



Preventive  
Conservation  
in Historic Houses  
and Palace  
Museums:  
Assessment  
Methodologies  
and Applications

SilvanaEditoriale

# **Preventive Conservation in Historic Houses and Palace Museums: Assessment Methodologies and Applications**

Conference of the National Museum of the Palace of Versailles (EPV), the Association of European Royal Residences (ARRE), and the Research Centre of the Palace of Versailles (CRCV)

In collaboration with the International Committee for Historic House Museums (DEMHIST), held at the National Museum of the Palace of Versailles and Trianon

From 29<sup>th</sup> November to 1<sup>st</sup> December 2017

## **Conference Proceedings**

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This book brings together the presentations of the speakers at the international symposium organised as part of the EPICO (European Protocol in Preventive Conservation) research programme, by the National Museum of the Palace of Versailles:

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#### Thanks to

Lorenzo Appolonia, Lionel Arzac, Jean-Vincent Bacquart, Wojciech Bagiński, Jérémie Benoît, Marie-Alice Beziaud, Céline Boissiere, Anne Carasso, Élisabeth Caude, Gabrielle Chadie, Thibault Creste, Stefania De Blasi, Elisabetta Brignoli, Hélène Dalifard, Gaël de Guichen, Ariane de Lestrangle, Festese Devarayar, Françoise Feige, Christophe Fouin, Éric Gall, Thomas Garnier, Roberta Genta, Denis Guillemard, Michelle-Agnoko Gunn, l'équipe du Grand Café d'Orléans, Pierre-Xavier Hans, Nicole Jamieson, Thierry Lamouroux, Marie Leimbacher, Nadège Marzanato, Béatrice Messaoudi, Stefan Michalski, Christian Milet, Marya Nawrocka-Teodorczyk, Marco Nervo, Lucie Nicolas-Vullierme, Clotilde Nouailhat, Agnieszka Pawlak, Amaury Percheron, Arnaud Prêtre, Gérard Robaut, Bertrand Rondot, Valériane Rozé, Béatrice Sarrazin, Béatrix Saule, Didier Saulnier, Emma Scheinmaenn, Violaine Solari, Emilie Sonck, Pauline Tronca, Rémi Watiez, Thierry Webley, Sébastien Zimmerman



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# Conservation State and Conditions of the Collections at the Historical Museum of Villele, Reunion Island

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## **Abstract**

The climatic study and the monitoring of the collections of the four museums on the Reunion Island from 2015 to 2017 show that the temperature and the relative humidity inside the historical museum of Villele are high but stable enough for a non-air-conditioned building. The good general condition of the exhibited collections and the absence of evolutionary degradation attest to a certain “acclimatisation” of the collections. By returning to light management and ventilation closer to the vernacular way of living (by adapting anti-intrusion devices) probably allows for the improvement of conservation and visiting conditions.

## **Keywords**

Conservation, museum, historic house, tropical environment.

**A**t 478 m above sea level on the West coast of the Reunion Island, the Villele Museum, one of the oldest sugar producing estates on the island, homes the furniture and decorative arts of a wealthy landowning family from colonial Reunion. It exhibits prints,



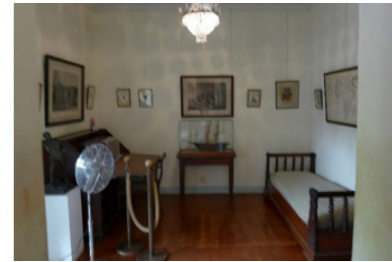
*Fig. 1*  
West facade of the Museum. (© C2RMF-PhG)



1. Entrance



2. Entrance, gallery



3. Bureau



4. Bedroom



5. Salon



6. Dining room

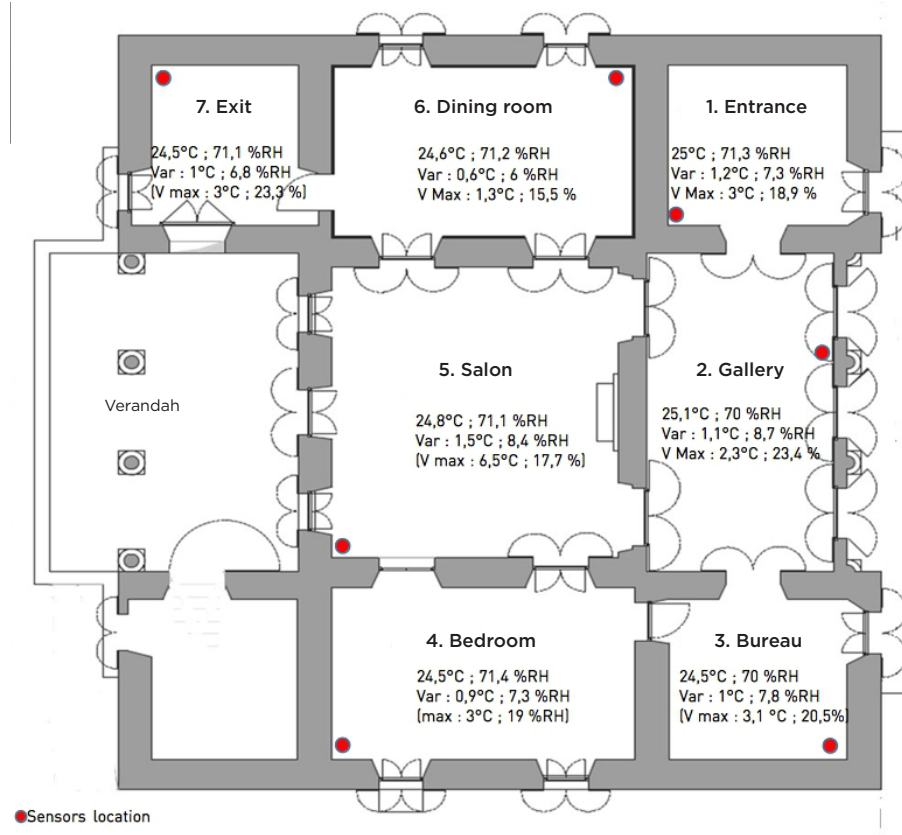


Fig. 2  
Climatic data  
(photographies and slide  
C2RMF-PhG).

Outdoors climate	T°C Ext	%R HExt	Var T°C Ext	Var %RH Ext
Average	22	80,1	6,5	19,4
Minimum	13,6	46,4	2,1	1
Maximum	32,1	100	11,4	41,4

illustrations, maps and plans, oil paintings, tapestries and clothes, crockery and silverware [Barbier, 2014] under a humid tropical climate that is variable depending on the season, the altitude, exposure to trade winds and rain.

The mansion significantly reduces the outdoor humidity from 80.1% RH to about 70.8% RH but its indoor temperature at 24.7°C is 2.7°C higher than the outside temperature at 22°C.

The building dampens the average daily variation of 6.5°C and 19.4% RH outdoors and a 1.07°C and 7.4% RH indoors, the same as the buildings measured in Guyana [Gøergen, 2013].

The atmosphere of the house is homogenous with small differences of 0.6°C and 1.4% RH between the rooms.

The condition report campaign of the collections identifies some starts of corrosion but reveals no recent fungal infection or serious alteration.

But the current measures against intrusion, which are closing doors and windows, block the building's original natural ventilation, increase the temperature and favour confinement. To open shutters for a better visibility also contravenes the traditional use of filtering light.

### **Conclusion**

Under the measured climate, the visual and macro-photographic examination does not reveal any significant degradation of the collections. An instrumented mechanical study is however necessary to evaluate the conservation of the collection pieces in the long term. In the meantime, a management of the building which is more attentive to the historical architectural project, therefore with more of a heritage nature, would undoubtedly further improve the collections and the visitors' comfort.

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Cinisello Balsamo, Milan

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