

CARING FOR OUTDOOR SCULPTURE IN LUGANO, SWITZERLAND: PREVENTIVE CONSERVATION AND LONG TERM MAINTENANCE

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Abstract:

Outdoor sculpture is common to most towns and cities and constitutes an important part of their cultural, artistic and urban identity. Over the years, while some artworks can become victims of neglect, others can be subjected to repeated and invasive treatment campaigns. In both cases, this can lead to increasing loss of original material and heavier treatment costs. A current nationally funded research project is looking at the outdoor sculpture collection belonging to the city of Lugano with a view to establishing, with the full backing of the city's authorities, a preventive conservation plan. As well as highlighting the need for improved internal coordination between relevant municipal departments responsible for the artworks and their immediate environment, the research is showing how risk assessment can lead efficiently towards a better understanding of conservation priorities and needs, governing typical preventive strategies such as regular inspection, maintenance and monitoring, and optimising financial, technical and human resources available for conservation.

Key-words:

Outdoor sculpture, preventive conservation, inspection, care and maintenance, preventive management, risk assessment.

Introduction

Public sculptures are works of art generally owned and cared for by public authorities; they can be commissioned by these authorities or constitute donations from institutions or individuals; they are placed in spaces normally accessible to the gen-

eral public and are for the most part outdoor; they contribute to the enhancement of public and semi-public urban spaces and constitute an important part of the cultural, artistic and urban identity of a city. The City of Lugano is no exception, owning some 130 such sculptures, representing the work of more than 90 artists, some of international renown, and dating mainly from mid 19th century to the present day. Common to many other towns and cities, the works are displayed in squares or parks, in the grounds of historic buildings, on major thoroughfares or along the lakefront. While many of the sculptures are artworks per se, others take the form of commemorative monuments, decorative and architectural elements, and fountains.



Fig. 1. *Eros bendato* by Igor Mitoraj, 1999. This giant-size bronze head is hollow and the public is free to climb inside. Although this open access might be part of the artist's intent, it increases the risk of physical damage to the sculpture due to wear or vandalism. (Photo. May 2008, SUPSI-DACD).

Typically, the development of Lugano's outdoor sculpture collection has been relatively non-linear. From the end of 19th century up until 1930's, the collection grew rapidly through donations or public authority commissions of monuments commemorating local historical figures or events. After a period of relative calm during the war, new acquisitions were made again from the mid 1950's in pace with rapid urban development and a desire to embellish new schools and public buildings. From the end of 1970's, acquisitions become still more frequent and were characterised by an increasing number of donations from institutions, individuals or from the artists themselves. One of the most important developments, following the first outdoor sculpture exhibition in 1977, was the creation of an open-air "sculpture gallery" along the lakefront, made possible by a series of new acquisitions. While the idea was being voiced of extending the concept of outdoor exhibitions to other city areas, a guide of the city's outdoor sculptures was published for the first time in 1989 [1]. From the mid 1990's, due to a policy to stage major open-air exhibitions throughout the city and along the lakefront, new important

sculptures were added to the collection (such as *Eros Bendato* by Igor Mitoraj, fig. 1). These exhibitions continue up to the present day and although there is no acquisition policy as such, the collection will continue to grow in the coming years as works are added on a one to one basis.



Fig. 2. *Stemma della famiglia von Derweis*, by Vincenzo Ragusa, 1875. This decorative element originally formed part of the pediment adorning the entrance façade of Trevano Castle above Lugano. Following the demolition of the castle in 1961, this and other elements were recuperated by the cantonal authorities and displayed in the grounds of Lugano's high school. (Photo. May 2008, SUPSI-DACD).

Conservation issues

The task of caring for this impressive collection is daunting, not least because the recent fusion of eleven peripheral councils to the City of Lugano and the expansion of urban territory has led to an overall increase in the number of works under the City's responsibility. Although the artworks are for the most part in bronze and stone, other materials are present such as iron, steel, glass, cement and ceramic, as well as copies in synthetic resins. These materials, accessible to the public day and night and exposed to natural elements all year long, develop different forms and rates of deterioration. During the present study of the sculptures, a variety of conservation issues were identified that are common to most municipal authorities faced with the care of their public sculpture:

Lack of awareness and depreciation: although public, outdoor sculptures are probably little known or appreciated by those who pass them by daily; the commemoration of national heroes or historic events is often short-lived and can lose meaning or importance from one generation to another. At the same time, paradoxically, changes to a sculpture, its disappearance or displacement can cause virulent public outcry.

Vandalism: easily accessible and with no surveillance, outdoor sculptures are often subjected to different types of vandalism: this can be involuntary, by children climbing on the sculptures, or voluntary by single or repeated acts of depredation. This risk has probably been exacerbated by systematic removal of enclosures and barriers which in the past formed relatively effective deterrents and were often part of the artworks original ground plan (Fig. 3, note 1).



Fig. 3. *Fontana Antonio Bossi* by Otto Maraini and Luigi Vassalli, 1895. In this view of the fountain shortly after its construction, we can see a low perimeter fence providing some protection. As with other sculptures in Lugano, these barriers no longer exist. (Photo. end 19th century, postcard).

Removal and displacement: repeated acts of vandalism can lead to the removal of the original sculpture and, in some cases, its replacement by a copy. These copies, typically made of modern cast materials, can in turn become subject to weathering, vandalism and general depreciation, sometimes with even more unsightly results. Copies can sometimes require as much care as their originals. Although well-meaning, retrieval and relocation of architectural elements from demolished buildings can also be problematic: parts of the pediments of the façades of Trevano castle (demolished in 1961) ended up being displayed at ground level around the cantonal high school, where inevitably they have become subject to neglect and regular vandalism (fig. 2, note 2). For the City of Lugano, displacement occurs nowadays only in exceptional circumstances which include repeated vandalism, severe degradation and occasionally in the wake of urban redevelopment.

Coordination and communication: given the dispersal of objects over the entire territory, and given their diverse forms and functions, the care of outdoor sculpture typically requires good coordination and communication between different city departments. There have been cases in the past where technical maintenance staff, unaware of potential risks, have cleaned sculptures with consequential damage to fragile parts (figs. 7 & 8). Although in Lugano communication is generally good between the departments concerned (3), it is recognised that constant improvements in coordination is needed to avoid such accidents. Likewise, when the electrical and hydraulic installations of public fountains are regularly overhauled or renewed for reasons of public security or functioning, it is important to obtain expert advice regarding the removal of old installations, new repairs and the potential risks of inappropriate materials.



Diversity of materials: as has already been mentioned, outdoor sculpture can be made from many diverse materials and these will deteriorate in different ways and at different rates; thus no general maintenance plan can be applied to all the sculptures. It is necessary to identify the materials and techniques present and determine the conservation needs of each object, or in the case of a composite sculpture, of each part of the object. Plinths, for example, may have different conservation needs than the sculpture they support (Fig. 4).

Fig. 4. *Nucleo*, by Paolo Bellini, 1997-98. This iron sculpture is a good example of different parts of the same sculpture requiring different conservation treatments. On close examination, it can be seen that the sculptured element was originally entirely polychrome, while the plinth was not. (Photo. SUPSI-DACD, April 2010)

Maintenance deficit: typically, conservation action is only undertaken when damage is advanced and becomes visually disturbing. Low cost, regular maintenance tasks, such as repointing mortar joints, cleaning, plant removal, or break repairs, are often neglected, letting deterioration get a hold on the sculptures and leading to exponential decay and higher treatment costs.

Inappropriate restoration and maintenance: some sculptures were originally conceived to be protected from the elements by being placed in covered porches or with purpose-built canopies. Over the years, due to their displacement or the removal of those protective structures, the sculptures found themselves exposed directly to rain, snow and frost, with consequential damage to original materials not necessarily intended to be exposed in such a way (figs. 5 & 6). When carried out without prior planning or specialist consultation, maintenance activities can be misguided and fragile parts of the sculpture can be damaged. Previous conservation interventions have varied in quality and have often depended more on neighbouring construction projects, on the particular value accorded to a sculpture by a potential outside sponsor, or on localised vandalism, rather than on particular conservation needs. In 2003, a major conservation campaign was carried out on the famous William Tell sculpture by Vincenzo Vela, situated in a prominent lakeside position: this one-off high profile conservation project was the result of generous outside sponsorship but did not provide for the long-term care of the sculpture nor for the monitoring of the treatments carried out.



Figs. 5 & 6. *Tre Ragazzi* by Bruno Morenzoni, 1946. On the left, this stone sculpture shortly after its installation. On the right, present condition, with loss of large portions of the face and book. This damage is not due to vandalism but to sedimentary structures passing through the stone (typical for local Saltrio limestone). In order to reduce the risk of further loss, this sculpture may have to be protected by a cover or moved to a sheltered position. (Photo. SUPSI-DACD, archives)



Figs. 7 & 8. *Bust of Vincenzo Vela* by Apollonio Pessina, 1930-50. This stone sculpture, depicting the famous Tessinois sculptor, has suffered from inappropriate cleaning in the past with consequent damage to the stone (two views of the same sculpture before and after cleaning). Better coordination between competent departments can reduce the risk of this type of accident. (Photo. SUPSI-DACD, archives)

Risk management : a global view of the condition of the collection, with a clear identification and evaluation of the risk of future damage, is often lacking; visible damage on a sculpture may lead authorities to precipitate costly intervention when in fact the risk of future deterioration is low and resources would be better concentrated on works judged at higher risk. Similarly, unnecessary steps may be taken to avoid children climbing on a sculpture when in fact the materials have low “vulnerability” to this type of risk. Natural disasters, which may have been high risks in the past, present probably very low risks today (fig. 9)

Tourism and public perception: local authorities can fail to exploit the tourist potential of public artworks (for example, city walks featuring the sculpture, information plaques in front of commemorative monuments, etc). Public perception and appreciation can play a key role in preventive conservation, while ignorance and indifference can lead to depredation. In Lugano, the city authorities are conscious

of the need to inform inhabitants and visitors alike about the historical and artistic value of the outdoor collection, through regular exhibitions, acquisitions and publications, thus enhancing the tourist offer and keeping interest alive in the works.



Fig. 9. *Fontana Antonio Bossi* by Otto Maraini and Luigi Vassalli, 1895. View of the fountain during the floods of 1951. This sculpture along the lakefront found itself under 1m of water. Despite this, due to better management of the lake's water levels, the risk of future flooding on this scale is minor (Photo. 1950's, post-card).

Towards preventive care

With the number of outdoor sculptures increasing year by year and in order to find the best solution to the care of the city's collection, a research project, funded by the Swiss national research fund, was started in 2008 and will be submitting shortly its results. The project associates the Cultural Affairs Department of the city (DAC) with conservation scientists and conservators from the conservation department of the University of Applied Sciences of Southern Switzerland (SUPSI) and the Haute Ecole de Conservation-restauration of La Chaux-de-Fonds (HECR Arc). The City's own Information Technology and Computing department and Urban Services Department constitute additional partners. Contacts have been made with the local authorities of other cities (Bern, Lausanne, Basel) in order to see if the results of the Lugano project can be applied or compared to other collections. It seems clear from these exchanges that there is a need for a more coordinated approach to the care and conservation of outdoor sculpture in Switzerland. Strong interest has been shown by these authorities in the Lugano project. Contacts have also been made abroad: in Berlin preventive strategies have been adopted by the city following a similar and inspiring research project carried out in 2007 [2 & 3].

Since the publication of the guide to outdoor sculpture in Lugano in 1989, many new sculptures have since been added to the collection, while others have been moved to storage. Hence the first task of the multidisciplinary project team has been to establish an up to date inventory. Each sculpture has been studied individually and all relevant information recorded, such as original materials and techniques, added materials, present condition and local environmental impact; in parallel, archival research has been carried out to establish provenance and ownership, authorship, conservation history and any recent conservation treatment. The in-

formation is stored in an Access database and will be fully integrated into the municipality's existing GIS (Geographical Information System) facility (fig. 10).

Fig. 10. MS Access-based data bank used for data collection and is also intended to provide the principle management tool for the collection's care. As well as assembling all the up-dated information on the sculpture, together with previous conservation history and a full condition survey established by the project team, the principal risks affecting the object are noted, with an indication of any urgent treatment necessary, the types of preventive tasks required, their intervals, and any pre or post-intervention monitoring. This tool will be available to all the relevant city departments and will enable everyone to be aware of the conservation needs of each object.

Among the different needs identified, two clearly stand out, both of which are basic principles of preventive conservation:

Improving knowledge of the collection: a precise and thorough identification of materials and techniques permits comparison of degradation phenomena and can allow tailor-made conservation treatments. The use of a portable XRF (X-ray fluorescence) device proved to be particularly useful in order to analyse alloy composition of the metal sculptures, as well as the composition of some paint layers on polychrome pieces. Modern alloys can be difficult to identify visually and a more in-depth analysis is necessary (fig. 11). Likewise, past conservation treatments went often un-documented, yet knowledge of such treatments can be essential to

understanding present condition. Establishing a coherent condition survey across the whole collection at one moment in time is also indispensable for bringing out conservation priorities. The database will enable all new information concerning the maintenance and conservation interventions to be recorded, stored in one place and to be accessible at all times.



Fig. 11. Portable XRF being used to identify elements present in metal sculptures, in this case *Composizione* by Bruno Morenzoni, 1983. This sculpture was described as aluminium in the literature, but was, surprisingly, found to be an alloy of copper, iron, lead, manganese and zinc. Through these non-destructive semi-quantitative measurements of alloy composition, a better understanding of degradation phenomena is made possible and in turn a more accurate identification and evaluation of future risks. (Photo. April 2010, SUPSI-DACD).

Risk identification, assessment and management: besides being exposed to weathering, sculptures in public spaces are on a higher risk level than when displayed within the museum environment. At the same time it is important that the proximity of the public with the outdoor artworks be preserved, allowing people to touch the sculptures, knowing that there is the risk of abrasion or staining. As long as these risks can be identified and assessed, they can be managed in the framework of a preventive conservation strategy. Protective coatings on bronzes for example provide protection from the environment, abrasion and graffiti. Vulnerable stone artworks on the other hand can be protected by natural barriers such as flowerbeds or trimmed hedges.

Conclusion

Through the present research project, the municipal authorities of Lugano will shortly have at their disposal an up-to-date inventory of all their outdoor sculpture. This database will associate historical data with detailed information on materials, techniques, condition and risks, enabling the Cultural Affairs Department to plan for the coming years regular inspection, maintenance and monitoring of their art-

works. The condition reports generated by the inspections of each sculpture has enabled the team to single out works that need urgent attention and to establish long term care and maintenance plans that take account of the condition of the entire collection. Guidelines will be drawn up for council personnel that look after the monuments and their surroundings to inform them of potential risks and the types of alteration which require specialist intervention. Basic maintenance such as light surface cleaning will be carried out by them on a regular basis after having been trained by a conservator. More specialised interventions will be carried out by professional conservators, whose condition and conservation reports will be fed into the database, so establishing a continuously updated record that will form the basis for future preventive tasks.

Notes

- (1) The removal of protective barriers has been reported elsewhere: see Koller, M., *Learning from the history of preventive conservation*, Preventive Conservation. Practice, Theory and Research, Ed. A. Roy and P. Smith Preprints of the Contributions to the Ottawa Congress, 12-16 September 1994, IIC, London (1994), 1-7, and Rieffel, Y., *Inspektion, Pflege und Wartung als Strategisches Konzept in der Denkmalpflege, am Beispiel der Standbilder Unter den Linden in Berlin*, Master-Arbeit, 2007 (http://193.175.110.9/hornemann/german/dipl_txt/Rieffel_Wartungs_konzept_Berlin_UdL.pdf)
- (2) The relocation of these displaced elements back to the grounds where the castle once stood, (where the buildings of SUPSI-DACD are now located) is presently being considered, with the idea of establishing an open air museum of the repatriated fragments, with information displays recounting the history of the site and the conservation of the fragments.
- (3) The three departments are Dicastero Attività Culturali, responsible for the conservation of the collection, Dicastero Servizi Urbani, generally responsible for the technical maintenance of urban spaces and able to assist with general upkeep, and Dicastero del Territorio, responsible for urban development and often needing advice regarding manipulation or displacement of sculptures.

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