



IIC International Training Centre for Conservation
 22 Oct – 2 Nov 2018 | The Palace Museum, Beijing

Scientific Approaches to
 Paper & Photograph Conservation




Preventive Conservation for Paper-Based Collections

23 October 2018
 Sarah Staniforth

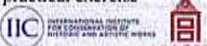


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Scientific Approaches to
 Paper & Photograph Conservation




9.00 Introduction and agents of deterioration quiz
 9.30 Group work – preventive conservation issues for your collections and feedback
 10.15 Lecture
 10.45 Break
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 11.45 Planning practical exercise



Ten agents of deterioration

- Physical forces
- Thieves and vandals
- Fire
- Water
- Biological
- Chemical
- Radiation
- Incorrect relative humidity
- Incorrect temperature

PLUS ONE:
 • Disassociation

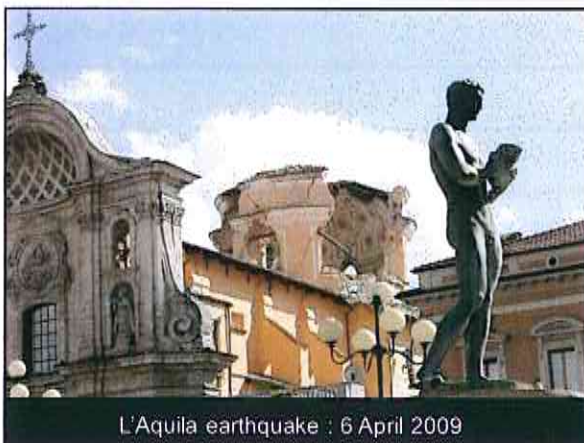


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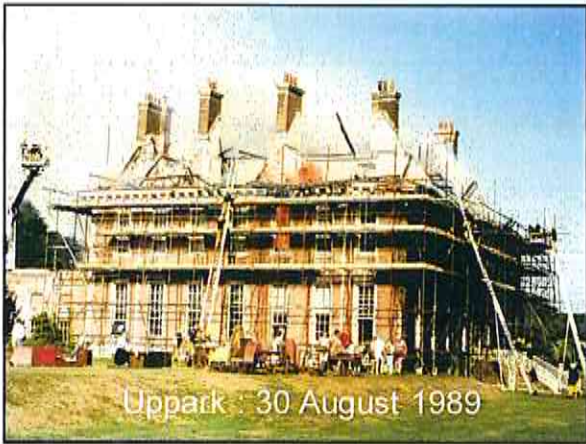
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Uppark : 30 August 1989



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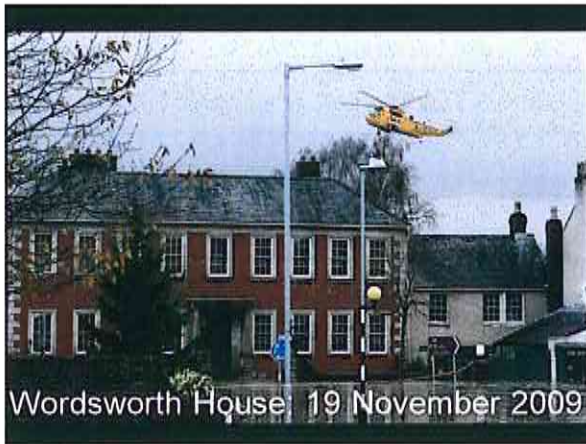








The Vyne : 20 July 2007



Wordsworth House: 19 November 2009



Wordsworth House: 19 November 2009





Ten agents of deterioration

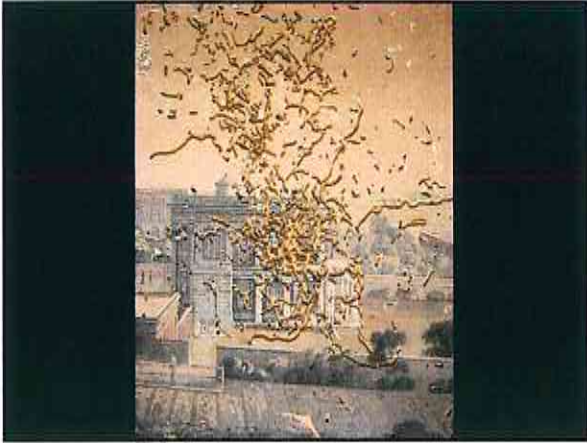
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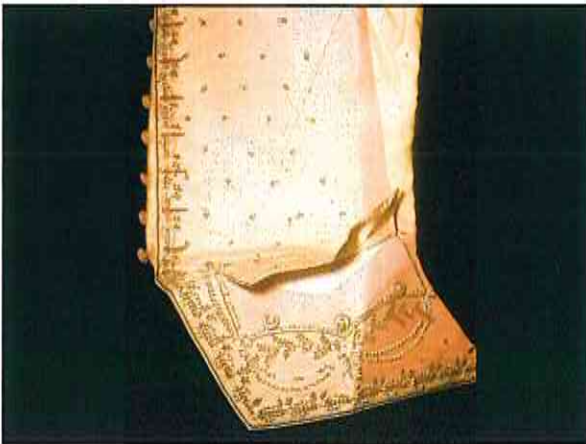


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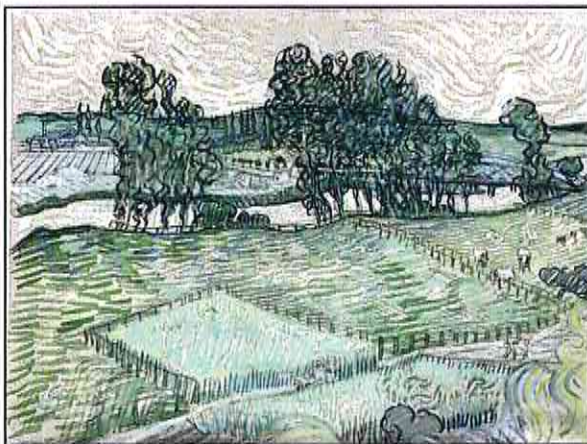


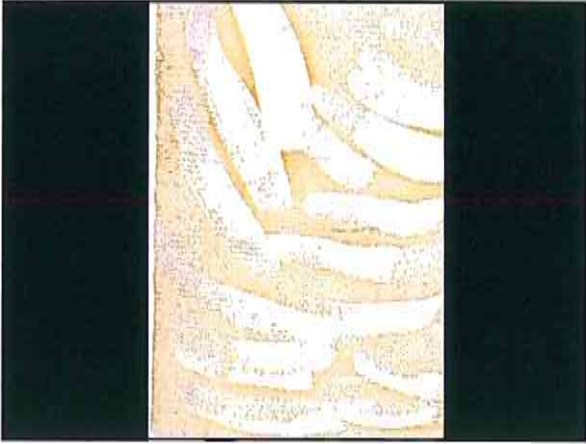






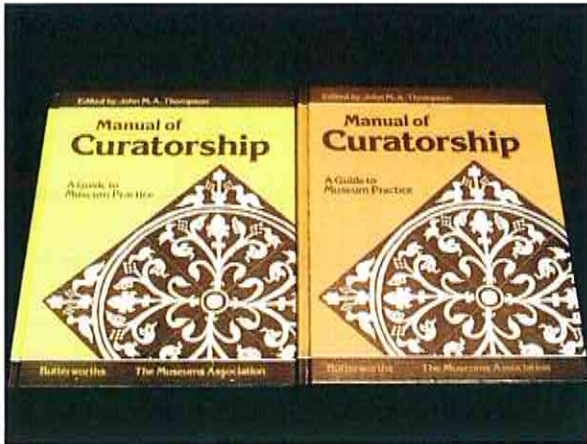


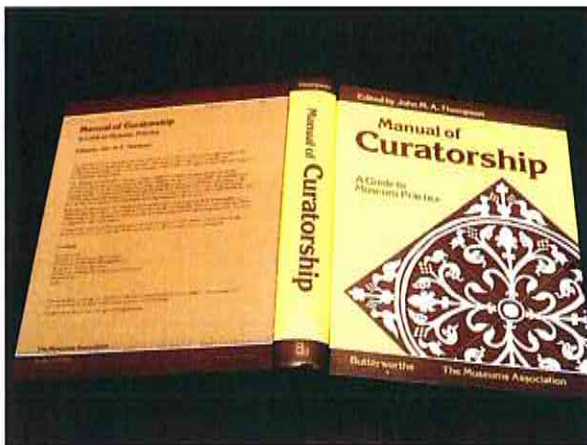


























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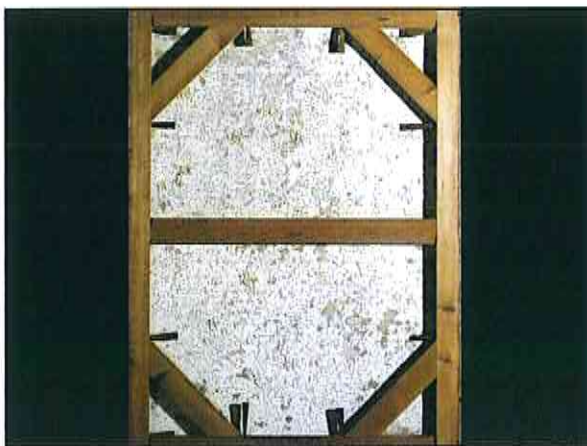

















 IIC/ICOM-CC
Environmental Guidelines (2014)

- Sustainability and management
 - Care of collections should be achieved in a way that does not assume air conditioning (HVAC). Passive methods, simple technology that is easy to maintain, air circulation and lower energy solutions should be considered.
 - Risk management should be embedded in museum management processes.
- Museum Environment
 - Guidelines for environmental conditions for permanent display and storage should be achievable for the local climate.
- Loans



Bizot Green Protocol (2015)

Loans

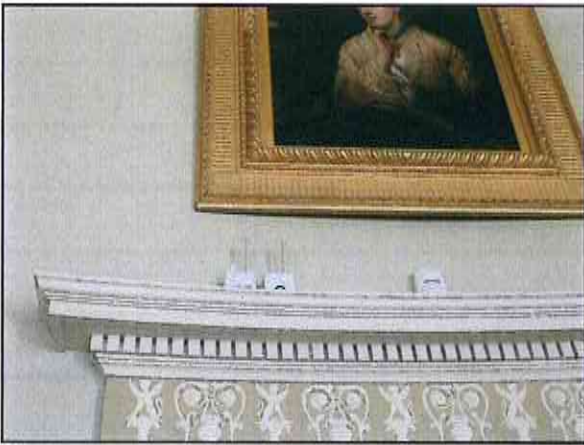
For many classes of object containing hygroscopic material (such as canvas paintings, textiles, ethnographic objects or animal glue) a stable relative humidity (RH) is required in the range of 40 - 60% and a stable temperature in the range 16-25°C with fluctuations of no more than $\pm 10\%$ RH per 24 hours within this range.

More sensitive objects will require specific and tighter RH control, depending on the materials, condition, and history of the work of art. A conservators evaluation is essential in establishing the appropriate environmental conditions for works of art requested for loan.











Knole, Kent

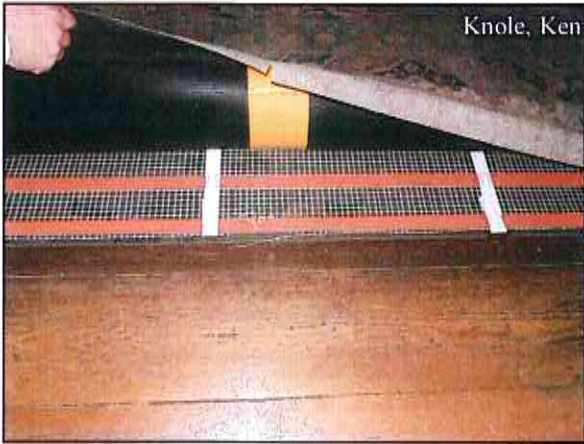


Knole, Kent



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Nine agents of deterioration

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IIC Professional Seminar Sustainable Storage

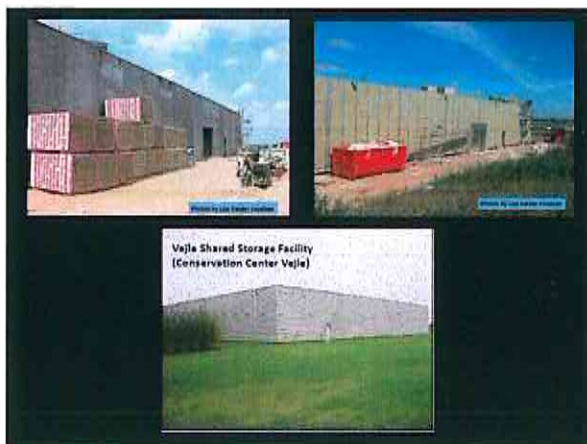
Summary

A low energy museum store has:

- Highly insulated walls and roof
- Concrete floor without thermal insulation (heat storage)
- No active heating
- Humidity buffer in walls
- Humidity control by dehumidification (may be powered by solar panels)
- Low infiltration rate, no forced ventilation
- No daylight allowed



John Gamber of St. George Street, London, 2001
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Preventive conservation

- Conservators can be the enablers of sustainable access
- Welcome the benefits of increased access
 - Help financial bottom line
 - Allow more people to share in experience of seeing authentic objects in context
- Use risk assessment and risk management



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