

The treatment of conservation-restoration of a bronze statue representing a sower woman.

Artist J. Probst 1933, Fonderie Giesserei, Rüetschi A.G., Araau
Mohrhaldenstr./ Immenbachstr. Riehen

Report of restoration November 2004



Before treatment.

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Bâle, 5th December 2004

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Artist J. Probst 1933, Riehen

Report of restoration

(The first offer for restoration was made the 20th of November 2003 and the second the 5th march 2004 was accepted the 22nd of October 2004).

This report concerns the conservation and restoration of the bronze statue representing a sow woman located by the park Mohrhaldenstr./ Immenbachstr. in Riehen.

The artist is J. Probst and it was made in 1933 in the foundry Giesserei, Rüetschi A.G., Araau. The restoration work has been made during the month of November 2004.

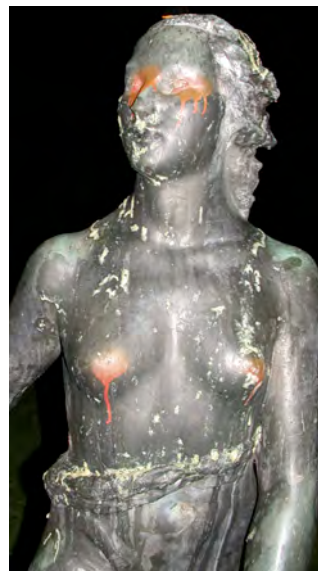


Photo 2 : The stamp from the foundry

Historical

At the beginning of November 2003, an act of vandalism was made on the bronze statue. Some blue paint, red spray and stinky organic fat were on the surface. The Baudepartement des Kantons Basel-Stadt, asked the firm Art Metal Conservation GmbH an urgent expertise and an offer to restore it. We recommended a treatment as soon as possible. First, because the fat risked to corrode the metal and the surface, to have a quickly and an irreversible aspect between the areas covered with it and the other ones free of it. It's also easier to remove paint and spraypaint when it's freshly made.

When the authorisation was given for the treatment, we realised that some new acts of vandalism had been made and the metal reacted badly resulting in some active corrosion.



Photos 3, 4 : The face and the chest before treatment.

The client's requests

To take out the paint.

To make an exhaustive cleaning.

No interventions on the structural damage were asked.

Protection and coating against corrosion.

Report of the restoration with a photographic documentation.

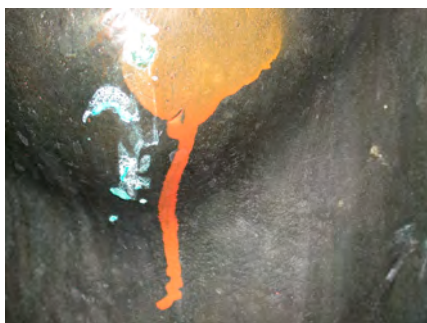
Observation and diagnostic

This bronze statue representing a sower woman is located in the middle of a park. It is based and fixed on red sandstone and this base is stuck in the ground among the grass.

This park seems to be a meeting point for a lot of young people. We could sometimes find papers, beer cans and broken glass bottle around the sculpture.

The bronze sculpture has some recent marks of degradation due to individuals that threw different things on the surface:

- some blue paint on the body of the sculpture and mostly on the bottom of the dress.
- a red spray on the face and the chest, specifically on the eyes and the breasts. Some other red marks were also found in many places on the statue.
- old traces of orange paint.
- stinky organic fat from the head to the feet. This fat corroded the metal, making, after one year, a green sticky paste filling all the cavities. In some other part the fat was making a white coating.
- a strongly active corrosion was due to a new substance, a kind of halloween blue spray. This spray seems to contain some acid like acetic acid (suspicion due to the smell) which is very corrosive on the copper alloys.



Photos 5, 6 : The red spray on the breasts and the blue one containing some acetic acid.

The sculpture suffered also a light natural alteration due to instability of bronze in outdoors conditions. Organic dust and pollution maintain humidity and an aggressive environment. However, the sculpture doesn't show major problems of natural corrosion and structure. The alteration is present in the form of a light corrosion on the surfaces exposed to streaming water.

The base, the feet and the hand of the statue are naturally polished because of the numerous touching that caused the disappearance of the original patina. The bronze seems to have a high percent of tin because in some polish places we could observe a white and shiny surface.



Photo 7 : One foot from the statue where we can see the polish and some broken glasses.

One shock could be seen in the back where the metal was bent.

We found some carved scratches and graffitis on the face and the back.

Treatment

All interventions of restoration-conservation on the sculptures, the choice of methods and products will be made by graduated specialists of Higher Schools of conservation-restoration or managed and controlled by them. The works will be done by specialists, with care and respect for the integrity of the art object.

We used products that stay stable for the outdoors monuments.

The treatment of conservation-restoration was made *in situ* .

Cleaning restoration and protection



Photo 8 : The first cleaning with high-pressure water.

The cleaning of all the dust on the statue was made with high-pressure water.

Chemical and mechanical treatments have been used to clean all the paint.

Tests with different solvents were made on the various paints. The best result was obtained by acetone. This product is active on the paint without any influence on the patina.

The first mechanical cleaning was accomplished with a scalpel.

The first chemical cleaning was made with Q-tips and solvent.

Compresses were put to pump out paint in the porous parts and to soften the paint.

We had to repeat four times the last two steps to have a satisfying result.

To clean the fat we used also chemicals.

Local or total chemical repatination was made with ammonium sulphide.

The protection was made with a mineral wax, the cosmoloïd H 80. This wax will help preventing paint vandalism and help the cleaning.

We had to apply it in two steps. First we had to heat the sculpture to make the wax penetrated deeply and then we apply a second coating diluted with a solvent (white spirit) for more protection.

To have a uniform and continued film we polished the wax.

In some places to homogenise the colour we added mineral black and brown pigments to the wax for a third layer.

We clean the stone base with high-pressure water.

We noticed that the inscription plate was missing.



Photos 9, 10 : The face before and after treatment.

Discussion and future maintenance

We kept the original patina because we thought that it was not necessary to make a new one on the worn places. In fact, this sculpture is, in some ways, a living object and people will always touch it. The missing patina is a part of the life of the object. The sculpture is in a place where a lot young people meet and unfortunately, there are a lot of possibilities that new graffitis will reappear. The wax will protect the metal surface and in that case the graffitis should be easily eliminated. In normal conditions, to keep the efficiency of the wax, we recommend a new application every two or five year. But in the present situation we suggest an annual application. If you have to do some graffitis cleaning we advise you to make an immediate application of wax. You can easily find this kind of wax and the application is not very difficult. We can even make a demonstration to your maintaining services.

It's a lot easier to clean the graffitis when they're freshly made, otherwise the more you wait the more difficult it will be to remove them.



Photo 11 : The sculpture after treatment.

Olivier Berger
Conservateur-Restaurateur