

Fachhochschule Köln  
Cologne University of Applied Sciences

*02 Fakultät für Kulturwissenschaften*

# Conservation Treatment: A Risk Factor

Adrian Heritage

## CICS

**Cologne Institute of  
Conservation Sciences**

Institut für Restaurierungs- und  
Konservierungswissenschaft



Is the conservator  
a —best kept—  
secret agent of deterioration?





# Can we be more honest about risk?

“truth is that which makes a people certain,  
clear, and strong.”

Martin Heidegger



# Wall Paintings: irreversible treatment processes

**CLEANING** *selective* removal of material

**UNCOVERING** *selective* removal of material

**AQUEOUS TREATMENTS**, e.g. poulticing

**FIXING**

**CONSOLIDATION**

**GROUTING**

**DETACHMENT**



# 10 Agents of Deterioration (Negative Risk)

1. Physical Forces
2. Thieves and Vandals
3. Fire
4. Water
5. Pests
6. Pollutants
7. Light, Ultraviolet and Infrared
8. Incorrect Temperature
9. Incorrect Relative Humidity
10. Dissociation

Stefan Michalski 1987: 1994

Robert Waller 1994



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**Preventive approach**

***"first, do no harm"***

*[Primum non nocere]*



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**Where is  
conservation treatment  
in all of this?**



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**Preventive conservation**

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# 10 Agents of Deterioration (Negative & Positive Risk)

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**Two roles for conservators:**

**Preventive conservation**

**Remedial conservation**



# “Deterioration” Agents

...five stages:

1 avoid sources of the agent

2 detect the agent

3 block the agent

4 respond to the agent

5 recover from the agent

 Preventive

 Remedial

Michalski 1990:589

# Agent 11: the potential for gain and or loss

1. Physical Forces

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## Detecting the 11<sup>th</sup> Agent



CLEANING

UNCOVERING

AQUEOUS TREATMENTS

FIXING

CONSOLIDATION

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DETACHMENT



# Deterioration Agents Role of conservator and treatment

1. Physical Forces

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**Conservator =**



**An agent who *tries* to do good!**

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**Treatment = Risk**



**= Opportunity**



# NECESSARY RISK in treatment processes

**Dualism:**

***Negative* Risk**

***Positive* Risk**

**two *necessary* aspects of the treatment process**

# Two *necessary* aspects of the treatment process

## ***Negative***

**For example: Irreversible information loss or treatment failure**

## ***Positive***

**For example: added value(s) like new or enhanced information (understanding), function, stabilisation**



# Value Shaping Agents

1. Physical Forces
2. Thieves and Vandals
3. Fire
4. Water
5. Pests
6. Pollutants
7. Light, Ultraviolet and Infrared
8. Incorrect Temperature
9. Incorrect Relative Humidity
10. Dissociation
11. Conservation

**The agents  
are interrelated :  
complex interaction!**



# Role of conservator and treatment ***4 Aristotelian Causes***

## 1. material change (addition, subtraction, alteration)



# Role of conservator and treatment **4 *Aristotelian Causes***

1. material change (addition, subtraction, alteration)
2. formal change (aesthetic = appearance or shape)



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# Role of conservator and treatment **4 Aristotelian Causes**

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**... a work of art has something to say and seeks to share its truth in dialogue**

**Hans-Georg Gadamer**



# Feller 1994: “LIFETIMES” of objects and added materials

what should be the limit of acceptable lifetime and acceptable decline in properties for conservation-quality materials to be used in long-term contact with artifacts? **The subject remains to be addressed.**

Feller 1994:11 *Accelerated aging : photochemical and thermal aspects*

Class	Classification	Intended useful lifetime	Approximate equivalent standard of photochemical stability
T	Materials in temporary contact	Less than 6 months?	–
C	Unstable or fugitive	Less than 20 years	BS1006 class 3 or less
B	Intermediate	(20–100 years)	(3 to 6)
A	Excellent	(A2?) greater than 100 years	Greater than BS1006
		(A1?) greater than 500 years	?

*Table 1.1. Standards of Intended Use and Photochemical Stability for Materials in Conservation (Feller 1975).*



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## WATERGLASS WALL PAINTINGS: = *Inorganic Binder (Potassium Silicate)*

### 1861-65 (*Painted*)

1874	<i>subtractive</i>	Dirt removal	[Cleaning mechanical
1875	<i>additive</i>		Washing with water]
1878			
1888			
1894			
1897	<i>subtractive</i>	Dirt removal	[Cleaning mechanical & aqueous]
	<i>additive</i>	Wax & Varnish?	[Consolidants = organics]
1938	<i>subtractive</i>	Dirt removal	[Cleaning mechanical & aqueous]
	<i>additive</i>	Wax	[Consolidant = organic]
1963	<i>subtractive</i>	Wax removal	[Cleaning solvent-based]

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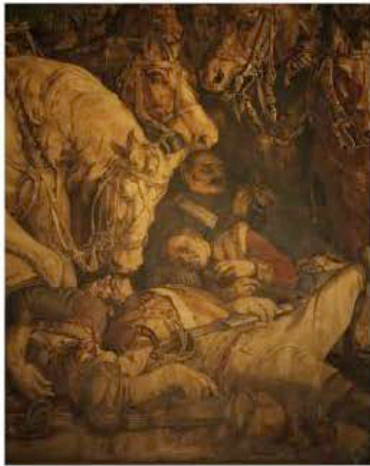
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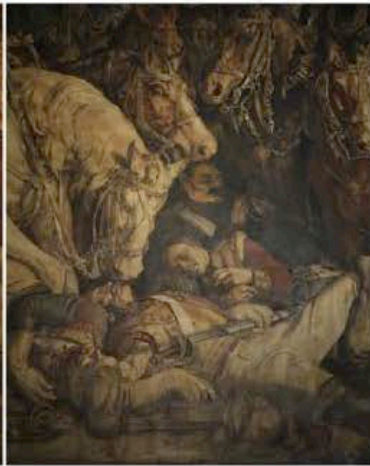
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„The meeting of Wellington and Blucher after the Battle of Waterloo“ - Beleuchtungsreihe bei wechselnden Lichtfarben



2700 Kelvin



3500 Kelvin



4000 Kelvin



5000 Kelvin



6500 Kelvin

„The Death of Nelson“ - Beleuchtungsreihe bei wechselnden Lichtfarben



2700 Kelvin



3500 Kelvin



4000 Kelvin



5000 Kelvin



6500 Kelvin



## LIGHT PROJECTION

Royal Gallery, Palace of Westminster, England

„Cleaning“ with light – experimentation with colour temperature



Detail:  
Ambient lighting in the Royal Gallery



Detail:  
Lighting at 6800 Kelvin



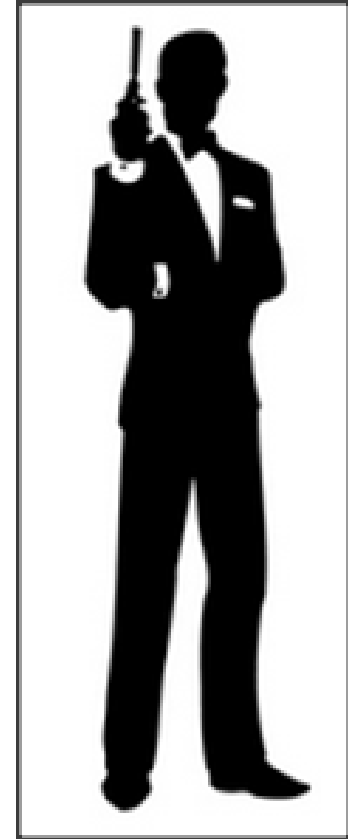
# Needed:

- 1. Change thinking away from isolated Deterioration Agents to interrelated Value-Shaping Agents**
- 2. Explicit acknowledgement of risks posed by treatments and integration of dual roles (preventive – remedial) within risk management**
- 3. Consider risk ratings for generic treatments (risk benefit)**
- 4. More evidence-based research into treatment outcomes**
- 5. New and better scientific/humanistic tools to help our decision-making**
- 6. Recognition of creativity in conservation = decision making**

# Getting closer to the truth: conservator = value-shaper

**"Beauty is truth, truth beauty,"  
– that is all Ye know on earth,  
and all ye need to know.**

**John Keats (1819), Ode on a Grecian Urn**



**Value-shaper**



The most thought-provoking thing  
in our thought-provoking time  
is that we are still not thinking.

Martin Heidegger

*Was heisst Denken?* (1951–1952)

Das Bedenklichste in unserer bedenklichen Zeit ist, dass wir noch nicht denken.