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## Conservação e metodologia na intervenção do claustro do Mosteiro dos Jerónimos

Nuno Freireça

### Introdução

A conservação dos paramentos em calcário lioz do claustro do Mosteiro dos Jerónimos, resultou da implementação do projecto apresentado pela Nova Conservação, Ld.<sup>a</sup>, acrescido das contribuições originadas pelo transcorrer da obra e pelos numerosos contributos da Equipa de Consultores Científicos da Associação World Monuments Fund – Portugal.

Os trabalhos, realizados para a WMF – P, decorreram entre Janeiro de 2000 e Abril de 2002, tendo a obra em andaimes sido realizada em vinte e quatro meses, entre Fevereiro de 2000 e Fevereiro de 2002. Em Janeiro de 2000 foram mobilizados os meios necessários à intervenção e no período entre Fevereiro e Abril de 2002 efectuou-se a desmobilização e a revisão dos trabalhos, de forma a limitar as variações decorrentes do arco temporal de cerca de um ano e meio, entre a conclusão da ala norte, primeira fase dos trabalhos, e a intervenção final na ala poente.

As acções de conservação abrangeram a totalidade das superfícies pétreas dos elementos constituintes do claustro, nomeadamente, paramentos dos alçados exteriores e interiores, abóbadas e pavimentos das galerias, bem como a fonte do leão e representaram, globalmente, um empenho de cerca de setenta mil horas de trabalho. O lajedo da cobertura foi igualmente intervencionado, tendo este trabalho decorrido sob a responsabilidade da Direcção Regional de Lisboa do IPPAR (intervenção não analisada no presente texto).

O desenvolvimento da obra decorreu em quatro fases, uma para cada ala do claustro. Ao longo dos dois anos o monumento permaneceu visitável e fruível, tendo sido minimizadas as implicações resultantes da presença das estruturas de apoio à conservação, mantendo a acessibilidade aos seus diferentes espaços de visita e permitindo a utilização do claustro para a realização das actividades habituais.

As diferentes problemáticas do estado de conservação dos materiais foram abordadas numa perspectiva de manutenção extraordinária, visando a melhoria das condições de conservação dos elementos da construção que apresentassem sinais de instabilidade. Em concreto podemos considerar quatro etapas fundamentais que guiaram a intervenção:

- A eliminação dos agentes da degradação.
- Tratamento dos materiais com degradação activa.
- Após as acções de conservação, as intervenções que permitiram melhorar a unidade estética e histórica a nível das superfícies.

## The conservation intervention of the Jerónimos Monastery cloister



Nuno Pimenta

### Summary

The conservation intervention of the cloister was carried out in two years (beginning in 2000 and ending by early 2002), each side of the cloister requiring approximately six months for conclusion. The previously completed condition survey helped to program the actual intervention which focused on various activities, such as the elimination of deterioration factors; the treatment of deteriorated materials; replacement of deteriorated mortar joints and repointing; consolidation and re-attachment of loose parts; cleaning and application of a final protection treatment. Of these, the most time-consuming operation was the replacement of mortar and joint repointing. The most extensive one was the cleaning of the stone surfaces. This was mostly carried out by different methods depending on the soiling to be removed and the condition of the surface: Thus, while water spray or nebulization was used most extensively on the walls, microabrasion was used for the removal of calcareous concretions and, in the specific case of the lower gallery arches and their tracery, laser cleaning was the only method that could preserve their fragile surface. It took over 70,000 hours of work with an average team of 18 conservators to complete the intervention. Over 22,000 square meters were treated, 800 of these were cleaned by laser. Over 60 km of joints were carefully examined and one fourth of these were replaced.

The intervention was careful in preserving all traces of historic treatments, such as the orange colourations found on some areas of the cloister, in keeping with the respect due to this monument. The intervention was followed by RTP, the Portuguese radio and television organization, which filmed systematically all the operations carried out during this complex intervention.

## Concluding remarks



A. Elena Charola

The first stone of the Jerónimos Monastery was laid on January 6<sup>th</sup> 1501, but actual construction only began with the appointment of Diogo de Boytas in 1514. Three years later, the works on the cloister were started. By 1551 it was completed under the direction of Diogo de Torralva who designed, among other sections in the monastery, the mannerist frieze that circles the upper gallery of the cloister.

Apart from housing the Jerónimos order the monastery, including the cloister, was also used for other purposes. In the 17<sup>th</sup> century, Phillip II of Portugal (i.e., King Phillip III of Spain) modified the entrance and had the grandiose staircase to the upper gallery built. During the following century the upper gallery was walled in to create rooms. By the 19<sup>th</sup> century, it housed the British Military Hospital when Wellington troops arrived to fight the Napoleonic invasion, causing much damage to the building as recorded by the Abbot. The 1820 revolution resulted in the secularization of the monastery in 1833. That same year, the orphanage Casa Pia, was installed in the monastery. As a result, many changes were introduced, including in the cloister where walls between cells were removed to create large classrooms. Between 1860 and 1890, various demolitions and reconstructions were carried out which gave this architectural ensemble, which now includes the Archaeological Museum and the Museum of the Navy, its present configuration. In the years 1882-1884, under the direction of José de Almeida, then head of the Casa Pia, the cloister suffered its first "restoration". The works included the demolition of many interior walls; the closures of both the lower and upper galleries and the completion of the flying buttresses to support the niches of the upper galleries. By 1886, the upper gallery was completed, including the addition of the central columns and the traceries they support in the arcades. Other artistic decorations such as pinnacles of the terrace parapet above the upper gallery were also added. In 1888, the Casa Pia was moved out of the monastery and this falls under State jurisdiction until 1983 when it passes to that of the Ministry of Culture. The monastery and the church were declared National Monuments by the beginning of the 20<sup>th</sup> century and they were included by UNESCO in the World Heritage List by 1983.