

Report on the Workshop on Recent Heritage of Science at the Universeum Meeting at Athens

University of Athens, Friday, 12 June 2015, 9:30 - 12:30

Organised by Roland Wittje (RW) and Marta Lourenco (ML)

Program:

1. Introduction (RW)
2. Presentation and Discussion of the Athens workshop
3. Group work:
 - 3.1. Compilation of the checklist (ML)
 - 3.2. Documentation of objects we cannot keep (RW)
4. Presentation and discussion of the group work (Anastasia Filippoupoliti and Bjørn Vidar Johansen)
5. Future workshops and activities

2. General discussion at the beginning

We had 19 participants from 8 countries (Belgium, France, Germany, Greece, Italy, Netherlands, Norway, Portugal). Only a small number of participants had attended previous workshops.

The participants are all confronted with the issues of recent heritage of science and want to have an exchange about these issues. New issues arise from the objects of the life and earth sciences, which include machines but even more so specimens and samples. With the transformation from the wet lab to the computerised dry lab, these are increasingly digital artefacts. Gianniri Dimitra-Klairi raised the issue of bioart, which interprets the objects and practices of the life sciences, but also creates its own objects.

We briefly discussed the bibliography (reference list) for recent heritage of science, which Roland has started to compile. He will circulate it in the Working Group and then post it on the Universeum website and mailing list. We decided that only literature specific to recent scientific heritage should be taken up into the list. We want it to include all kinds of written material from different countries in all kinds of languages. If possible, we will link the bibliography directly to a document.

3. Group work:

We split up into two groups. The groups worked on the following subjects:

- Group 1 worked on the compilation of a step-by-step checklist of what is needed to preserve and document recent heritage of science.
- Group 2 discussed issues around objects, collections or sites that cannot be kept.

4.1. Group on the checklist (Anastasia Filippoupoliti):

The objective was to deliver a simple and brief checklist to be followed by 'keepers' of recent scientific heritage. We initiated the discussion by revising briefly the documents previously produced in the Working Group. Then we went 'backwards': we schematically followed the path of objects from manufacture to garbage (or museum) in order to identify people involved, processes,

common stages and critical points. From that we produced a list of steps to be followed in the preservation and documentation of recent heritage.

Specimens generated from recent research in the life and earth sciences ('naturalia') were out of scope but we want to include them in future discussions. In the next workshop, Paul Lambers will make a brief presentation of the specific issues to kick-off discussion.

CHECKLIST FOR COLLECTIONS OF "ARTIFICIALIA"

(ie. scientific instruments, apparatus, mechanical artefacts)

1. **Be proactive:** identify researchers, laboratories and the current state of the scientific activities/research of your University.
2. **Identify people:** locate the specialists that will assist you with the objects.
3. **Identify the objects:** describe, categorise, classify the instruments and their components. At this stage, you should be aware of the context (ie. if some objects come together as a group).
4. **Start a basic cleaning of the objects:** apply decontamination techniques and make a diagnosis of any hazardous materials. At this stage, you can use the Universeum document "Selection criteria for recent material heritage of science".
5. **Make a basic selection of objects:** this will be based on conservation and material identification.
6. **Reassemble the collection:** document objects' biographies, use oral history techniques (ie. interview possible owners). At this stage, it is important to be aware of the objects' origins and context; make a checklist of research questions that you can use to enrich the documentation of every object. You can use the Universeum document "Selection criteria for recent material heritage of science".
7. **Make a second selection of objects:** use the Universeum document "Minimum requirements for preservation and access of recent heritage of science".

4.2. Group on documenting what we cannot keep (Bjørn Vidar Johansen):

Things from small objects to large installations cannot be preserved for several reasons:

- No resources available
- Space or equipment will be re-used or modernized, or is in continuous use
- Objects and installations are radioactive or contain hazardous substances like asbestos
- Objects are leased or being sold
- Objects are going into space or else wise get destroyed, disappear or get out of reach

We discuss the following issues

Defining the process in saving heritage:

- It is essential to have a plan, and go for it
- Are there possibilities of periods of quarantine between throwing away and keep?

Future technology:

- Possibilities of 3D scans. Objects, even whole interiors, can be scanned and created as replicas or models

Preservation of large instruments:

- A solution is to keep only the most essential or vital parts. However, what are they? Such would also reduce the instrument's value as a scientific resource or an outreach tool. Nothing can compare with the real things

Science vs. education:

- Traditionally the scientific heritage of instruments has been valued more than their role in education. One should be more aware of the latter aspect.

In situ preservation:

- Can we work with architects or designers to preserve large scientific instruments as architectural installations or even artwork in refurbished or renewed buildings?
- Important to keep a level of historical "readability" when buildings of science are transformed. Scientific instruments or parts of interiors (e.g. lab furniture) can be of great help. At the same time they must give meaning. Can they at the same time be transformed to new usage?

Documentation:

- A great challenge: Facing the fact that not even all written or printed documentation regarding an instrument can be stored. How to choose the essential?
- Film of an instrument in use can be of great value
- Student programs can include documentation work. Students can be time consuming, but a great resource within an already established educational program
- Oral history is an important way of keeping information and knowledge about the scientific heritage for the future. It also opens links between science and sociology. Anecdotes, reflections or descriptions can be useful for other fields of historical research
- Challenges regarding oral documentation: A strict guidance of the interviewees can be necessary to keep focus. Scientists can be emotionally attached to their instruments. New artifacts are in fact also produced during the process – how to manage the digital data in future open up to new challenges. Also, the upkeep of digital media can be costly.

Hazardous instruments and sensitive data:

- Recent scientific instruments can contain hazardous waste and components which must be dealt with
- They, including computers, can contain sensitive data

5. Future workshops and activities:

We all agreed that the workshop was a great success. It was very helpful for everybody to discuss issues of recent heritage of science, to get inspirations from others, and to think about aspects in new ways. We decided that we will continue with the working group. We discussed four themes for future workshops:

1. Preparedness. Often we have to react spontaneously to situations where objects and collections are thrown away instantly or on short notice. We should be proactive, procure

and maintain contacts with scientists and technicians, and establish routines and processes to inform and enable us to act ahead of time.

2. Big science / big installations / buildings. How can we preserve and document large objects, big installations and buildings that will be demolished, modernised or re-used for different purposes? We would like to discuss documentation, preserving key objects and in situ preservations. We should look at practices of industrial archaeology.
3. Documentation of recent heritage of science. We have identified documentation as a critical issue for both, objects and collections we keep, as well as those we cannot keep. But we have to realise that we also have to let go as we cannot document everything. What are the best practices but also the limits of documenting recent heritage?
4. Hazardous and sensitive material. What do we do with objects and sites that are radioactive or contaminated with asbestos? Other objects and collections might not be dangerous for our health but sensitive for other reasons, such as human remains or data on computers.

18 July 2015 Roland Wittje, Marta Lourenço, Anastasia Filippoupoliti and Bjørn Vidar Johansen

19 Participants:

Anastasia Filippoupoliti (Greece) <afilipp@gmail.com>;
Anne Bidois (France) <anne.bidois@univ-rouen.fr>;
Anne Sophie Rozay (France) <Anne-Sophie.Rozay@insa-rouen.fr>;
Anne Vaalund (Norway) <anne.vaalund@muv.uio.no>;
Audrey Theron (France) <audrey.theron@univ-montp2.fr>;
Bjørn Vidar Johansen (Norway) <b.v.johansen@muv.uio.no>;
Chiara Gallanti (Italy) <chiaragallanti@gmail.com>;
Flora Pappas (Greece) <florap@otenet.gr>;
Frédérique Andry-Cazin (France) <frederique.andry-cazin@upmc.fr>;
Geert Vanpaemel (Belgium) <geert.vanpaemel@kuleuven.be>;
Gianniri Dimitra-Klairi (Greece) <claire.gian@hotmail.com>;
Gudrun Wolfschmidt (Germany) <fm7a014@uni-hamburg.de>;
Irina Savvani (Greece) <savvani@hotmail.com>;
Jörg Zaun (Germany) <Joerg.Zaun@iwtg.tu-freiberg.de>;
Katerina Servi (Greece) <katservi@gmail.com>;
Marta C Lourenco (Portugal) <mclourenco@museus.ul.pt>;
Paul Lambers (Netherlands) <p.h.lambers@uu.nl>;
Peny Theologi-Gouti (Greece) <stmuseum@upatras.gr>;
Roland Wittje (Germany / India) <roland.wittje@gmail.com>;