Conservation in a private cemetery

The Non-Catholic Cemetery in Rome is a historic cemetery which has been in use for some 280 years. It is also an active cemetery in that those who qualify may still be buried there. Its management therefore faces the challenges of many cemeteries that both have a historic value and are still in use, but with an important difference. The Non-Catholic Cemetery is a private cemetery. It receives no regular public funding. Public cemeteries can usually count on a regular budget for maintenance and for their continued operation as a burial place. The Non-Catholic Cemetery in Rome is subject to all national and municipal regulations governing burials in cemeteries, on the one hand, and the preservation of historic sites on the other. But it has to find its own resources to be able to comply with them. How does it achieve this? It is mainly the income gained through its operation as an active place of burial that funds the conservation of its tombs and natural environment. (This income is now increasingly being supplemented by external fundraising.) The Cemetery has some 2,500 tombs, containing more than 5000 burials that have taken place there since the 1730s. Most of those tombs are now considered to have a historic or artistic value and, in accordance with the law, must be conserved. Since an estimated 80% of those tombs are no longer being paid for by relatives or descendants, their conservation is a cost that falls to the Cemetery. At the same time it must ensure the good condition of the tombs that are ‘active’, i.e. the object of maintenance payments by families.

In the face of this large task, an overall policy of preventive conservation applied to the whole cemetery would be an ideal approach. Preventive conservation does play a large role in the Cemetery’s policies. But it is not alone sufficient, because of the scale of the Cemetery compared with its resources and because neglect of tombs in the past now sometimes requires a more profound intervention than regular maintenance. The Cemetery has therefore adopted a more pragmatic and opportunistic approach to conservation. This paper describes its current management and conservation policies in the light of the rather particular status that the Cemetery enjoys.

Significance and protective status

The cemetery, an area of some 18,045 sq.m, is significant for its social, historic, aesthetic and scientific values and is protected for these values by national and local legislation. But it is also an active cemetery that it is still in use for burial. Conservation goals have therefore to be reconciled with the needs and preferences of customers and with the requirements of local laws regulating the disposal of the dead. The historic value of the Cemetery derives from the centrality of Rome as
a destination for foreigners because of its cultural appeal and for its temperate climate compared with that of northern Europe. Many of those buried in the Cemetery were artists who had found in Rome a congenial city in which to practice and who eventually ended their days there. It is the burial place of poets such as John Keats, Percy Bysshe Shelley and Amelia Rosselli, of architects such as Gottfried Semper and William Mead, sculptors such as William Wetmore Story and John Gibson, the writers Malvina von Meysenburg and Antonio Gramsci, and the painters Karl Briullov and Hans von Marees. An additional important historic value lies in the tomb monuments designed by noted sculptors (e.g. Thorwaldsen, Story, Gibson, and Ximenes), some of whom are also buried there.

Most of the early burials in the cemetery were of those of Protestant faith but increasingly over the years other Non-Catholics, notably members of the Orthodox churches, were accommodated. In 1953 it was recognised formally that anyone of non-Catholic faith, or of no faith at all, could be buried in the Cemetery if duly qualified.

The origins of the Cemetery as a burial-ground for Non-Catholics are not fully clear [1, 2]. The first burial of which remains survive is dated 1738 and was made right at the foot of the Pyramid of Caius Cestius (c.18-12 BC). But archival evidence documents an earlier burial in this location in 1732.

The Cemetery also has strong social, environmental and scientific values. Its oldest section, the Parte Antica, is in a park-like setting of 0.5 ha facing the Pyramid (fig. 1, 2). Local residents and other visitors use this open space for its recreation value. In contrast, the greater part of the Cemetery, as it expanded westwards during the XIXth century, was systematically planted with trees of

Fig.1. Map of Cemetery.
Pinus and Cupressus species, along with a variety of flowering shrubs (fig. 2). The rich vegetation of the Cemetery constitutes an area of ecological value for its bird and insect life, while also acting as a carbon sink for the emissions of the intense vehicular traffic immediately outside its perimeter.

The historic importance of the Cemetery has been recognised in legislation that grants it a protected status. In 1918 it was declared a Zona Monumentale de Interesse Nazionale and it is considered a protected monument under the 1939 Cultural Heritage law of Italy. By virtue of its lying within the Aurelian city walls (IIIrd century AD) of Rome, it is included within the inscription (in 1980) of the Historic City of Rome on the World Heritage List of Unesco. Any change to the built fabric of the cemetery (its constituent buildings - including a chapel built in 1898 - and its tombs) or the design of a new tomb requires the approval of the Sovrintendenza dei Beni Culturali of the Comune di Rome. The Cemetery must comply with other local regulations, for instance those concerned with the green spaces of Rome. Thus, the Cemetery must obtain permission to fell any tree and must replace any fallen or felled tree with a new one. Because of its historic status, applications to remove dangerous trees must have the approval both of the municipal Gardens Department and of the Sovrintendenza. Management of the rich vegetation is a major pre-occupation: many of the pine trees are well over 100 years and vulnerable to high winds and to the rare snowfalls. On specialist advice, trees are removed when considered to present a safety risk. In recent years the red palm weevil
(Rhynchophorus ferrugineus) has infested several date-palms in the Cemetery, as it has elsewhere in Rome, and regulations require infested trees immediately to be felled and burnt.

The protected status conferred on the Cemetery is advantageous for its long-term preservation but it also imposes obligations which, as noted earlier, are not funded from public monies.

**Governance, stakeholders and funding**

Ultimate responsibility for the well-being of this private cemetery lies in the hands of a committee of fourteen Ambassadors accredited to the Italian Government. The majority of those buried in the Cemetery have been nationals of one of these countries of predominantly Protestant or Orthodox populations. The Assembly of Ambassadors appoints the Director who in turn appoints other staff (currently one restorer and one office assistant). Garden maintenance, all burial operations and inscription carving are contracted out.

An Advisory Committee supports the Director and meets monthly.

Most of the tombs in the Cemetery are family tombs in which, depending on the terms of the concession granted the family, subsequent direct descendants for one or more generations may be buried. Otherwise, where no family tomb exists, there are three criteria governing admissibility for a concession (usually of 30 years duration) for burial: non-Italian citizenship; non-Catholic faith; and residence in Italy.

The current concession-holders for tombs represent the primary stakeholders of the Cemetery.

Their interests enjoy a certain priority while also being subject to the Cemetery’s regulations concerning the design, decoration and maintenance of tombs. Other important stakeholders in the Cemetery include the following: descendants of those buried there in tombs for which there is no longer an actively paid concession; the legal authorities (City of Rome, and the national Ministries of Health and of Cultural Property and Activities); the Assembly of Ambassadors; local residents of the Testaccio and Ostiense districts of Rome; cultural tourists, Italian and foreign; educational groups from schools and colleges, both Italian and foreign; and the Advisory Committee, staff and volunteer helpers.

A major reason why the current concession-holders of tombs are considered the primary stakeholders of the Cemetery is that its financial wellbeing rests on the income that they bring in. The principal sources of income for the Cemetery are the sale of concessions for burial, the burial fees and the maintenance charges payable by concession-holders. If the Cemetery were to cease to be an active place of burial (for instance if no further space were to be available), its revenue would decline steadily as new concessions ceased to be taken up. It would then constitute only a historic monument that would
be dependent on generating its own funding for conservation and maintenance purposes. After several years of declining income from burials and concessions, the situation since 2008 has markedly improved. A number of factors have been responsible: making it better known that the Cemetery is still available as a place of burial for those who qualify; recovering large sums of accumulated arrears of unpaid annual maintenance fees from concession-holders, some dating back a number of years; and requiring the 30-year maintenance charges for a new concession to be paid in full in advance, rather than annually. It should be stressed that the income from maintenance charges is applied to the upkeep of the Cemetery as a whole, not solely to the tomb(s) in question.

An additional source of income is derived from the voluntary donations made by visitors and from their purchases of guidebooks and other publications in the Cemetery’s Visitors’ Centre. (This currently constitutes c. 13 % of total income). Because it is an active cemetery, it is not considered appropriate to charge an entrance fee to visitors. Instead a voluntary donation of €2.00 a head is suggested. The Cemetery offers guided tours, providing its own volunteer guides, and these represent an increasingly important source of revenue as the Cemetery becomes even better known as an unusual destination in Rome. The Visitors’ Centre and the production of a quarterly bilingual Newsletter are staffed entirely by volunteers.

Conservation issues and policy
The record of burials in the Cemetery is relatively well documented, even though the originals of early records are missing. Two principal databases exist, one (the Burials Database) which is derived from the Cemetery’s records of burial activity, and the other the Graves Database [3]. The Graves Database was the result of a systematic survey carried out in 1984-86 of all graves existing at that period, a joint project of two of the foreign academies in Rome, the British School at Rome and the Swedish Institute of Classical Studies [2]. The same project made a detailed study of the oldest tombs, located in the Parte Antica facing the Pyramid.

In addition to this fundamental documentation, a number of condition surveys of the tombs have been carried out in the past. Their aim was to define priorities for restoration intervention on tombs considered to be of particular historical or artistic importance. For example, surveys carried out in the 1990s and in 2003 led to prioritised lists of tombs requiring intervention, and a number were successfully treated [4]. A study by ICCROM made in 2005 at the request of the Cemetery included a Conservation Condition Survey, based on a series of sample areas. This Survey concluded that 75 % of the grave markers were in need of some conservation treatment (for half of those it was deemed urgent). The commonest stones represented in the Cemetery are marble (including Carrara marble), travertine and granite. Conservation problems are caused by excessive moisture, microbiological growth and higher plant growth, atmospheric pollution, and the deterioration of assembly fixtures or repairs (e.g. corrosion of iron pins). A few grave markers have suffered physical loss as a result of past vandalism or accidental damage or explosive impact (during WWII). Others show structural problems caused perhaps by local soil subsidence or tree root growth. Many of the stone conservation problems derive from the thickly vegetated nature of the main part of the Cemetery (the Parte Antica is exceptional in this respect) and the high levels of atmospheric pollution that are typical of this quarter of Rome (the Cemetery lies adja-
cent to a major traffic intersection). Not only does the tree cover promote high humidity levels during winter months but hand-watering of plants during summer months contributes to a constant excess of moisture, sometimes in liquid form, on tomb surfaces. The *crosta nera* (black crust) found on many monument surfaces in Rome where not exposed to direct water runoff is common in the Cemetery, especially on marble surfaces (fig. 4, 5). Unless structural and static problems have been diagnosed, the intervention carried out on most tombs has the goal of improving their aesthetic appearance by cleaning, followed by consolidation. A typical intervention, subject to the particular operations that might be necessary, might include the following:

- Survey of the state of conservation of the whole tomb, checking its statics and stability,
- Preliminary removal of superficial deposits by ‘soft’ mechanical means (e.g. dry brushing),
- Temporary infilling of cracks and microfissures with a mortar of hydraulic lime and marble powder,
- Cleaning with mechanical means (microdrill, etc.) to remove crusts, incrustations, concretions, etc.,
- Biocide treatment to eliminate colonies of micro-organisms (Preventol and quaternary ammonium salts),
- Extraction of soluble salts using compresses (EDTA),
- Removal of inactive microorganisms using water under pressure,
- Final stuccatura of lacunae and cracks,
- Consolidation of stone surfaces by means of impregnation with ethyl silicate,
- Final protection with an application of ethyl silicate and polyoxysilanes,
- Photographic and written documentation for the record.

Given the large number of historic tombs, how are priorities for tomb conservation defined? In the 1990s and 2000s, tombs were mainly selected for intervention following the priorities defined by the condition surveys (see above). Given the resources then available, around 20 tombs per year could be cleaned and conserved.
Other tombs benefited from overall maintenance and preventive care. As a result, in this period some of the tombs most urgently in need of conservation were treated. But, at a rate of 20 per year, it was evident that many would not receive attention for a long time. Current policy attempts to increase the rate at which tombs in need of treatment can receive attention, and to raise the profile of conservation work at the Cemetery as a means of attracting external funding. By successfully attracting external funding for conservation, larger projects can be undertaken and the costs of employing a staff conservator can be partially recovered.

The principal components of current stone conservation policy are as follows:

**Preventive conservation and maintenance**
The Parte Antica (containing the oldest tombs) is surveyed annually; and every year, in turn, one of the four other zones of the Cemetery is monitored. Thus over a span of five years, every zone has received attention and urgent interventions made.

**Cleaning of individual tombs on request**
A concession-holder (or any other individual) can request, and pay for, the time of the staff conservator to have a tomb cleaned and conserved. Some ten tombs a year benefit from such requests and the funding that accompanies them.

**The conservation-restoration of tombs of historic or artistic significance using external funds**
This policy is opportunistic, being subject to matching a donor with a suitable tomb that is in need of conservation. Some donors are regular (e.g. the German and Russian Embassies make an annual contribution to conservation of their nationals’ tombs); others are identified as a result of the Cemetery’s fundraising efforts.

This mixed strategy aims at both maximising the preventive care of as large a proportion of tombs as feasible and at making possible major interventions that require external funding. In order to complement fundraising efforts, other support in kind is sought through external partnerships. For instance, for three years students from a restoration institute in Rome assisted with the preventive conservation work described above. This enabled a larger number of tombs to be treated. Another collaboration with scientists from the Department of Earth Sciences in the University of Calabria has led to diagnosis of stone decay problems [5].

Despite the success of external fundraising and partnerships in helping to meet conservation needs, it remains true that the Cemetery’s ability to fund the conservation of historic, i.e. no longer active, tombs depends on the income from continued burial activity. To the first-time visitor, the cemetery already appears to be ‘full’. How sustainable is this financial model if there were no longer to be space for new burials? What is the policy for re-cycling tombs in order to create more space?

**Reconciling space needs with historic values**
The Cemetery’s goal is to comply with all obligations concerning the conservation of historically and artistically significant tombs, maintaining the environmental context that has always characterised the Cemetery. Past policy has allowed the occasional recycling of non-actively maintained tombs so as to create space for new burials. Current policy is firm in respecting all tombs of historic and artistic value (as determined independently by the Sovrintendenza). The only instance in which a tomb space may be recycled is in the event of a family not wishing to renew its concession after 30
years. With the agreement of the family, tomb contents may be transferred to one of the Cemetery’s ossuaries, or to another destination. In the event of this happening, but only with the family’s agreement, the gravestone is removed and preserved in an outdoor lapidarium in the Cemetery. The space then becomes available for future burials.

At present the space still unoccupied and the few instances of renunciation of concessions are sufficient to meet the annual demand for burial in the Cemetery (most burials today take place in existing family tombs). The financial model sketched out here therefore remains viable for the immediate future. At the same time, the Cemetery is able to devote resources to the conservation of tombs of historic and artistic importance. The success of this model in turn attracts potential donors and additional, dedicated funds for other conservation purposes (of the tombs but also of the buildings and the natural environment that is so integral to the atmosphere of the Cemetery).

We hope that this model may be of interest to others responsible for cemeteries in which, along with continued use, there is an accompanying obligation to conserve values that are historic, artistic, social or environmental in nature.

References
3. Available at www.cemeteryrome.it

Résumé
Le cimetière non catholique de Rome : gestion et conservation de la pierre.

Le cimetière non catholique de Rome a le statut de site historique protégé mais est encore en usage pour l’enterrement des personnes qualifiées pour y reposer. Les politiques de conservation de ces monuments en pierre doivent tenir compte du statut du cimetière comme de site protégé, de son usage, du respect dû aux descendants des personnes enterrées et du nombre croissant de visites de loisir. Le cimetière est une propriété privée, les premiers enterrements datent de 1730 environ, mais il a été élevé au titre de monument national depuis 1918. Il fait aujourd’hui partie du site classé au patrimoine mondial de Rome. Le cimetière comporte 2500 tombes en pierre (surtout marbre et travertin), la plupart érigées dans une zone riche en végétation (Pin, Cyprès et buissons fleuris). Le travail de conservation sur les tombes doit être approuvé par les autorités nationales, et les arbres qui les entourent sont aussi sujets à une législation protective.

Une politique de conservation préventive, relative à la fois aux tombes et à la végétation et applicable à l’ensemble du cimetière, constituerait la meilleure pratique. Ceci est le but à atteindre à long terme mais les réalités des problèmes de financement, les intérêts des parties prenantes et l’état des tombes déjà altérées requièrent au présent une stratégie plus adaptable et souple. Cette stratégie comporte un mélange de maintenance régulière des tombes importantes du point de vue historique, et la restauration de tombes ayant une valeur nationale, esthétique pour lesquelles un financement externe peut être assuré. Cet article décrit les défis auxquels fait face le cimetière, les politiques de restauration, et le progrès fait ces dernières années pour améliorer la condition du cimetière.