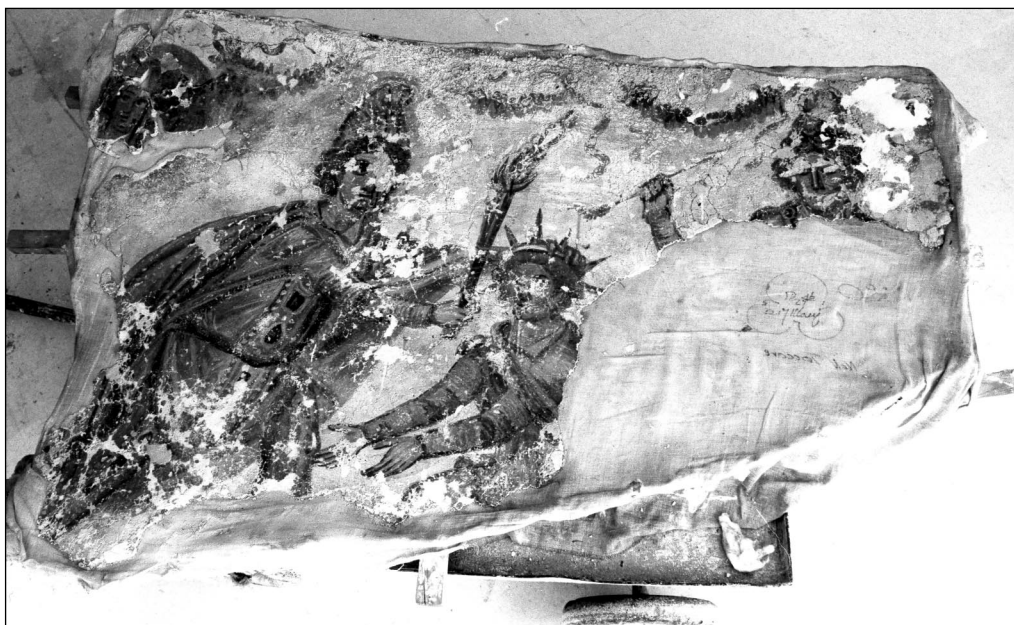


Fig. 1a. Mithraic scene detached from the eastern wall of the mithraeum in Hawarte, state before treatment in 2002 (Photo E. Parandowska)

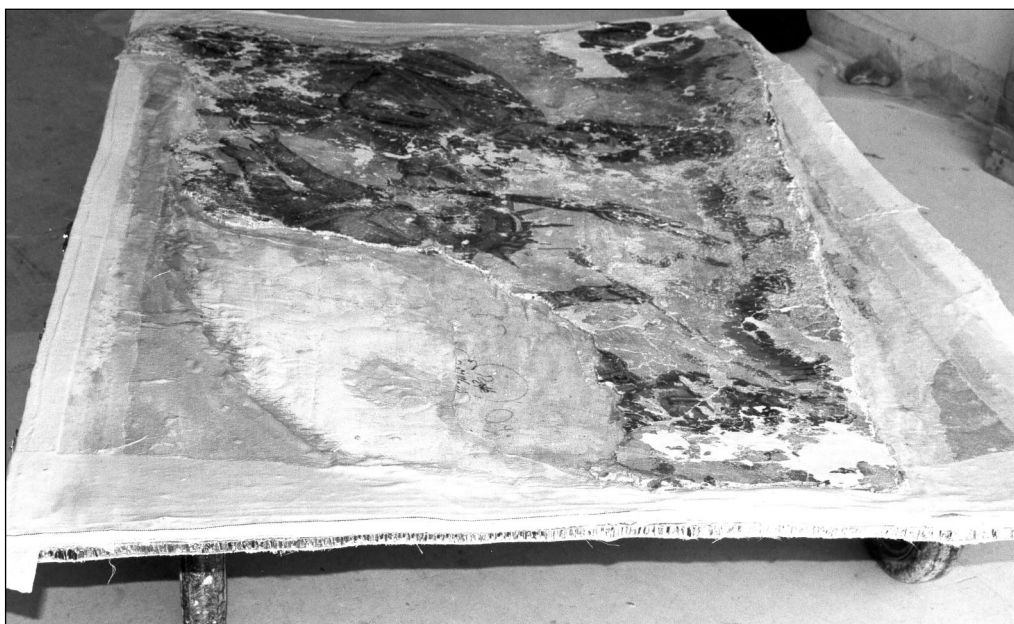


Fig. 1b. The same mural fragment glued on a new support (Photo E. Parandowska)



Fig. 2. Fragment of the fourth layer (lower one) of decoration found during the separation of layers carried out this season (Photo E. Parandowska)



Fig. 3. Example of new joining fragments discovered this season (Photo E. Parandowska)

surface of the transfer were leveled with a layer of mortar (2:1:0.1 parts of sand-lime-PRIMAL AC-33). Small cracks were filled with a ground composed of calcium carbon-

ate, fine sand and PRIMAL AC-33 (*Fig. 1b*). The final aesthetic arrangement (color unification of the new plaster, wooden frame) will be completed during the next season.

RESTORATION OF RECOVERED FRAGMENTS OF PAINTING

Several big pieces and hundreds of mostly tiny fragments of painted plaster had been recovered during previous excavation seasons from the debris filling the mithraeum. Partly re-assembled, they were sorted separately as coming from the ceiling and from the walls, and stored for processing in eighteen specially designed, flat wooden boxes (120 by 80 cm). The boxes remained in the Afamia Archaeological Museum, while many fragments collected by Syrian restorers before 1998 were kept in the museums at Damascus and Hama.

This year all the preserved fragments were brought together at the new archaeological museum in Hama, where they were treated and studied in preparation for a virtual 3D reconstruction of the five different layers of painting that had originally decorated the mithraeum at Hawarte.

The big working space in the basement of the museum building permitted work on many fragments at the same time. Almost all the fragments of painted plaster could be viewed simultaneously, spread out on the floor and in the eighteen wooden sand-filled frames.

Many big fragments of painting from the collapsed ceiling were found still attached to chunks of bedrock. Numerous

of these fragments consisted of several superimposed painting layers. One of the objectives of the restoration work was to separate the layers of decoration and to detach them from the remaining stone support.

Detaching and restoration of the earlier layers of painting had to be preceded with careful cleaning, disinfecting (PREVENTOL, 20% solution in alcohol) and protecting of the surface with Japanese tissue stuck with polyvinyl alcohol. The reverses of thin and fragile separated fragments had to be reinforced with gauze and plaster (lime, sand and polyvinyl acetate). Once the facing had been removed with hot-water compresses, the fitting fragments were joined and glued (*Fig. 2*). Many new joining fragments were discovered during the present work (*Fig. 3*), but much work remains to be done. Selected larger fragments of particular painting layers can be prepared for display at the Museum in the same manner as the two transfers described (previously a part of the ceiling had been treated in Warsaw).

Obviously, all the newly detached layers of decoration will be included in the computer-aided virtual reconstruction, giving an even better idea of how the decoration on the mithraeum walls and ceiling changed and developed over time.