## Using interdisciplinary educational programs and wide ranging projects to raise the profile of university collections

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## Abstract

Usually, university collections are bound tied to a particular subject with a specific use in education and research. Most of the old universities in Europe possess various holdings of collections which represent a broad spectrum of disciplines, i.e. Anatomy, Botany, Zoology, Archaeology, Chemistry, Physics, Astronomy. In the past those collections have been restricted to one discipline or educational purpose. Today, we are aware of a trend to overcome these disciplinary boundaries and pursue a new way to raise the profile of university collection.

Some universities merge their collections into a broadly based museum often located in a central building. In some cases this may be the best solution to preserve the collections, but the disadvantage of this approach is that the objects must leave their institutions and are not regularly available for teaching and research: Being without a strong institutional background often means being without a close connection to present-day research projects and inquiries. Therefore it is sometimes better to keep a collection in its traditional context and try to start projects which themselves are broadly based and do not require a long-term abandonment of objects.

This paper offers some ideas and examples from Germany on how to use noncentral stored collections and objects for interdisciplinary educational programs and wide-ranging projects, e.g.: teaching students in the context of general studies, demonstrating the difference between working methods in the fields of sciences and humanities, offering exhibitions with objects from different academic spheres and stressing the network of researchers, disciplines, institutions, collections and objects in a digital museum.

## Presentation

Most of the old universities in Europe possess various holdings of collections which represent a broad spectrum of disciplines. I would like to give some typical examples from Germany. I know the situation very well because of my project "University Museums and Collections in Germany: Research on their Holdings and History". The project is funded by the German Research Foundation.

All German university museums and collections are recorded in a web based database:

http://publicus.culture.hu-berlin.de/sammlungen/

Most of the museums and collections are also recorded in the UMAC database, but – compared to the German database – just with some key features: http://publicus.culture.hu-berlin.de/collections/

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I start with my university, which is Humboldt University of Berlin: According to the latest state of registration it owns 39 different collections. All of these collections are bound tied to a particular subject with a specific use in education and research, for instance anatomy, pathology, anthropology, botany, zoology, mineralogy.

A survey demonstrates that Humboldt University holds collections in every collection category:

- Cultural History & Art: Art treasures, Mori-Ôgai Memorial Place, Portrait Collection
- Ethnology & Anthropology: Ethnology, Sound Archive, Archive of Alternative Culture



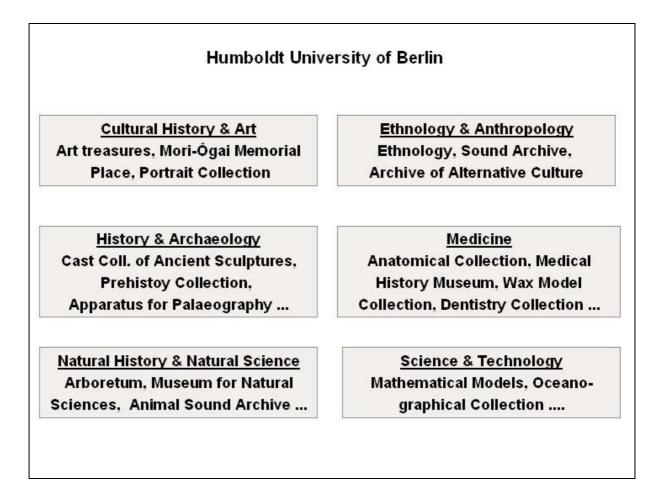
- History & Archaeology: Cast Collection of Ancient Sculptures, Prehistory Collection, Apparatus for Palaeography etc.
- Medicine: Anatomical Collection, Medical History Museum, Wax Model Collection, Dentistry Collection etc.
- Natural History & Natural Science: Arboretum, Museum for Natural Sciences, Animal Sound Archive
- Science & Technology: Mathematical Models, Oceanographical Collection etc.

The University of Tuebingen keeps almost the same spectrum of collections:

- Cultural History & Art: Art treasures, Collection of Music Instruments, Detention Room (a historical lock-up for students)
- Ethnology & Anthropology: Ethnographical Teaching Collection, Empirical Cultural Studies Collection
- History & Archaeology: Cast Collection, Coin Collection, Prehistory Collection, Egyptological Collection, Classical Archaeology etc.
- Medicine: Anatomical Collection, Osteological Collection, Dentistry Collection etc.
- Natural History & Natural Science: Botanic Garden, Zoological Collection, Mineralogical & Palaeontological Collection
- Science & Technology: Mathematical Models, Physics Collection, Computer Museum etc.

Another example is the University of Halle-Wittenberg, which maintains nearly the same spectrum of collections from diverse academic disciplines (except for Ethnology & Anthropology):

- Cultural History & Art: Art Collection, Engraving Cabinet, Papyrus Collection, Phonetic Collection



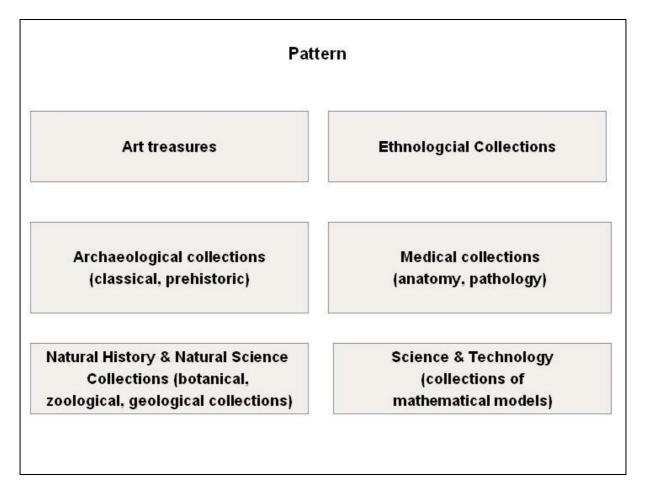
- History & Archaeology: Archaeological Museum, Coin Collection, Prehistory Collection, Collection for Christian Archaeology
- Medicine: Anatomical Collection, Collection of Macroscopic Specimens
- Natural History & Natural Science: Botanic Garden, Zoological Collection, Geological- Palaeontological Collection
- Science & Technology: Collection of Mathematical Models, Map Collection etc.

To sum up one may say that all traditional universities in Germany (and Europe as well) show almost the same pattern. Usually they hold at least the following types of collections:

- Art treasures
- Ethnological collections
- Archaeological collections (classical, prehistory)
- Medical collections (anatomy, pathology)
- Natural history & natural science collections (botanical, zoological and geological collections)
- Science & technology collections (collection of mathematical models)

Looking at the holdings as a whole they represent a broad spectrum of disciplines. This unique setting should be more reflected and taken as a chance for an advanced use of university collections.

In the past all university collections were restricted to one discipline or educational purpose which means that the collections were just used within their disciplinary boundaries by experts and particular groups of students. Right now we are aware of a strong tendency towards interdisciplinary or multi-disciplinary projects and initiatives. This trend to overcome disciplinary boundaries is a great challenge for



university collections to extend their sphere of activity and play a new part in academic life.

Some universities already merge their collections into a broadly based museum often located in a central building. In some cases this may be the best solution in order to preserve the collections, but the disadvantage of this approach is that the objects must leave their university departments and are consequently not regularly available for teaching and research: Being without a strong institutional background often means being without a close connection to present-day research projects and inquiries. Therefore, it is sometimes better to keep a collection in its traditional context and to try starting projects which themselves are broadly based and do not require a long-term abandonment of objects.

At this point I would like to give some ideas and examples from Germany on how to use non-central stored collections and objects for interdisciplinary educational programs and wide-ranging projects, offering exhibitions with objects from different academic spheres and stressing the network of collections in a digital museum.

The starting point is the university with its great variety of disciplines. What kind of interconnection exists between all these disciplines which have become extremely specialised? Some important aspects are:

- working methods
- topics
- media
- people
- history

The challenge is to find out the relevant interconnections and to take them as a basis for education, research and science communication. This seems to be a great advantage for university collections because regular museums or science centres are not able to come up with such an exclusive program.

In Germany most of the universities provide courses in the framework of general studies (*studium generale* or *studium fundamentale*). The concept is to offer broad-based lectures and seminars for all students and to boost their understanding of ideas and issues from an interdisciplinary perspective.

This academic program is perfect to make university collections a subject of discussion. Here are just a few proposals for teaching courses:

- Following the way of doing research in certain disciplines to demonstrate the concept and process of science in different fields of knowledge
- Demonstrating working methods in the fields of sciences and the humanities
- Discussing the genealogy of epistemic objects
- Talking about collecting, documenting, arranging and preserving items

The collections are a valuable source for manifold topics which could be used for educational purposes in the future.

Particular sessions can be hold in the premises of the museum or collection and – if possible – presented in cooperation with the museum director or the person who is in charge of a collection. I learned that most of the experts like to cooperate with their colleagues because they know that their institution can profit enormously from this kind of teaching. And students are really pleased to get the opportunity to exchange views with different specialists on various fields of knowledge.

It goes without saying that this approach (which can also be used for teaching school classes) will open minds towards the need of interdisciplinary work.

This summer the university of Tuebingen, founded in the 15th century, presented an exhibition called "38 things".<sup>1</sup> These 38 heterogeneous exhibits encompassing almost all disciplines are just some examples from far more than 100,000 objects. They give us a general idea of the *universitas* and the university as producer of knowledge and interpretation. The exhibition "38 things" marks a first step towards a new university museum which – as a common 'umbrella' structure – shall complete, extend and make the present activities of non-central stored collections more attractive.

It seems to be the same model which Humboldt University started some years ago: Offering temporary exhibitions with objects from different academic spheres and a variety of attendant activities in the heart of the university, managed by a central unit within the university structure in close cooperation with collection experts.

Instead of an 'umbrella' structure some other universities in Germany created special committees to organize temporary events around the collections. These committees are very successful because they are able to act as a big and strong group towards the rector or president of a university.

Exhibitions cannot just be organized in cooperation with other curators at university but also in partnership with other museums. For example: On the occasion of the 2006 Football World Cup the famous Pergamon Museum in Berlin presented together with Humboldt University the exhibition "The ball is round – Circle, Sphere, Cosmos". The exhibition presented "objects on two of the oldest and most pivotal symbols of the culture of mankind - circle and sphere. Art treasures from the most

<sup>&</sup>lt;sup>1</sup> <u>http://www.uni-tuebingen.de/uni/qvo/38dinge/38dinge.html</u> (08.11.09)

diverse periods and cultures" met "with natural science objects"<sup>2</sup>, provided by the Museum for Natural Sciences.

Last but not least I would like to turn the attention towards the development of a digital museum integrating researchers, disciplines, institutions, collections and objects and thus reconstructing the underlying network of science. In Berlin such a project has been started in 1998. Today, this multimedia database called "Cabinets of Knowledge" contains more than 16,000 objects:

http://www.sammlungen.hu-berlin.de/

The database describes the items with a special view towards the connections between several spheres of knowledge and it reflects the historical, personal and institutional background of the objects. The practical use is manifold: Among others, it can be used for research, as powerful and important tool in academic education, for the preparation of exhibitions and publications, and for science communication.

To conclude: I tried to show that the interdisciplinary nature of university collections is perfect in order to use them as an educational tool and to increase audiences and recognition. The last decade has not just "witnessed a re-awakening of interest in the concrete material foundations of science and of our culture in general"<sup>3</sup> but also of interest in interdisciplinary research and projects. Let us take this trend as a "new era" for university museums and collections and try to boost their profile through contemporary programs and projects.

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<sup>&</sup>lt;sup>2</sup> <u>http://www.smb.spk-berlin.de/smb/kalender/details.php?lang=en&objID=9757&typeId=10</u> (08.11.06)

<sup>&</sup>lt;sup>3</sup> Jochen Brüning: Humboldt's Virtual Wunderkammer. In: Klaus-Peter Lehmann (Ed.), Digital Resources from Cultural Institutions for Use in Teaching and Learning. A Report of the American/German Workshop The Andrew W. Mellon Foundation/Stiftung Preußischer Kulturbesitz Berlin, München 2004, pp. 87-98, p. 97.