

# Why academic heritage should not be restored and exhibited?

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## Introduction

Academic heritage reveals the paths, traditions and steps of creating researchers and doing research, whether the steps were taken forwards or backwards. Denying, hiding and destroying one's past ensures failures in the future.

In this paper I will discuss the relation between renovating or maintaining existing exhibitions of collections and museums. I also present some solutions on how to explain to the economists the value of university museums and collections for research as a source for creativity and inspiration, as a foundation of reputation and as a PR-device for a university.

I present a case study on the commercial approach of managing the premises of Aalto University and its impact on the preservation of heritage. I shall address the question of the compatibility of this commercial approach for the academic world and national building heritage. I also raise the question about the ways alterations, rearrangements and modifications were made to the interiors and furnishing in the oldest parts of Otaniemi campus since the central area and its buildings are the masterpieces of Alvar Aalto, not only

because of exteriors but also, and especially, because of its interiors. The Otaniemi campus is on the Finnish DoCoMoMo list.<sup>1</sup>

## Who and why needs collections and museums?

There are various users of heritage although they may not know it in advance: researchers, students and future researchers and students: i.e. schoolchildren (and their teachers). Also those who are generally interested in various branches of (doing) science and those who need to promote the university to the surrounding society. Academic heritage can, and should be, used to promote a university for the public. The reason for this is simple: for an “outsider” a university museum with its café, shop and exhibitions is the easiest way to get in touch with the past and present of the academic world, research and science. The deeper reason for museums to exist is to serve as means for understanding how science-studies and the academic world work and how things were (taught) in preceding eras. Museums and collections may also serve as an inspiration for other professionals, such as artists, artisans, designers, inventors, and teachers. The significance of collections is obvious: they are the database and sources for research and very seldom only a showpiece.

A university museum might also show what had gone wrong in some cases or what might have been the direction of the research when some special branches of science would have survived. The changes in theories and common understanding of different branches of scientific knowledge can also be shown. An issue that most of us never even think about is the history of errors and other possible paths, but also ability to argue the so-called “we just agreed that this is ok” when it really has no scientific and up-to-date research to back it up.

## How are the objects shown?

Museums should use at least two levels of storytelling – scientific and popular – most preferably showing rather long but visible con-

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<sup>1</sup> <http://www.docomomo-fi.com/index.php?k=218300> (20.10.2012) DoCoMoMo is a non-profit organization International Working Party for Documentation and Conservation of Buildings, Sites and Neighborhoods of the Modern Movement. It has also national sub-organizations and each country has its own list of items.

nections between early phase and current solutions. For decades the leading idea in restoration of architecture has been to show stratification and this could also be a solution for university museums.

Different ways of exhibiting various collections, spaces related to the collections and documents depend much on usable resources and possible users as well as money, space, and the nature of collection itself, its quality and quantity. The policy of one truth, one universal exhibition ideology and graphical layout often leads to a situation where once you have seen one collection/museum, you have seen them all. Is it really necessary to wipe out all traces of previous permanent (collection) exhibitions just because they are shown in “old, out-of-date” style? Is it not part of history and science itself to show how a collection was previously, and possibly originally, exhibited? The original interiors, showcases, arrangement of objects and information papers are an essential part of history of sharing information. By showing different and original ways of exhibiting objects from different eras you also pose a question: can you notice how the ways of doing science, knowledge and way of sharing information change? Can you relate this showpiece to its historical context and the world around it? History has numerous levels and as many viewpoints as there are viewers (pic 1).



**Pic 1.** Natural history museum of Berlin and three different samples. From left “wet collection in 21<sup>st</sup> century style”, “learned cabinet from 18<sup>th</sup> century” and exhibition with new and original cabinets – typical 18<sup>th</sup> and 19<sup>th</sup> century array as a picture on the background (Photo: A. Vähätalo)



**Pic 2.** Cabinet of Physics at the University of Coimbra (Portugal), first room is in original array and shape. Cabinet is dated back to 1780's and in the middle are shown devices for researching electricity. Devices are constructed of timber, glass and brass/copper (Photo: A. Vähätalo)

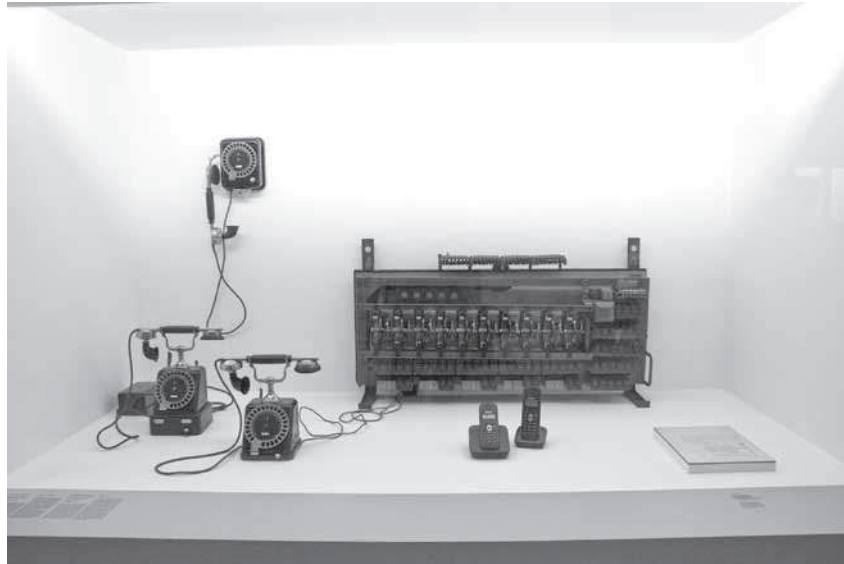
## Old arranged cabinets, dioramas, concept-shows, objects telling timeline, wow-shows

In some cases the most impressive and informative way is to show collections in their original cabinets and environment especially when both have survived through centuries. Although time is not the decisive factor, the entity and its meaning for research in situ. For example a nuclear reactor representing modern architecture from mid-1950's can be an excellent showpiece (such as the linear accelerator at Orsay in France<sup>2</sup>) as well as a collection room of scientific instruments from 1780's (e.g. Cabinet of Physics at the University of Coimbra<sup>3</sup>). Sometimes it is difficult to fit the artefact into the basic concept of a showpiece or a museum, for example Germany's first and still radioactive nuclear reactor, the visually stunning Atomei, literally "nuclear egg"<sup>4</sup> – a piece of modern industrial and scientific

<sup>2</sup> <http://cerncourier.com/cws/article/cern/29096> (12. 01.2012).

<sup>3</sup> [http://fisica.uc.pt/xt/mf/mf\\_main.php](http://fisica.uc.pt/xt/mf/mf_main.php) (20.10.2012).

<sup>4</sup> <http://www.museion.ku.dk/2012/02/curating-a-nuclear-egg-roland-wittje-at-the-muse-seminar/> (20.10.2012).



**Pic 3.** Modern, up-to-date showcase exhibiting evolution of telephone. Very informative but cold. Exhibition includes several similar stories. University of Porto in Portugal (Photo: A. Vähätalo)



**Pic 4.** Partly renovated (new worktables above old ones) laboratory of physics at the main building of Helsinki University of Technology (now Aalto) in August 2011; original design by Alvar Aalto (Photo: A. Vähätalo)

architecture. Much depends on the tale and level of information the curators want to tell (pic 2, pic 3, pic 4).

It is very “hip” in the 2010’s to demolish old dioramas and collection cabinets and show things in “concept exhibitions”, that is to put objects with same ideas, but from different eras in the same box and show “evolution and timeline” within one showcase. This is a very informative way of storytelling, but on the other hand, if you have a collection of electrical demo pieces from 1890’s in original cabinet and possibly in original environment – is that worth anything? Some 120 years of survival is not something you meet daily. How about diorama from 1970’s? Yes, it might be very ugly and old-fashioned but also a representation of its own time. What if you at least save the most popular, meaningful and typical ones and document all the others properly? You might make a virtual tour of the others before they are demolished and then you can put this documentation in “3D goggles” and let the visitors see how the museum was before.

The most impressive example of new ways of exhibiting and preserving scientific samples (“wow-shows”) I have seen so far is the “wet” collection of Natural History Museum in Berlin. The collection consists of thousands of samples that have been preserved in alcohol and glass tubes; animals from all over the world are all displayed within a kind of giant crystal cube – a room within a room. A regular visitor will see the examples from high and dark circulating corridor, meanwhile researchers and students of biology can see the illuminated “cube” inside and make their observations. This collection is an ideal case: an impressive showpiece and used in everyday research at the same time. This new way of exhibiting has its parallels in the past: the collection exhibitions from 19<sup>th</sup> century in the wall-size vitrines full of stuffed samples of animals. A very beautiful and visually simple example of this kind is the Gallerie des Oiseaux a series of collection rooms of birds at the Musée Zoologique de la Ville de Strasbourg.

## How to do it?

Some universities have made an absurd and strict rule that their museum is not allowed to conduct research and then wonders why the museum does not achieve any scientific results and does not at-

tract a great number of visitors. A good exhibition is mostly based on careful research that at least partly comes from inside the museum.

Recycling is the day's word. For a temporary exhibition this ideology is a bit difficult but still manageable: one has to create basic structural layout that can be used over and over again; just change the posters, content and composition. Old cabinets can usually be reused, repaired and if necessary, remodelled (pic 5, pic 6).

Connecting the work of science historians with museums is "simply" solved: museums should employ researchers who know how to research, write and publish and how to prepare exhibitions. Museums should also not forget an architect who knows how long one meter is, how heavy 40 kg are and how long it takes to build an exhibition with a negative budget. Large audiences are quite easily pleased when they are shown how theories and scientific instruments have made their everyday life easier.

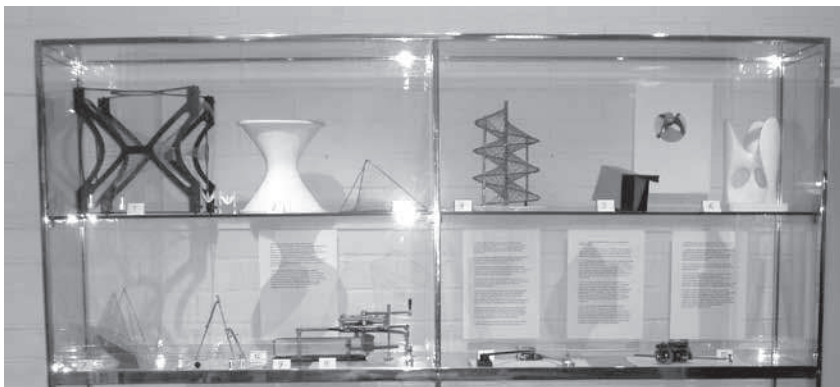
If you have to establish a new collection out of forgotten items in a storage cellar, quickly study the pieces, find any marks and notes and overtake all without hesitation. Later you can go to archives to research for inventory lists. Remember to doubt everything, ask stupid questions and not to assume anything. And you must remember to protect that which cannot speak for itself – the heritage as an entity. Sometimes this means changing locks and acting as a fire brigade in action. You must never panic or lose self-control, even when you are 'the last man standing'.

## Virtual object versus real item?

We may think that virtual tours and archives give us all the information we need, but in reality we just see either a reflection made by camera lens or an animation. Virtual display does not have the same impact as the real existing thing; it does not give us the sense of material, size, colour, ageing, patina, and odour. Also, the original context is missing, though this also happens when an object is not shown in the original environment and showcase or laboratory context. But virtual 3D and 4D -models and photographs can give useful additional data and often allow us to see 'inside' or 'behind' the object or its path in time and timeline. Another advantage of virtual exhibition is



**Pic 5.** Stripping table designed for land surveying department. Unique set of furniture that will have a new life as exhibition table and after remodeling, cabinet (Photo: A. Vähätalo)



**Pic 6.** Cabinet designed by Alvar Aalto office, original furnishing of HUT. Mathematical models inside date back to 1910-20's and are related to the main interest of science in those days in Finland. A small piece of temporary exhibition about teaching on HUT in year 2008 (Photo: A. Vähätalo)



to make collections and museums known to those who are not situated in its neighbourhood, therefore it is a good way to promote and share knowledge. Virtual archive also preserves objects from wear of handling and gives simultaneous access for several researchers but it can never replace actual archive.

Establishing virtual archive and exhibitions needs knowledge and understanding of software but also a clear vision of the visual outlook and simple user interface – and this system should work in harmony with other similar archives already established. Above all, this requires enough time to consider different solutions and money to provide for memory storage, energy, counting capacity and also secure interactive web. However, we should not assume that everyone really has access to the Internet.

## Is money the new god?

Maintenance demands money, but the real issue is the worshipping of making money over university buildings. Why should university pay so high rent for its premises that it gives the ‘owner’ equal profit as large as any commercial real estate business over deposited capital? In Finland the premises used to be the property of university and then in mid-1990’s they were given by state to profit-making statistic company<sup>5</sup> which led to a situation where rent formed over 50% of the costs of every faculty. This is what happened in HUT<sup>6</sup> and in all other universities in Finland. Official explanation for later rent increases was that “university should pay its way due renovation costs.” But how can a university operate when its main product is knowledge and immaterial resources for economic life – that is, highly educated experts whose education is mainly paid by the state?

Museum and collection spaces should be valued to one tenth of the regular “rent price” or even less. Also, when a built-in scientific instrument or its podium is in an ordinary university room, the volume of the area the podium takes should be reduced from the rent. A relic

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<sup>5</sup> Panu Nykänen, *Otaniemen yhdyskunta. Teknillinen korkeakoulu 1942–2008* (Helsinki: WSOY, 2007), 348.

<sup>6</sup> HUT is Helsinki University of Technology and since 1.1.2010 part of Aalto University (HUT is nowadays dealt in four different Schools of technology).

should be a matter of boast and pride, not a nuisance to get rid of. An issue that is quite difficult to explain to the euro-fixed-make-profit economists or the humble and diffident scholars. Inspiration comes from a little intellectual stimulus and trigger hidden in environment.

### How to convert a “true-believer” or a “faint heart”?

What if the emperor has no new clothes, not even the undergarments? How to make economists to understand that university’s main goal is not just to be an effective result-maker but to be a place for study, doubt, success and also errors. How to show that nothing new comes from empty hands? You need the history around you in order to understand how it was before and how it is today – and create a question based on hands-on study: did we have it right or can we do better?

To get funding for a museum, collection and exhibition activity is to abuse the international ranking lists for your own purpose: check top-twenty of your own kind of universities and then study their websites and look if they mention a university museum specialized on the subject you are looking for and make your own statistics. You can also make a comparative study on top-twenty universities in general and make a similar list. The result is that at least 90% of the top-twenty have a museum or collections and funding for them. If you have the possibility, visit some of these, document them, interview the staff and ask for statistics. Then show your report to those who make the decisions in a way that it cannot be forgotten and recommend them to do an official visit to your collections and then to the best ones you visited. Lure in money to compete. A faint heart is a bit different but usually the eyes of scholars can be opened just by taking them to see the instruments and asking them what they are used for.

### The Case: Aalto University

In Aalto University the premises are now run by Aalto University Properties Ltd – a new organization taking care of the foundation based on Aalto University’s premises. The policy remains the same: money is taken from education to pay for the walls and equipment. A new pricelist is given for the renovated spaces: storage rooms are

equal to office rooms when it comes to rent per sq.-m.<sup>7</sup> Everyone can see what this means to collections in faculties with a long history and huge instrument(s) or a collection with no present use.

The situation in Aalto's Otaniemi campus is the following: old main building has been under renovation since August 2011 and land surveying department is the first in line for destruction. Land surveying collection consists of all kinds of measuring instruments from 1800's to 1960's, the biggest being half-the-elephant-size instruments used to construct maps from aerial stereo photographs. The department also has teaching spaces specially made for them with tables joined to solid ground and a 75-metre measuring line for calibrating the devices and an unused laboratory for soil specimens. Most of this is going to be demolished due to price tag given to storage rooms, need for vast amount of HVAC-engine rooms<sup>8</sup> and due to new techniques in land surveying and because some of these instruments are being used by very few people during an academic year. There is no room and no money for showing history or scientific progress because the rents are so high and also, possibly, there is not enough willpower to find a way to preserve bulky scientific instruments as a part of interiors even if there would be a possibility to do so.

The paradox is that the collections of Aalto's engineering schools survived three different wars during the 20<sup>th</sup> century but not the time of peace and prosperity of the early 21<sup>st</sup> century. It is quite certain that in past many engineering-related vast objects and machines were destroyed when they became out-of-date but quite many of them ended up in museum collections outside the university. Luckily, this time most of the instruments used in land surveying were saved, some of the biggest found a new place in various land surveying related museums and smaller instruments got a shelter under the roof School of Engineering at Aalto for the sake of old times, in the spirit of the so-called "teekkarihenki".

Most alarming is the ignorance and negligence towards architectural value of Alvar Aalto's heritage in Otaniemi. The exteriors are considered to be of high value but interiors are very often altered for the sake of 'modernization'. The central architectural ideas in the

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<sup>7</sup> Conversation with professor Henrik Haggrén, December 2010.

<sup>8</sup> <http://www.aaltonet.fi/Otakaari-1-Peruskorjaus> (24 .02.2012).



**Pic 7.** Main hall of the main building of HUT. In the middle are shown wall cabinets made in 1998 for a history exhibition – these cabinets are updated and reused in situ year 2011. Exhibitions are integrated in departments since there is no actual museum (Photo: A. Vähätalo)

main building of HUT are the shape and interiors of the amphitheatre-like auditorium, entrance halls in the main hall and those of the department of architecture and land surveying, the long corridors connecting the three and the additional “fingers” with upper light or sidelight depending on the location of the corridor in the plan. The newest idea from AU Properties Ltd is to demolish these walls between old drawing halls and central corridors and build all dividing walls of glass and put students, researchers and assisting administration staff in open-plan offices, just because it is so fashionable and new (this was so some twenty-forty years ago). These alteration plans are also going to ruin the main architectural interior features of the main building and also endanger the work peace of students, teachers and researchers. What makes it worse is that they thought of this plan when recent studies<sup>9</sup> have shown that open-plan offices are non-efficient as a workplace. Why do non-professionals want to do

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<sup>9</sup> Article about sickness absence [http://www.sjweh.fi/show\\_abstract.php?abstract\\_id=3167](http://www.sjweh.fi/show_abstract.php?abstract_id=3167) (20.10.2012) and article about noise in general and in offices [http://www.tiede.fi/artikkeli/1202/melu\\_vie\\_hengen\\_ja\\_hermot](http://www.tiede.fi/artikkeli/1202/melu_vie_hengen_ja_hermot) (20.10.2012).

architects work when an architect never wants do economists' work? We put our hope on the National Board of Antiquities to prevent this disaster, but due to present budget cuts it is likely that there is very little professional help available (pic 7).

However, there is a faint light at the end of the tunnel – the new school for architects and designers. They need a new house, not just for the studies but also for exhibitions and collections. Will there also be space for a museum? No one knows. It is possible that there will be some kind of museum-organisation in Aalto in future, but the strategy remains in shadows. Meanwhile the spiders of museum-minded weave their world-wide-web of co-operation in silence.

## Conclusions

In order to maintain the heritage it is essential to create guidelines, policy and grant funds for establishing proper framework and to make the wide range of heritage known to the whole of the university, from its students to the headmaster, and then practice this policy. One of the most important missions is to guide all those who work and study at the university to act in a way that the heritage is not endangered, but nourished and grown. The renovation of old exhibitions should be done after thorough consideration, since stratification is the timeline of all history and it can and must be shown. Original showcase also has its value of curiosity, as a means of information and as an historical artefact. Virtual exhibition cannot replace real objects; however, it can give additional information that is not included in normal exhibition arrangement. Recycling and reusing are a good means to reduce costs if budget is low.

Once lost is gone forever. Money saved/gained in a quarter can turn into loss in centuries. It is essential to understand the meaning of history and heritage, since they are the base of university's reputation. Heritage and reputation can be established only by centuries of work, research and education and all of these are the most valuable PR-devices that a university can ever possess. Heritage is not just objects, it is also the built environment, both interiors and exteriors of university, and immaterial heritage e.g. in form of traditions of ceremonies, teaching procedures, student life and emblems showing academic identity.