

# Where past, present and future knowledge meet: an overview of university museums and collections in Europe

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*The [university] museum is neither an institution for the general public as are most museums; [...] nor a department of a college or university like Spanish, or Biochemistry, with its staff of teachers and students. If it were either one of these, its identity, role, philosophy and finances would be clearly delineated. [...] The beast is indeed strange.*  
(Freundlich 1964-65: 150)

## ABSTRACT

Universities hold a very significant proportion of the heritage of mankind and university museums are among the oldest museums in the world. Today, university museums and collections are discussing their traditional missions in the context of contemporary universities and societies. They are reassessing the uses and users of their collections. Simultaneously, or perhaps as a consequence, the interest for university museums and collections, their heritage and their social role is growing worldwide. National and international associations were created, inter-university projects are being developed, and the number of conferences, meetings, publications and workshops has increased significantly in the past four years. Gradually, several university museums are already changing as a result of this reflection - they are increasing the accessibility to their collections, developing integrative and interdisciplinary projects, renovating exhibitions, collaborating with local communities. This global movement provides an opportunity for change and these initiatives deserve to be acknowledged and better known. However, it still represents a drop in the ocean of the preservation and promotion of academic heritage and a tiny percentage of the potential social role of university museums. This communication aims at discussing recent developments in university museums worldwide, particularly in Europe. Current challenges facing university museums and collections are identified and discussed. The communication also discusses the value of university heritage for universities and for contemporary societies in general, with a focus on significant recent European developments, both in museological and in political terms.

Key words:

university museums, collections, Europe.

## RIASSUNTO

*Dove la conoscenza passata, presente e futura si incontrano: uno sguardo sui musei e collezioni universitarie in Europa.*

*Le Università conservano una parte importante del patrimonio culturale dell'umanità e i musei universitari sono tra i più antichi al mondo. Oggi i musei e le collezioni universitarie vedono messa in discussione la loro missione tradizione nell'ambito dell'università e della società e stanno riflettendo sulle loro funzioni e sul rapporto con il loro pubblico.*

*Contemporaneamente, o forse conseguentemente, l'interesse per i musei e le collezioni universitarie, il loro patrimonio e ruolo sociale è in crescita nel mondo intero. Sono nate associazioni nazionali e internazionali, sono stati sviluppati progetti interuniversitari e il numero di conferenze, convegni, pubblicazioni e workshop sull'argomento è notevolmente in crescita negli ultimi anni. In risposta a questi eventi alcuni musei universitari stanno già cambiando e stanno migliorando la visibilità delle loro collezioni sviluppando progetti integrati multidisciplinari, rinnovando le esposizioni e collaborando con gli Enti locali. Questo insieme di situazioni rappresenta una buona opportunità per cambiare e queste iniziative vanno apprezzate e rese note. Nonostante ciò, ancora poco è stato fatto in merito alla conservazione e valorizzazione del patrimonio culturale accademico e queste iniziative rappresentano solo una percentuale limitata del potenziale ruolo sociale dei musei universitari.*

*Il presente contributo discute i recenti sviluppi dei musei universitari nel mondo e in particolare in Europa, e le attuali sfide cui essi si trovano di fronte. Inoltre sarà discussa l'importanza del patrimonio universitario per le Università stesse e in generale per la società contemporanea con un accento sui significativi sviluppi europei sia in termini museologici sia politici.*

Parole chiave:

musei universitari, collezioni, Europa.

## INTRODUCTION

No one knows the real magnitude of the scientific, artistic and cultural heritage held by European universities<sup>1</sup>. Collections are the 'dark matter' of universities: we know they are there, but no one could actually 'measure' them so far. No comprehensive survey of university museums and collections at the European level has been carried out and only a few exist at a national level<sup>2</sup>. Until a few years ago, several European universities had 25-30 museums open to the public. Even today, the Humboldt University in Berlin and the University of Leipzig each list about 30 museums and collections, while Pisa, Zurich and Kiel each have 13 museums and collections. Between 2000 and 2004, I had the good fortune and privilege of visiting about 200 museums and collections, of all sizes and types, at 50 universities in 10 European countries. Although it is impossible to give a precise number of their museums and collections, it is clear that European universities hold a significant proportion of our scientific, natural, and cultural heritage. However, for several reasons this important heritage has not received the attention and recognition it deserves and, to a large extent, has remained unknown and inaccessible for the public at large.

In the context of this article, it is impossible to detail all the dilemmas and challenges faced by university museums and collections in Europe today. I will not consider issues related to their typology and the application of the terms 'museum' and 'collection' in the university context<sup>3</sup>. I will merely present an overview of the present situation, as well as recent developments in different European countries. I will conclude with some reflections on the importance of university museums and collections for contemporary society. First, however, I will briefly discuss the diversity of university museums and collections.

## THE DIVERSITY OF UNIVERSITY COLLECTIONS

University collections encompass all possible disciplines. As Rodeck (1952: 4) stated, "There is every possible combination [...] and almost every

imaginable subject, from dentistry to church history, [...] represented by a museum at some university". The designations may vary, but university collections cover 'traditional' fields such as natural history (which can mean any combination of zoology, botany, mineralogy, geology, palaeontology and anthropology), art, archaeology, anatomy, pathology, and others. University collections also encompass collections of history - including social history, history of religion, history of the university (university memorabilia), history of student life, history of medicine, pharmacy and pharmacognosy, technology and engineering, physics, chemistry, and astronomy. University collections also cover more specialised subjects, such as history of design and textiles, history of theatre, geophysics, geodesy, meteorology, genetics, ecology, microbiology, and marine biology<sup>4</sup>. In number of objects, university collections may vary from a couple of dozens to tens of millions of objects. At a typological level, the complexity of university museums and collections is also astonishing. Apart from the more 'traditional' museums and botanical gardens, it is worth mentioning that universities also have historical buildings and house-museums (e.g. the Unamuno House Museum of the University of Salamanca, the Legado de Ortiz Echagüe Museum of the University of Navarra, the House Museum/Memorial Mōri Ogai of the University Humboldt Berlin, Kettle's Yard of the University of Cambridge, and the Abel Salazar House Museum of the University of Porto, fig. 1), science centres (e.g. Maison de la Science, University of Liège and Jodrell Bank Science Centre, University of Manchester), planetariums (e.g. Steno Museum, University of Aarhus and Museum of Science, University of Lisbon), castles (e.g. Durham Castle, University of Dundee), aquariums (e.g. Aquarium of Banyuls-sur-mer, University of Paris 6 Pierre et Marie Curie), ecomuseums (e.g. Ecomusée de la Région du Viroin-Treignes, Université Libre de Bruxelles), hospital museums (e.g. Museum at the Psychiatry Hospital, University of Aarhus), sacred art museums (e.g. Temple of the Annunciation Museum, University of Seville) and contemporary art museums (e.g. Laboratorio Arte Contemporanea at "La Sapienza" and Museo de la Universidad de Alicante). There are also national museums resorting under the

<sup>1</sup> In this article, the term 'university' is taken in its broadest sense and to mean all European higher education institutions, including e.g. *Fachhochschulen*, polytechnics and *grandes écoles*.

<sup>2</sup> Published national surveys of university museums and collections were undertaken in the Netherlands in the 1980s and 1990s (e.g. LOCUC, 1985; Adviesgroep Rijksdienst Beeldende Kunst, 1996), and in the UK between 1989 and 2002 (Arnold-Forster, 1989, 1993, 1999; Arnold-Forster & La Rue, 1993; Arnold-Forster & Weeks, 1999, 2000, 2001; Bass, 1984a, 1984b; Drysdale, 1990; Council of Museums in Wales, 2002; Northern Ireland Museums Council, 2002). In France, a survey is ongoing, but no data has been published so far. In Italy and Germany, there also are ongoing national surveys, the data of which has been made available on the internet.

<sup>3</sup> For a more in-depth discussion see Lourenço, 2005.

<sup>4</sup> For a more comprehensive overview of disciplines represented in university collections, as well as institutional types, see UMAC's Worldwide Database at <http://publicus.culture.hu-berlin.de/collections/> (accessed, 20.III.2006).



Fig. 1. Abel Salazar House Museum, University of Porto. Photo Abel Salazar House Museum Archives.

direct administration of universities, e.g. the National Museum of Natural History, University of Lisbon, the Musée National des Arts et Métiers (CNAM) in Paris and the National Museum of Architecture, Universidad Politecnica de Madrid. In Norway, the national museums of archaeology and natural history are found at the University of Bergen.

Universities also have collections that are not housed in a museum and these are undoubtedly in the majority. Typically, these are found in departments, institutes, astronomical observatories or other facilities. In Europe, some important examples are the Palaeontology Collections at the University of Lyon Claude Bernard, the Animal Sound Archive at the Humboldt University in Berlin, the collection of scientific instruments at the École Polytechnique in Paris, the Egas Moniz Collection at the University of Lisbon, and many others, including almost all herbariums. Conditions of public access vary - some collections are displayed in a permanent and



Fig. 2. Collection of scientific instruments from the University of Sciences and Technology in Lille: temporary exhibition at the *Espace Culture* of the University, April 2004. Photo M.C. Lourenço, courtesy Université des Sciences et Technologie de Lille.

dedicated space without public access. Other universities have art collections on permanent display in galleries open to the public such as the Courtauld Institute of Art Gallery (London), the Galerie Wittert (University of Liège) and the Whitworth Gallery (University of Manchester). Art galleries without collections - hosting temporary exhibitions - are also found in universities, e.g. the Université de Lille (Sciences et Technologie, fig. 2), the Université de Bourgogne (Dijon), and the Université Libre de Bruxelles.

Finally, collections can also be found in university libraries. Keeping collections of objects in libraries is an old tradition in many European universities. As early as 1638, there was a gallery of antiquities in the Bodleian Library at Oxford University (MacGregor, 2003). Collections under the jurisdiction of libraries may come under the designation "library special collections" or "*fonds anciens*". These collections/archives may be associated with the history of the university (e.g. the College Archive Collection at Imperial College London, the *Fonds anciens et précieux de la Bibliothèque universitaire*, Université de Bourgogne in Dijon) or with a personality (e.g. Brunel Collection at the library of the University of Bristol).

## WHAT IS THE PRESENT SITUATION OF UNIVERSITY MUSEUMS AND COLLECTIONS?

If university collections are so diverse and important, why are they so little known, so little valued? What is the problem with university museums and collections? In fact, there is not a single problem that can be easily identified. There are several problems - theoretical and practical, complex, enchainé, structural and often of contradictory resolution.

First of all, there is a problem of perception. One tends to look at university museums and collections having other museums (national or regional) as their main reference model (today designated 'benchmarking'). This is logical given that they have many aspects in common, particularly in the case of important and high profile university museums such as the Fitzwilliam Museum in Cambridge, the Hunterian Museum in Glasgow or the Musée des Arts et Métiers in Paris. However, this perspective is partial and insufficient. For the large majority of university museums and collections, the influence of the museum sector has only become truly significant in recent decades, when their purpose was questioned by their parent-university. It was only in the 1960s that many university museums and collections began to look at non-university museums in search for alternative organisational models, roles, and in many cases, in search for an identity.

University museums and collections cannot be



Fig. 3. Students from the University of Tartu (Estonia) at the University Museum of Art, December 2003. Photo M.C. Lourenço, courtesy Art Museum, University of Tartu.

understood without understanding universities for the simple reason that they are planned, built, directed, organised, expanded, neglected and dismantled by professors, researchers, students, rectors, librarians, and alumni (fig. 3). If the nature, history and *modus operandi* of universities are not taken into account, one is likely to find the complexity of university museums and collections overwhelming, the reasons for their existence chaotic and arbitrary, and their public performance well below standards. One can and should benchmark against the museum sector, but one can do so only once the significance of university collections is more clearly understood. This is essential and not always appreciated, both by those looking from "the outside" and by those looking from "the inside". This is the first problem of university museums and collections.

The second problem of university museums and collections is more complex: the role they can or should play in the contemporary university and in contemporary society is not clearly established or even understood. There was a time when this role was clear and university museums were in tune with both the higher education system and the museum sector (fig. 4). Today, this is not the case. "What is the use of collections if they are no longer used for teaching and research, which is what we are paid for?", "What are collections for, if what we need is state-of-the-art

laboratories to recruit the best students and researchers, enabling us to compete in the global higher education sphere?", "Of course collections are important - they are our jewels, our treasures - but who pays for them?", "Who pays for the preservation, study and public interpretation of our collections, museums, astronomical observatories, gardens and libraries?" Answering these questions is part of the daily routine of countless university museum directors and curators across Europe.

During the past 40 years, universities have faced major transformations: from the adaptation of courses to the needs and specificities of the labour market to a slow but ongoing decrease in the number of students in some disciplines as a result of demographic and other factors. Today, universities are increasingly asked to contribute to regional and local development by establishing stronger links with local industries. Moreover and most importantly, the majority of European universities suffer from chronic underfunding and have been required to raise a significant portion of their annual budgets themselves. In addition, since the Lisbon Strategy (European Council of Lisbon, March 2000) was adopted, universities have been asked to actively compete in the international arena, especially with American universities. In other words, they are being asked to do more with less money. At the same time, some courses such as archaeology, anthropology, life sciences and medicine have undergone profound transformations as a result of scientific trends, research policies and curricular change. The use of artefacts and specimens for research and teaching has generally decreased in the past decades and today funding for collection-based research represents only a small fraction of the total research funding in the life and medical sciences.

Clearly, these developments have not been favourable for university museums and collections. Several

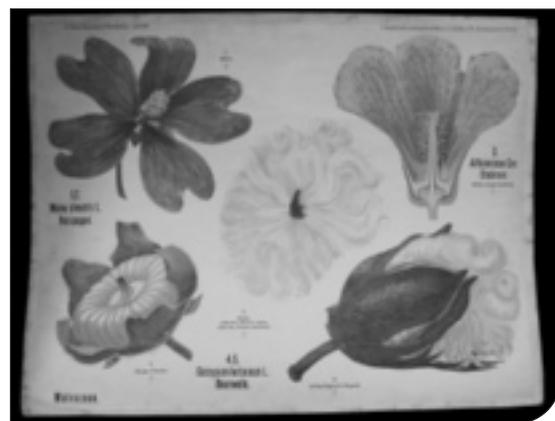


Fig. 4. Historical teaching collection of Botany: 19th century hand-painted didactical boards at the Institute of Botany, University Louis Pasteur in Strasbourg. Photo: S. Soubiran, courtesy ULP.

departments have recently been closed, others have been restructured or changed name, ties between museums and departments have weakened and in some cases were broken, and disciplines that used collections as a main source for teaching and research were removed from graduate courses or became optional. In some universities, staff occupying traditional collection-based careers and functions - such as the curator-professor or the director-professor, the taxidermist, the naturalist, etc. - retired and were not replaced, while in other cases, these careers were discontinued. The need for space and the general management of buildings have also had a severe impact on museums and collections. In 2002, the Department of Geology at the Catholic University of Louvain (Belgium) was closed (L. Hance, *in litt.* 26 February 2001) - the fate of the collections is unknown. The same is likely to have happened to the Department of Geology and Palaeontology at the University of Clausthal (L. Schmitz, *in litt.* 11 October 2003) and with the Institute of Anthropology at the Humboldt University in Berlin (U. Creuz, *pers. comm.* 10 June 2004). A particularly illustrative example is the University of Amsterdam (UvA), which in the past 20 years practically eliminated its natural history collections or intends to do so in the near future:

- 1983: Geology was abolished as a discipline (collections were orphaned) (Clercq, 2003);
- 1988: the Botanical Garden was de-accessioned (a private Foundation was created for maintenance purposes) (Ursem, 1994);
- 1993: it was decided to donate one-third of the geology collections to the Amsterdam Zoo - transfer effectuated in 2002 (Clercq, 2003);
- 1998: the *Pinetum Blijdenstein* (arboretum of conifers) was 'sold' to the Botanical Garden Foundation;
- 2002: a letter of intention between UvA and the National Museum of Natural History (Naturalis) in Leiden was signed, foreseeing the transfer of 90% of the Zoological Museum's collection (13 million specimens) to Naturalis in 2006, following a recommendation from the Royal Dutch Academy of Sciences that systematic zoology in the Netherlands should be centralised (W. Los, *pers. comm.* 11 May 2003); however, at the time of writing, actual transfer has not yet been decided;
- 2003: part of the remaining two-thirds of the geology collections was dispersed amongst Naturalis,

the local natural history museums of Maastricht and Nijmegen, and the Geological Service of Indonesia in Bandung - the rest was disposed of (Clercq, 2003)<sup>5</sup>.

Not only natural history collections are at risk. The Robert Koch Museum, a small historical and biographical museum devoted to the work of the 1905 Nobel Prize winner is in danger because the Humboldt University in Berlin has sold the building where it is located (W. Donath, *in litt.* 12 July 2005). The Delmas-Orfila collections at the University of Paris V are reportedly in danger due to works in the building (Vulser, 2004). In clear violation of the ICOM Code of Ethics (which is little known in universities), the Fisk University, Nashville, Tennessee (USA), is planning to sell two of the best paintings in its famous Stieglitz Collection in order to build "a new science building", create "teaching positions and extra security for the rest of the art collection and put some money in its bank accounts" - the President calls the operation a mere "asset realignment"<sup>6</sup>. More examples could be given and not all are recent. If university collections are in "crisis", then such has been the case for quite a while. In fact, the "crisis" is probably less about collections and more about universities. European universities are going through a profound crisis of identity and resources and it is important to put the "crisis" in its proper context.

## ANSWERING THE "CRISIS"

Regardless of who is to blame for the "crisis", since the 1990s there has been a considerable mobilisation of professionals from both university museums and the museum sector at large. University heritage was (is) at risk and action was (is) needed. Australia, the UK and the Netherlands initiated comprehensive and systematic surveys of their university museums and collections at the national level, coordinated by university museums' associations that had meanwhile been created<sup>7</sup>. Although professional associations are important, they do not replace the need for a structure related to university heritage at the very heart of each national conference of rectors. Conferences of rectors are the highest non-governmental representative council of universities within a country and their political power is considerable. For this reason, I would like to applaud the Conference of Rectors of Italian Universities (CRUI) for the creation of the

<sup>5</sup> Transfer session at Naturalis, attended by the author, 28 April 2003.

<sup>6</sup> Cf. *Tennessean.com*, <http://www.tennessean.com/apps/pbcs.dll/article?AID=/20060119/COLUMNIST0107/601190366/1101>, 19 January 2006, (accessed 27 February 2006). At the time of writing, the sale had not yet been confirmed.

<sup>7</sup> Today, there are associations of university museums in eight countries, four of which in Europe: the Korean Association of University Museums (KAUM, 1961); the Association of College and University Museums and Galleries (ACUMG, 1980) in the United States; the British University Museums Group (UMG, 1987); the Council of Australian University Museums and Collections (CAUMAC, 1992); the *Forum Permanente de Museus Universitários*, in Brazil (1992); the Dutch *Stichting Academisch Erfgoed* (SAE, 1997); the University Museums in Scotland (UMiS, 1998) and the *Asociación de Museos y Colecciones Universitarias Españolas* (AMCUE, 2002).

*Commissione Musei*, for its national survey of Italian university collections, for the encouragement of a *sistema museale per university*, and for a rich website about Italian university museums. Italy has university collections of immense international significance - including the only university museum classified as UNESCO World Heritage, the Botanical Garden of the University of Padua - and, to the best of my knowledge, no other conference of rectors in Europe has gone as far in acknowledging university heritage.

These national initiatives are slowly bearing their fruits, the most significant example possibly being the UK, which in little more than a decade has achieved sustained funding for a considerable number of university museums and collections<sup>8</sup>.

Internationally, the two most important initiatives were the creation of the European network *Universeum* in April 2000 and the recognition of university museums by the International Council of Museums (ICOM) through the creation of an international committee, UMAC (University Museums and Collections) in 2001<sup>9</sup>. Together, these organisations have produced a number of specialised publications, among which two volumes of *Museum International* (Vol. 206 & 207, 2000), the Halle Declaration on University Heritage (April 2000), the publication *Treasures of University Collections in Europe* (Bremer & Wegener, 2001), a publication sponsored by the OECD (Kelly, 2001), one issue of ICOM Study Series (No. 11, 2003), and UMAC's Conference proceedings<sup>10</sup>. Perhaps the single most important event concerning university heritage at the international level took place on the 7<sup>th</sup> of December 2005 in Strasbourg, when the 48 countries of the Council of Europe unanimously adopted a Recommendation on university heritage - Rec. (2005) 13.

## THE SIGNIFICANCE OF UNIVERSITY HERITAGE

Given the current state of affairs, two broad and equally legitimate positions are possible. The first is pragmatic and of immediate impact, consisting of admitting that universities do not have the minimum conditions, or even vocation, to preserve, study and

interpret their collections according to international standards. It is, therefore, more useful to put a significant part of university heritage into the hands of those who can care, namely national, regional or local museums or, more generally, to place it under the jurisdiction of Ministries of Culture. Despite the fact that, for several reasons, this change can be problematic, it is a solution that has been at times adopted in recent history (for instance, collections from the Imperial College of London went to the Science Museum, seventeenth and eighteenth century cabinets of physics from Dutch universities went to the National Museum of the History of Science and Medicine "Museum Boerhaave" in Leiden, among other examples as mentioned above).

The second possible position consists of rejecting arbitrary and emergency solutions and facing the problem within a consistent and long-term strategy, founded on serious research. In other words, getting to know objectively what exists through surveys per university and per country and simultaneously trying to better understand the role that university collections can play in contemporary society.

The importance of university museums and collections results from a combination of two unique factors: on the one hand, their strategic position and, on the other hand, the special nature of collections and, more generally, of university heritage.

A lot could be said about the extraordinary potential resulting from the inherent position of university museums - museums in the university, of the university and for the university. The idea of the university museum as the ideal type of museum is not new - it was probably first defended in the ICOM General Assembly of Munich in 1968 (Rodeck, 1970). However, the recent history of university museums is a succession of lost opportunities. For example, it is difficult to understand why university museums did not take the lead in museum career training when such courses were created and expanded in the 1970s. It is difficult to understand why higher education *laurea* and master courses in museology make so little use of the museums and collections that exist in the university, for seminars, short-term practical internships, and for students to develop essays and theses based on the collections and exhibitions. It is

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<sup>8</sup> Funding of European public universities is very complex, but typically the annual budget of a university is based on a mathematical formula that depends on the number of students and, in some countries, on the research output. This makes it very difficult to fund museums and heritage. Recently, the UK has successfully argued that funding for university museums and collections should be considered separately as long as the museums and collections meet minimum standards of preservation and access (for which these have received previous funding; it is pointless to speak about museological standards in university museums when these often do not even have staff or the minimum conditions for survival).

<sup>9</sup> See *Universeum* website at <http://www.universeum.de> and UMAC at <http://icom.museum/umac> (accessed 20.III.2006).

<sup>10</sup> UMAC has published the proceedings of all its annual meetings. The Barcelona (2001) and Sydney (2002) conference proceedings were published in the journal *Museologia* (Vol. 2 & 3), the Oklahoma (2003) was published in a separate volume (Tirrell, 2005) and the Seoul (2004) and Uppsala (2005) proceedings were published in the journal *Opuscula Musealia*, University of Krakow, (vol. 15).



Fig. 5. The 19<sup>th</sup> century *Laboratorio Chimico*, recently renovated.  
Photo P. Cintra, courtesy Museum of Science, University of Lisbon.

difficult to understand why researchers and professors in social sciences, computer sciences, pedagogy, communication, history of science, and many other fields, make so little use of the museums of their university as a source for research and as a teaching resource. It is hard to believe that university museums rarely present contemporary research results, including scientific topics of social impact (such as the current bird flu), when there are researchers "at hand" who would certainly be happy to disclose their work to a wider audience. It is difficult to understand why so few university museums across Europe truly represent "windows" between the university and society, using people, laboratories and content available in the university as a platform for public projection. Reciprocally, what are universities waiting for to use their museums to effectively and efficiently reach increasingly broader segments of society, including potential future students?

The second factor that makes university museums relevant for contemporary society is the nature of collections and, more generally, the nature of university heritage. In this connection, a distinction could be made between the collections proper, constructed historic heritage and the intangible heritage of universities.

Universities have assembled collections for at least 450 years. With the exception of works of art acquired or donated to decorate rooms, corridors or gardens,

and the memorabilia associated with institutional history, all university collections are directly or indirectly associated with teaching and research. All university collections are "scientific".

Except in rare cases, university collections are not organised around the idea of regional or national identity or around the concept of a shared territory. The large majority of university collections are organised around the idea of retrieving information in order to generate and disseminate knowledge. University museums and collections hold the material evidence about how knowledge has been generated and transmitted from generation to generation. Here lies their distinct nature. They have the objects that can tell the history of knowledge. The history of knowledge is in scientific equipment that has been used and re-used countless times for different purposes, it is in cannibalised instruments, it is in the apparatus more so than in the object. The history of knowledge is embedded in hundreds of rocks gathered for a research project or PhD thesis, it is in these immense archives of biodiversity, in wax models used in anatomy teaching, in art collections resulting from students' experiments and development of the artistic and creative process, in the laboratory notes of scientists, in the field notebooks of zoologists, in the way botanical gardens and herbariums are arranged. The material evidence of the evolution of knowledge is intrinsic to the way objects in university museums

and collections were collected, organised and used. The same can be said of historic buildings and monuments, such as the eighteenth century Library of the University of Coimbra, the frescos in Turin and Bologna, the colleges in Britain, the greenhouses, *orangeries*, anatomical theatres and astronomical observatories that exist in many places. They are representative of the way architectural form and function reflects the needs of teaching and research and its evolution through time (fig. 5). They are material evidence of the history of knowledge too and, together with collections, they form a coherent system that cannot be dissociated. This coherence is often overlooked in universities.

Although highly fashionable and often folkloristic at present, intangible heritage in universities is at least as important as tangible heritage. At a first approach, intangible university heritage is evident in the traditions of academic and student life, often so deeply embedded in the culture and habits of towns and cities that it becomes hard to tell which came first (towns such as Montpellier, Uppsala, Oxford and Coimbra are telling examples). However, the intangible in university heritage goes further than that and is even independent of the foundation date of the university. The intangible in university heritage lies in the identity of an imagined community of scholars, teachers and students (Sanz & Bergan, 2002) from all disciplines, who share a distinct set of *savoir faire*s and practices, as well as common values such as freedom of expression, universality, internationalism, criticism and plurality<sup>11</sup>. For almost 1,000 years, this community has communicated freely, independently of religious or political borders, exchanging correspondence, specimens and knowledge from Altdorf to Louvain and from Louvain to Pavia, long before Germany, Belgium or Italy existed. It is not by chance that of the 66 institutions worldwide that survived without interruption since the Reformation until the present day, 62 are universities (the other four being the Catholic Church, the Protestant Church and the parliaments of Iceland and the Isle of Man) (Rüegg, 2002). This fact *per se* should implicate every European citizen in the protection and promotion of university heritage.

This is the multi-level and integrated approach we need to adopt towards university heritage: encompassing science, art and nature, museums and collections, artefacts and specimens, ugly and beautiful, easy and difficult, historical and in use, *savoir faire*s and values, books and documents, buildings and gardens - in short, space and time, form and function,

tangible and intangible. Is this too much? Is it too overwhelming? Perhaps, but diversity and complexity should not detain us - on the contrary. An integrated approach is in itself of incredible richness - it is like a cornucopia of so far unsuspected opportunities. Most importantly, it is the only approach faithful to the history and significance of university heritage.

## CONCLUDING REMARKS

The overwhelming majority of university museums and collections - in science as well as in the arts and humanities - have been assembled around teaching and research activities. The same happened with astronomical observatories, botanical gardens, libraries and laboratories. Our "ways of knowing" is their common thread, it is what binds them together. University museums evolved similarly as a group - in parallel with, yet distinct from, other museums. Today, university museums are facing many problems and dilemmas. Often under intense pressure and lacking staff, university museums are looking at other museums as models to redefine their mission. This is positive and ought to be stimulated: university museums have a lot to learn from the general museum sector, particularly in the domains of ethics, professional practices and public service. However, as university museums from all disciplines increase access and become more visible in the public arena, their strategic position and the meaning of university heritage needs not only to be respected but promoted as well. Given present conditions, this will not be easy. Nevertheless, it is crucial because ultimately this will be their *raison d'être* in an already crowded world of cultural institutions. There is a niche for university museums, but only if they manifest a distinct identity - and they have it.

The twenty-first century university is necessarily different from the university proposed by Humboldt and Newman<sup>12</sup> in the nineteenth century. For better or worse, opinions are divided and the debate continues, particularly in light of the so-called Bologna Process and the increasingly "market-oriented" nature of present-day universities. However, what the university is, what it does and what it stands for, resonates with the ideals, dreams and hopes of people from all over the world. Whether in Italy, Kenya, Denmark, or Pakistan, the university is perceived as the place of knowledge and it continues to capture the splendid world of human imagination. Citizens all over the world continue to trust and respect universities, granting them the right of unorthodoxy as no other

<sup>11</sup> These are values cherished by present day democratic societies, yet we often forget that they have their roots in medieval universities.

<sup>12</sup> John Henry Newman (1801-1890), Rector of the Catholic University of Dublin. In a famous lecture entitled "The idea of a university" (1854), Newman defended "the high protecting power of all knowledge and science, of fact and principle, of inquiry and discovery, of experiment and speculation".

institution, and expecting great achievements from them - expecting them to play a major role in the advancement of society through the progress of knowledge. This is universities' most important legacy to the world. Their responsibility is to explain this legacy to present-day society as well as to generations to come. Heritage is the single and most important resource universities have to do so in a long-term and meaningful way.

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