State of conservation of the Casa Moneta Museum (HSM N°42)

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***Information paper submitted by Argentina***

Summary

The Casa Moneta Museum is located at the Argentine Orcadas Station, in an Antarctic Specially Protected Area on Laurie Island. It is the first Argentine installation in Antarctica and receives its name in homage to the Captain of the National Meteorological Service Manuel Moneta, who was part of the Argentine expeditions to the Antarctic continent in 1923, 1925, 1927 and 1929.

Currently, each element of the house is affected by different types of deterioration that may cause significant damage to its structure. This document summarizes what was observed in the last Antarctic campaign by the researchers of the Argentine Antarctic Program.

***Introduction***

Casa Moneta is located in the Argentine Station “Orcadas”, on Laurie Island, between Bahía Uruguay and Bahía Scotia. It was built in 1905 and for 34 consecutive years served as a house for the staff of different expeditions, being the first permanent Argentine establishment in Antarctica.

After its recognition as a building of patrimonial value, the House underwent important modifications that began in 1992 through the MUSEOANTAR 1991 project to rehabilitate it as a museum house. The current diagnosis and conservation work at the Moneta Museum and the Omond house are part of a series of actions carried out by personnel from the Naval Museum of the Argentine Navy from the beginning of the 21st century, and since 2019, also the staff from the Argentine Antarctic Institute (IAA).

The Casa Moneta Museum is protected by the Antarctic Treaty System as Historic Site and Monument N° 42, as well as by Argentine legislation that designates it as a National Historic Site. It is an Antarctic construction of the "heroic age", being essential for the study and exploration of Antarctica. Therefore, as administrators of the HSM, ensuring its preservation for future generations is an important responsibility.

***State of conservation - Diagnosis***

Within the framework of the Historical Heritage Project of the Argentine Antarctic Program, under the leadership of the Coordination of Social Sciences, Communication and Outreach of the Antarctic Institute (IAA), and in cooperation with the Naval Museum of the Argentine Navy, a diagnosis of the state of conservation of the Casa Moneta Museum was carried out during the Summer Antarctic Campaign 2022-2023, which consisted of a visual examination and a photographic survey of the building. In addition, archive files with historical photographs and reports of the house were analysed in order to identify different building interventions and to develop a chronology of the problems that affected it over time

In addition, a survey was carried out to determine the structural changes of the house, which consisted of a description of the construction profile, image-taking with a thermographic camera and the collection of internal and external humidity and temperature data of the house, plus a graphic and 3D survey. Both survey works are essential for the development of research and the preservation of Antarctic heritage architecture.

During said interventions researchers studied the biological attack suffered by the building, its various constructive problems and the diverse risks and damages affecting materials and structures.

In the photographs taken with the thermographic camera they could identify areas that were colder than others, mainly located in the upper and lower sectors of the house and associated with water leaks from the roofs and non-drained water around the floor of the exterior area.

The direct observation of the structure carried out in 2023 rendered the conclusion that the parts of the house intervened in 1927/1928 had construction panels different from those used in 1905, due to differences observed in the materials used in ceilings, floors and walls.

Added to the variety of materials mentioned above is the use -in different sectors and at different times not always specified- of raw materials such as wood, metal, textiles, concrete and different covering materials. Currently, construction elements are affected by specific biophysical deterioration that could presumably worsen due to the extreme climatic conditions associated with the Antarctic environment and cause significant losses. Said losses could be prevented with the development of conservation and restoration actions that would improve long term conservation of the house-museum and contribute to keeping its integrity and patrimonial value.

***Future plans***

In the coming months, the IAA microbiology laboratory will collaborate with the project by processing micro-samples of wood to analyse wood deterioration. Later, action proposals will be put forward depending on the biodeterioration identified. Also, desirable humidity and temperature parameters will be established. Likewise, data collection of humidity and temperature in the house throughout the year will be used as a comparison and enhance the feasibility of the project.

Based on the surveys and the results of the analyses described above, a preventive conservation plan will be designed according to the current diagnosis. This plan will be in charge of the Coordination of Social Sciences, Communication and Outreach of the Argentine Antarctic Institute (IAA) in coordination with the Naval Museum of the Argentine Navy. This plan will probably include standards for control and adequacy of electrical installations and the measurement of humidity and temperature parameters for the conservation of architecture and internal objects, among other measures such as non-aggressive cleaning techniques and placement of UV filters on windows. The guidelines on visitor management will also be reviewed, in coordination with the Environmental Management and Tourism Program of the National Antarctic Directorate (DNA).

***Conclusion***

As can be derived from the initial diagnosis, various biophysical risks were noted on the Casa Moneta heritage site, which are somehow reinforced by the effect of climate change. In this sense, it would be beneficial to establish synergies with the Committee’s Climate Change Response Work Program (CCRWP). Most likely, information gathered can constitute a strategic input for decision-making in this specific case, as well as for progress in terms of good practices related to policies to counteract the affectation of cultural assets by change. climate change, which will be reflected in the Preventive Conservation Plan.

***References***

• Aldazabal, V. y Pereyra, P. (2001). Proyecto Centenario de la instalación argentina en la

Antártida (1904- 2004). Recuperación y puesta en valor de las instalaciones de Omond House -1003- y Casa Moneta -1905-. Informe de tareas realizadas.

• Barr, S. (2021). Como hablamos del patrimonio cultural antártico. Antarctic Affairs, 8,

33-52.

• Cronyn, J. M. (2003). Elements of archaeological conservation. Routledge.

• Gaiser, R. F., Robles, C. A., Kobashigawa, J. M., Pereira, S y Skronski, N. (2021). Mycobiota associated to Casa Moneta Museum wood, South Orkney Islands, Antarctica. Polar Biology, 44 (9), 1817-1831.

• IRAM Instituto Argentino de Racionalización de Materiales. Norma sobre

acondicionamiento térmico de edificios, 1996. IRAM 11603: “Acondicionamiento térmico de edificios. Clasificación bioambiental de la República Argentina”.

• IRAM Instituto Argentino de Racionalización de Materiales. Norma sobre acondicionamiento térmico de edificios, 2000. IRAM 11625: “Aislamiento térmico de edificios. Verificación de sus condiciones higrotérmicas. Verificación del riesgo de condensación de vapor de agua superficial e Intersticial en los paños centrales de muros exteriores, pisos y techos de edificios en general”.

• Martínez, C. (2017). Informe sobre tareas de mantenimiento en la base Orcadas. DNA.

• Moneta, J. M. (1949). Cuatro años en las Orcadas del Sur. Peuser.

• Roucco, M. I. y Del Valle, R. A. (2003) Tsunami tectónico en las islas Orcadas del Sur

de la Antártida Argentina.

• Sinner, C. E (2023). Riesgo de condensación superficial e intersticial. Recomendaciones

para la conservación estructural y constructiva. IAA-DNA

• Skronski, N. (2016). Reporte de condición casa Moneta. Armada Argentina.

• Zarankin, A., Salerno, M., y Perosino, M. C. (2012). Arqueología y violencia política. Historias desaparecidas: arqueología, memoria y violencia política. Brujas.