

Report on the Workshop on Recent Heritage of Science at the Universeum Meeting in Amsterdam and Utrecht

University of Utrecht, Friday, 10 June 2016, 15:00 - 17:30

Organised by Roland Wittje (RW) and Marta Lourenço

Program:

1. Introduction (RW)
2. Presentation and discussion of the Athens workshop
3. Group work:
 - 3.1. Collections in the life sciences after 1945 (Sébastien Soubiran)
 - 3.2. Big Science / large installations (RW)
4. Presentation and discussion of the group work (Sébastien Soubiran and Joep Huiskamp)
5. Future workshops and activities

2. General discussion at the beginning

We had 23 participants from 9 countries (Denmark, France, Germany, India, Italy, Lithuania, Netherlands, Sweden, USA). Only a small number of participants had attended previous workshops.

After an introduction to the Working Group by RW we had a round of presentations of all participants. A number of issues came up, among these the preservation and exhibition of digital material, intellectual property rights, secrecy in research, and material that is supposed to be destroyed after it has fulfilled its function in research or teaching. For the preservation of particle accelerators and other big installations we should collaborate together with other institutions / universities and discuss whether certain institutions should specialise in the preservation of certain material. We briefly raised the issue of what is supposed to be preserved, stuff or stories? What is essential to be preserved? Which role do memory cultures play? In Eastern Europe many actors want to forget rather than remember the Soviet period. How do we deal with this in regard to scientific heritage?

We then discussed the themes for the group work. In the call for the workshop two themes were mentioned for group discussion, *collections of the life sciences after 1945* and *Big Science, large installations and buildings*. Marta Lourenço, who had initiated the discussion on collections of the life sciences after 1945, could not attend the workshop. We decided that one group will nevertheless discuss collections of the life sciences after 1945 because a substantial number of participants wanted to discuss the subject and we had enough expertise in the group, including Ramunas Kondratas, who has been curator for medical sciences at the Smithsonian and Bart Grob, curator for medicine at the Boerhaave Museum, Leiden.

3. Group work:

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

- Group 1 worked on issues around collections of the life sciences after 1945

- Group 2 discussed Big Science, large installations and buildings.

4.1. Group on Life sciences after 1945 (Sébastien Soubiran):

The discussion focussed mainly on how we should collect modern life science material.

The group discussion has profited from the experiences and expertise of Ramunas Kondratas and Bart Grob regarding the rise of molecular biology, especially in the USA in the 70's and the documentation programmed by the Smithsonian, using video-histories, document strategies, looking at instruments to properly understand them, as well as at scientists, engineers, researchers, manufacturers and production, marketing, and patenting. The Smithsonian followed the processes from prototype to standardization and industrial fabrication. This is raising the issue of which stories should be told and how they should be told. Should we basically tell the successful stories or the "winners"?

Tools have changed, each scientific instrument respond to a specific type of research. How do you collect and document objects like PCR instruments and protein sequencers. Prototypes are key objects and easier to read in regard to how the ideas came up; the question is how to acquire prototypes and how to identify them in time. Prototypes are usually cannibalised, though cannibalization is part of the story of an object.

This specific experience, though exemplary in many ways, does not answer the numerous questions faced at local level within academic institution. We exchanged on different collecting mechanisms. Examples of such collection mechanisms are:

- Every month, every week we record what have been define as « relevant » documentation as a typical day broadcasting.
- We document on a regular basis documents without knowing the future « historical value ». Taking samples, choose a laboratory, for instance AIDS research.

We agreed that we need debate on collecting strategies and on documentation, maybe as a session before the group discussion, also as a preparation for the group discussion. Every museum should have a collection strategy, a framework that leads to active choices. We need to be proactive.

The question was also raised of the collect of animal models; the animals themselves are interesting, if we look, for example, at the different rats they look different. How were animals used in life sciences? From the animal, to the people, to the instruments, chemists, genetics. What kind of samples do we preserve?

We also address the issue with biological data banks, sperm banks, and slides.

Some raise the problem of conservation of contemporary material. Plastics for instance, are not specific to life sciences. Many things are documented on the Internet already. Jörg Zaun has added the link to the "Plastic Heritage Symposium" for everybody concerned with this issue:

<http://www.forum-kunststoffgeschichte.de/>

The Plastic Heritage Symposium will take place 27 - 29 October 2016 in Berlin.

The time for discussion, 1 hr., was too short; we need to have more time for discussing in the group.

4.2. Group on Big Science, large installations and buildings (Joep Huiskamp and RW):

RW started the discussion with a short introduction, presenting the examples of the Bergen particle accelerator lab (Bergen university Norway), the Atomei in Garching (Technical University Munich) and the Harvard cyclotron. The Atomei building in Garching is under heritage protection and will be re-used as a nuclear physics laboratory after decontamination. Everything inside is radioactive and will be discarded, only documentation is possible. The future of the Bergen particle accelerator laboratory is unclear. It is still operational but it will not be viable as a museum. The Harvard cyclotron has been demolished but parts of the installation were collected, for example control panels, together with documentation and oral history.

This shows the three avenues for the preservation of the heritage of large installations: In-situ-preservation, documentation and preservation of key objects. An integrated approach, making use of all three avenues would be ideal. But what are the key objects of a large installation, and what are the possibilities and the limitations of documentation? In situ preservation meets limits and resistances against turning the campus into a museum.

We decided to concentrate on the questions of preserving buildings. Ownership of university buildings varies in different European countries, raising the question of who pays for their heritage protection. We have to make sure that the heritage department of a university is involved when planning for the refurbishing of old buildings.

We should have an inventory of large scientific installations on a national as well as a European level. The European Physical Society has a list of important sites. Also botanical gardens fall into the category of large installations and the built environment. We have to team up with historians of architecture and other actors in heritage protection to achieve a more integrated approach.

Joep Huiskamp has been put in charge of developing a plan for the preservation of building at TU Eindhoven. He might be able to give a presentation about the subject in a session at the next Universeum meeting. Heritage protection of astronomical observatories can serve as an example for how thinking the preservation of buildings and instruments together in an integrated approach.

5. Final discussion, future workshops and activities:

The discussions in the groups were good but with one hour too short to be really productive. As soon as we warmed up in the discussion, we already had to close it and come to a

conclusion. We need at least two hours for group discussion. The introduction to the Working Group could have been shorter or could have been skipped. The introduction of all workshop participants took some time but was necessary.

We should continue the discussions on *collections of the life sciences after 1945* and *Big Science, large installations and buildings* at our next meeting in Belgrade in June 2017. Instead of producing more reference documents, we should organize sessions at the Universeum meeting, which would also serve the purpose to introduce these subjects to a later discussion in the working group. These sessions should address the following topics:

- Collection strategies for the life sciences after 1945
- Documentation for the life sciences after 1945
- Buildings as scientific heritage. The buildings of a university constitute a part of its academic heritage but the protection of architecture is at most universities treated separately from the protection of its collections and archives. With laboratory science and big installations, buildings have become increasingly inseparable from the scientific instrumentation they house. This has long been the case for astronomical observatories. More recent examples are particle accelerators, research reactors and wind tunnels.

29 August 2016 Roland Wittje, Sébastien Soubiran

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