

## EPICO seminar 4-5 April 2024 Chantilly and Versailles

*Conclusions by Isabelle Pallot-Frossard, General Curator of Cultural Heritage, President of the Heritage Science Foundation.*

This EPICO seminar, organised by the Châteaux of Chantilly and Versailles and the Association of European Royal Residences, supported by the French Ministry of Culture and accompanied by the Heritage Science Foundation, brought together heritage conservation professionals - architects, curators, restorers and scientists - from various European countries - Germany, Austria, Belgium, the Netherlands, Portugal, Italy, Monaco and France - to share their concerns about the foreseeable impact of climate change on historic monuments, particularly castle museums and the collections they contain, as well as their experiences, the knowledge they have acquired through observation and study, their strategies and their pragmatic solutions.

The EPICO method, developed at Versailles in 2014 in preparation for the first significant climate treatment works, has been applied in 5 countries, with 150 professionals trained, 6,588 diagnoses carried out, and 1,270 objects examined. It has proved its worth thanks to a systemic and scientifically sound approach, considering the whole building and the objects it contains, from general diagnosis to close observation, via rigorous sampling based on typological classifications. It was also recognised in 2018 by the European Union's Grand Prize for Cultural Heritage, Europa Nostra Awards, research category.

During the first day at Chantilly, we looked at the history of EPICO, through the examples of Chantilly, Maintenon, Sintra and Berlin, complemented by the happy and unhappy experiences of Eggenberg Castle in Austria, the Forbidden City in Beijing and the gardens of Versailles. We could also mention the impact of mass tourism, which imposes an additional constraint to that of climate change, or the landscape and gardens environment that are an integral part of castles, museums and royal or princely residences, and which are also suffering from the new climate, that is becoming part of our daily lives.

It is very difficult to summarise the various cases presented yesterday, as well as Danilo Forleo's brilliant analysis of the ten years of experimentation with the EPICO method. Personally, I've picked out a few key ideas, which don't claim to be exhaustive:

- The **major impact of the indoor climate** on the conservation of objects, which comes as no surprise, and the predominant role played by the building envelope, its insulation and ventilation.
- The **limits already reached by climate regulation systems**, however recent and efficient, in the face of the new constraints of climate change, which also calls for new thinking and methods.
- In addition to heat or cold peaks, storms, floods, droughts and, at our latitudes, the arrival of a warmer, wetter climate, the **development of more intense biological aggressions**, such as moulds and insects, which have already been observed. We have seen clouds of flies, midges, and ladybirds, leaving an unattractive blackish pitting on the paintings and woodwork.
- The need **to consider the traditional regulation and ventilation systems**, pragmatically put in place by the builders of the monuments concerned, but also by their successive users who adapted them, for example, by installing shutters to protect them from light and heat and which were unfortunately systematically dismantled with the aim of returning them to an "original state".

- The **very simple measures that can be adopted to smooth out the effects of climatic fluctuations**, such as lowering the temperature in winter by 1°C or 2°C to maintain an acceptable Relative Humidity for the most reactive materials and to make substantial energy savings.
- As a corollary, however, **the absolute need to raise awareness**, both among the various people working in the monument, such as maintenance or surveillance staff, whose working comfort may be disrupted, and among the public, who must accept the regulation of flows and a slightly lower level of thermal comfort, in both summer and winter. Information and awareness-raising are even more necessary now that **public practices have changed**: we are all familiar with the selfie mania, but we have also seen Barbie dolls perched on equestrian statues and careless snatching of souvenirs cut out of silk curtains!
- Paradoxically, despite an increase in the frequency of climatic fluctuations in recent years, **the surveys and observations carried out do not show a significant increase in mechanical deterioration over the last 4 years** as part of the EPICO measurements. From this, we can deduce either that the regulation systems put in place worked well or that the amplitude of these fluctuations has already been experienced, at least once, by our objects, in the course of their history, without leading to a systematic and linear worsening of the mechanical alterations. Further observations will undoubtedly enable us to decide.
- We were not surprised to hear that a **fluid flow of information** between the various players, from the security guard to the curator, via the architect and the various maintenance teams, was urgently needed. But it was also clear that **harmonising measurement methods and sharing data** could, in the long term, enable the data to be used in greater depth, thanks to data mining and artificial intelligence, and thus provide a better understanding of the mechanisms at play and the measures to be taken.
- Working in groups with Post-it® notes, we came up with some simple, concrete and effective recommendations that will feed into a future EPICO Charter, and which Danilo Forleo strongly urges us to implement by 2025, at least one for each of us.

On 4 April we focused on conserving cultural assets in this transition period. The following day we discussed the **extremely complex management of a major estate such as Versailles**, in the face of the challenges of climate change and energy sobriety, a very narrow ridge to follow, taking into account all the components, from the management of the public to the recycling of materials and watering water, via the drafting of public contracts including environmental clauses not forgetting, on a more anecdotal level, that the abundant use of gilding here can also, because of its reflective nature, contribute to the building's energy efficiency!

We mentioned the **adaptation of standards and regulations**, both old and more recent, such as the CEN standards on the conservation of cultural heritage and the ministerial directives on sustainable development and energy efficiency, showing that in this period of climate transition, **heritage is not a problem but part of the solution**, in a non-utopian combination of the imperatives of climate change, sustainable development, energy efficiency and conservation. As mentioned, **we can work simultaneously on mitigating the rise in global temperatures and on adapting tangible and intangible heritage** to the changes that are already underway.

We have also discussed research and development, innovation while respecting old systems, data sharing, and transdisciplinary approach.

In a slightly personal conclusion, I would say that it is urgently necessary, even more so today than in the past, to **analyse and understand monuments**, to decipher their **traditional construction methods and their "climatic history"**, to return to tried and tested methods of the past, to common sense approaches, **but without naivety** and without forgetting that the heritage objects that have come down to us are also the fruit of natural and anthropic selection.

Many have been destroyed by their environment or man, however well-designed they may have been. But those that remain, and to which society and societies have given an additional cultural value for more than 2 centuries, have acquired a new right to conservation and transmission for which we are the guarantors.

Faced with the challenge of climate change, the consequences of which we still don't fully understand, isn't it time **to take a kind of critical pause** to look at and study objects in order to understand their present state and their material history and to conduct **new research into the real impact of the environment on heritage objects and their materials, their fragility, but also their resilience**, in order to intelligently review our conservation standards, or to develop **new monitoring methods**, before launching large-scale actions, which will often prove necessary, but whose relevance must be based on the results of research and observation?

Is it not time to adopt a concept that our Dutch friends from the Cultural Heritage Agency (RCE) introduced to us at the recent Entretiens du Patrimoine<sup>1</sup>, that of "**benign neglect**", which is not inaction in the face of real and immediate danger, but a kind of **attentive waiting** around the object without ever losing sight of it, which allows for duly planned and measured action?

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<sup>1</sup> Les Entretiens du patrimoine: restoring heritage in the 21st century, Paris, 28-30 November 2023. Proceedings to be published.



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