

Decision Making Model for the Conservation and Restoration of Fluid Preserved Specimens

The model presented here builds upon a model for decision making in conservation issues developed earlier by a working group of the Foundation for the Conservation of Modern Art (1999). The model suggests a decision-making trajectory for conservation problems associated with fluid preserved specimens. Basically, the decision model serves as a guideline to:

- Determine if a change in condition affects the meaning of the specimen in such a way that intervention must be considered.
- Propose various possible solutions for the conservation problem.
- Come to a final treatment plan by carefully weighing the conservation options against the consequences.

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Step 1. Data registration

Knowledge of the specimen, including information on the preparation technique, the conservation materials used, and for what purpose it was preserved, is crucial for the conservation of fluid preserved specimens. The gathering/registration of this knowledge forms the basis for the decision making model.

Register the following information:

Historical data	When and where was the specimen collected?	GATHER AND REGISTER THESE DATA	Sources: Catalogs Publications Illustrations Condition reports Conservation reports Undocumented knowledge in head of curator and/or collection manager
	What is known about the collector?		
	For what purpose was the specimen collected/preserved: Scientific purpose? Educational purpose? Both?		
Scientific data	Is the specimen a carrier of published scientific data?		
	What scientific data have been retrieved from specimen?		
	Is the specimen an important reference for scientific data?		
Conservation data	Is there visual material of the original condition and/or intermediate condition?		
	What information can be found on preparation method, the composition of preservative fluid, sealing method, mounting of specimen, jar/lid, labelling and storage conditions?		

Step 2. Condition

Make a condition report of the fluid preserved specimen.

Specimen	Stability (colour/shape/structural integrity)	MAKE A CONDITION REPORT OF SPECIMEN	Methods:
	Mechanical damage		
	Infestations (fungal growth / bacteria)		
	Deposits on specimen		
Preservative fluid	Type	DETERMINE IF CONDITION IS STABLE OR NOT	Visual inspection
	Volume (fluid loss)		
	Concentration	DETERMINE WHAT IS ORIGINAL AND WHAT IS NOT	Measurements
	pH		
	Colour (yellowing)		
	Deposits on bottom of jar		
Mounting	Method	DETERMINE IF FURTHER CHANGE IN CONDITION AND/OR DAMAGE CAN BE EXPECTED ON SHORT TERM OR LONG TERM	Analysis of materials
	Materials		
	Changes/Damage		
Jar/Lid/Seal	Type		Using old condition reports and visual material of the original condition and/or intermediate condition as a reference to try to quantify the change in condition (Step 1)
	Material		
	Changes/Damage		
Labels	Type		
	Material		
	Transcription		
	Changes/Damage		

Step 3. Meaning

Determining the meaning of the specimen prior to conservation is the foundation for responsible decision-making in the conservation of fluid preserved specimens. As an example, the choice of preservative fluid can have a direct impact on the structural integrity of the tissue, on the visual appearance of the specimen and/or on the scientific data that can still be retrieved from the specimen.

Purpose	Why was it prepared (original purpose)?	DEFINE MEANING OF SPECIMEN	Sources: Step 1
	Has specimen still an important research purpose, educational purpose or both?		
	Has function changed from a scientific/educational one to a more cultural-historic one?		
Relative importance	How unique is the specimen?		
Appearance	What is the importance of the visual appearance for the meaning of the specimen?		
Additional materials	Do additional materials add to meaning of specimen?		
Preparation technique	Does the way of preparation contribute to the meaning of specimen?		

Step 4. Discrepancy?

When a discrepancy between the condition and the meaning of the specimen can be established one can speak of a conservation problem. Determine whether there is a discrepancy and define the conservation problem.

Esthetical	Does altered appearance affect meaning?	CONSERVATION PROBLEM, YES OR NO?	Sources: Step 2,3
Authentic	Does altered authenticity affect meaning?		
Historical	Do historical traces add to meaning?		
Functional	Does specimen still function as meant (with respect to its scientific/educational purpose)?		

Step 5. Conservation options?

Formulate options for passive and active conservation that could contribute to the termination or lessening of the discrepancy or of the conservation problem.

Analyse conservation problem	Describe problem	FORMULATE OPTIONS FOR PASSIVE AND ACTIVE CONSERVATION	Sources: Step 1,2,3 Conservation literature Conservation research centres Colleague institutes
	Identify source of conservation problem		
	Which part(s) of total specimen need conservation?		
	Should original technique be preserved?		
Available solutions	Make inventory of technical possibilities		
Research	Which options are in need of additional research because of possible synergistic effects?		

Step 6. Weigh options against consequences

The following question is central: in what sense will the meaning of the specimen alter as a result of the proposed conservation option?

Meaning	How does meaning change as a result of conservation: Esthetical? Authentic? Historical? Functional?	WEIGH OPTIONS AGAINST CONSEQUENCES	Source: Step 1,2,3,4,5
Limitations of options	What is technically possible?	DISCUSS OPTIONS WITH CURATOR, CONSERVATOR AND RESTORER	Conservation literature
	What is financially possible?		
Conservation ethics	Is the integrity of the specimen sufficiently guaranteed after treatment?		
	Can the proposed methods be reversed? If not, are there decisive reasons for using them nonetheless?		
	How do options affect risk of short-term / long-term damage (risk assessment of options)?		

Step 7. Proposed treatment

The result of the previous steps in the model is a definitive treatment proposal with a founded motivation.

Conservation proposal	Is the proposal sufficiently motivated?	DRAUGHT THE TREATMENT PLAN	Source: Step 1,2,3,4,5,6
	Consider if proposal applies to group of specimens.		
		MAKE SURE THAT THE MOTIVATION OF THE DECISION MAKING IS STORED WITH THE DATA REGISTRATION	