[M.C. Lourenço, 2005. Between two worlds: the distinct nature and contemporary significance of university museums and collections in Europe. PhD dissertation, Conservatoire National des Arts et Métiers, Paris]

#### 1. Introduction

At an international meeting of university museum professionals at the University of Lille, 1 April 2004, the philosopher Pier Ugo Calzolari, Rector of the University of Bologna, asked: "Quel sens donner à tout ce patrimoine? Pour quoi? Pour qui? Et comment?" The audience realized that Calzolari aimed right at the heart of their common problem: today the significance of university museums and collections, once taken for granted, is under intense scrutiny. Coming from a university rector, the bluntness of the question is even more meaningful. Firstly, it explicitly addresses a dilemma faced by many rectors, presidents and vice-chancellors today when confronted with collections that seem to be at odds with the present and future agendas of their universities. Secondly, more than merely asking a rhetoric question, Calzolari appeared to challenge the professionals gathered at the meeting: more understanding is needed so that sound arguments can be made.

Today, the same questions are being asked by university rectors, vice-chancellors and presidents worldwide. Not only are these questions asked, but — either due to lack of answers or because these are deemed unsatisfactory — action is being taken. In 2003 alone, at least 14 university museums in the USA were under threat of being closed and almost half were closed or collections were dispersed.

During the same year, the five oldest Dutch universities¹ signed an agreement on the transfer of two-thirds of their geology and palaeontology collections to Naturalis, the national museum of natural history of the Netherlands, and to local museums in the Netherlands and the Geological Service of Indonesia. Also in 2003, the Historical Museum at Lund University, Sweden, was saved from closure through a petition signed by thousands of citizens of the town of Lund. In August 2003, the Boston Globe reported budget cuts that could have a severe impact on the art museums at Harvard University, while observing that Harvard "seems to have turned against its art museums which *should* be among its chief connections with the larger world" (Temin 2003) [italics in original].

Nevertheless, 2003 was not a particular *annus horribilis* for university collections, as 2002 had already been harsh and so would be the year to come. University collections have been reorganised, neglected, down-graded, dispersed, sold and lost for at least the past 25 years. Indeed, university collections have probably always been reorganised, dispersed and lost. However, while in the past this occurred mainly for scientific reasons, over the past 25 years the reasons for reorganisation and dispersal seem to have become largely political and administrative. Even the good news – such as the reorganisation and re-creation of university museums in recent years – seems often to be politically motivated. Considering that it took many decades – if not centuries – to assemble these collections, current developments are happening at a disturbing pace. What is going on in university museums and collections today? What are the challenges and dilemmas they are facing? What, if anything, is special about these museums and collections? Why are they important and worthy of our care and attention?

Even if the problem seems too complex to resolve, it is important to objectively assess present reality and try to understand the combination of historical facts and developments that has brought us where we are today. The two main goals of this research programme were: 1) To

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<sup>&</sup>lt;sup>1</sup> Amsterdam, Delft, Groningen, Leiden and Utrecht. For a more detailed account of the recent developments involving Dutch university collections, particularly geology, see Clercq (2003) and Kriegsman (2004).

compile a comprehensive overview of the current state of knowledge of university museums and collections, with data taken both from the literature and from the field; and 2) To contribute to our understanding of the significance of university collections — particularly those related to teaching and research — both to universities and to contemporary society.

The present study was centred on Europe, where the majority of the study visits took place. The European university model, as well as its history, was taken as the main framework. Nevertheless, the findings and conclusions herein are likely to equally apply to many non-European university museums and collections. This research was conducted between November 2000 and November 2004. In this introduction, the background context for this research is described and an overview of the structure and organisation of the dissertation is also presented.

#### 1.1 Universities, museums and collections

Previous studies of university museums and collections have focused on the situation in a single country (e.g. LOCUC 1985, Arnold-Foster 1993, Drysdale 1990, Kelly 1998, 1999). However, caution is needed when addressing Europe as a whole as the different national higher education systems are heterogeneous. To overcome this difficulty, I have looked into the criteria of what constitutes a 'university' adopted by international bodies operating at the European level, such as the Council of Europe (CoE), UNESCO, the Organisation for Economic Cooperation and Development (OECD), and the European Union (EU). Unfortunately, criteria appear to vary even within the same organisation. Sometimes, the generic designations of Higher Education Institution (HEI) or Tertiary Education Institution (TEI) are used to encompass the diversity and complexity of European institutions teaching, performing research and authorised to grant doctoral degrees. The designation HEI was also used in some of the earlier studies mentioned above. However, HEI is a mere designation and it does not include a consistent definition applicable across Europe. After careful consideration<sup>2</sup> and unless stated otherwise, I have herein adopted the term 'university' in its broadest sense of a higher education institution, i.e. encompassing universities sensu stricto, but also other higher education institutions, such as the German Fachhochschulen, the French établissements d'enseignement supérieur/grandes écoles, military academies and the polytechnics among others. For example, in France – which undoubtedly has one of the most complex systems of higher education in Europe – universités, the École polytechnique and both the Conservatoire national des arts et métiers and the Muséum national d'Histoire naturelle are all taken to represent the generic category of 'universities' as used in this dissertation.

The term 'university' sensu lato has also been adopted by the European Commission (EC) in several of its official documents<sup>3</sup>, as well as by the OECD (Kelly 2001). Additionally, the terms 'university museum' and 'university collection' are the ones most widely used in the literature and were recognised by the International Council of Museums (ICOM) through the creation of an international committee for University Museums and Collections (UMAC) in 2001. However, in order to avoid any chance of misinterpretation, each chapter begins with a

<sup>&</sup>lt;sup>2</sup> The American-based Carnegie Foundation for the Advancement of Teaching (CFAT) has established a classification of higher education institutions that is widely adopted as a reference throughout the world. The latest edition, dated 2000, classifies universities in five major groups: 1) Doctoral/Research Universities II, 2) Doctoral/Research Universities II, 3) Baccalaureate (Liberal Arts) Colleges I, 4) Baccalaureate Colleges II and 5) Associate's Colleges (CFAT 2000). I considered adopting this classification, but realised that it did not contribute significant understanding to the issue of university collections and, on the contrary, was a source of unnecessary extra complexity. This is not a study about higher education systems but about the museums and collections higher education institutions hold. The fact of the matter is that independently of the heterogeneities: a) almost all higher education institutions have collections and b) these seem to face similar problems and challenges.

<sup>&</sup>lt;sup>3</sup> Including in the important strategic document *The Role of Universities in the Europe of Knowledge*, dated 5 February 2003 [COM(2003)58 final]. In: *EUR-Lex, European Union Law*, http://europa.eu.int/eur-lex/en/com/cnc/2003/com2003\_0058en01.pdf, accessed 25 August 2004.

footnote reminding the reader of the definition adopted. Throughout and also for simplicity, I will use the term 'rector' to include other designations such as 'vice-chancellor' and 'president'.

All universities have collections. Of course, universities are not all alike. Like hymns, they come organised in 'ancient' and 'modern'. The 'modern' are the overwhelming majority. Three quarters of European universities were created after 1900 and 50% after 1945 (Scott 1999). Naturally, the old universities – such as those of Oxford (1214), Padua (1222), Uppsala (1477) – are more likely to have richer and more diverse museums and collections, as well as buildings and gardens. However, so do some more recently established universities, such as Milan (1924), Bath (1966), and Maastricht (1976). In fact, the founding date of universities is hardly a reliable guide to the importance of its heritage. Upon foundation, many European universities incorporated collections and buildings from earlier schools, academies, etc. The University of Bath has a history of predecessors dating at least from 1856. Likewise, while contemplating the Renaissance collections at the Museo di Storia Naturale of the University of Florence, it seems hard to believe that the University was founded in the 1920s. The same applies to the University of Lisbon - founded in 1288, re-founded in 1911, but with collections, buildings and staff incorporated from the former Escola Politécnica, founded in 1837 (which in turn had already incorporated the Colégio dos Nobres, founded in 1761 and the Noviciado da Cotovia, created in 1603). The Atheneum Illustre, established in 1632, preceded the University of Amsterdam (1877). There are many more such examples throughout Europe.

Typically, the reasons why universities have museums and collections vary within the same university, from university to university, and from country to country. Ever since their very beginnings, European universities have more or less continuously collected art, religious artefacts and antiquities for reasons of prestige and social status. They also commissioned art to ornament noble rooms, buildings, and gardens. In this respect, universities are not different from other organisations, whether public or private, such as foundations, corporations or banks. More significantly however, universities have assembled collections in order to fulfil their teaching and research missions since at least the mid-16<sup>th</sup> century (Warhurst 1984, Lewis 1984, Boylan 1999, Clercq 1998, 2001, Schupbach 2001), with objects being assembled and collected because of the role they played, or projected to play, in the construction and transmission of knowledge in different disciplines.

The use of objects for learning and study is not an exclusive domain of universities. Collections were assembled 2,400 years ago at the Lyceum in Athens and at the Museion in Alexandria. In our modern world, research collections also exist in academies of sciences, hospitals, national laboratories, and national and local museums. Secondary schools (lyceums, gymnasiums, and their equivalents) have used collections for teaching ever since they were established. Notwithstanding these facts, universities have a long tradition in museums and have played a relevant role in the history of museums in general – contrary to high schools and *lyceums*. Moreover, the connection between learning and study is stronger, more explicit, indeed more special in universities. Within the university, education and research do not exist in isolation of one another, but are fully intertwined. As a community, the university has organised its structure, people, buildings, collections and curricula in such a way that learning effectively means learning to research. Students learn from first hand contact with actual researchers, who teach them not only the substance ('the facts'), but also the methods, processes, practices and savoir faires that are inherent to research – even if later these students will not proceed a research career. In short, universities intrinsically and dynamically combine the creation of knowledge and the dissemination of it. This characteristic gives university museums and collections a unique articulation between objects and knowledge that this research aims at better understanding.

## 1.1.1 The pressure on universities

By definition, universities have always been highly dynamic institutions. A static university is a dead university. Although to some extent the core-business – teaching and research – has remained the same, universities mirror the demands and needs of contemporary society. During the past 40 years, universities faced major challenges and transformations, from the adaptation of courses to the needs and specificities of the employment market – thus redefining their missions in more utilitarian and vocational terms. Universities are also increasingly asked to contribute more significantly to regional and local development by establishing stronger links with local industries. Aspects such as free access, tuition fees, the Humboldt model, are under intense debate across Europe today. Moreover, the majority of European universities suffer from chronic underfunding and have been asked to raise a significant portion of their own annual budgets.

Some speak of paradise lost, of a 900 year-old institution in ruins. Others speak of new opportunities, a 'new university', paradise regained. The full dimensions of this debate are complex and beyond the scope of the present research. Here, I want to emphasize that the familiar institution of the university is going through a process of substantial and dramatic change and, although more poignantly in some countries than in others, this change is taking place from Riga to Dublin. With the Bologna process going on, the Lisbon Strategy in place 4 and 25 countries in widely different economic situations in the European Union, the pressure on universities is likely to increase rather than decrease. Moreover, in the whole world, the number of students in higher education increased from c. 51 million in 1980 to c. 82 million in 1995, an increase of 61%. It is estimated that by 2010 this figure will have soared to c. 97 million (Sadlack 2000). Other countries - particularly China, India, and Japan - are investing substantial resources in basic research so as to be able to compete effectively in the global knowledge economy. In November 2001, in Doha (United Arab Emirates), the World Trade Organisation (WTO) decided to include education services in the next round of liberalisation under the General Agreement on Trade in Services (GATS), a clear confirmation of what appears to be the emergence of a world education market. Kim Howells, the UK higher education minister, told *The Guardian* that vice-chancellors "know better than everyone that it's a market and it's a cut-throat market and it's going to become harder not easier for administrators and they are going to have to prove their worth"5. Universities are preparing to meet these challenges through rationalising resources, reorganising courses, departments and faculties and even merging with one another<sup>6</sup>. In the midst of this formidable and vertiginous change, where do museums and collections come in? How can they find their *raison d'être* and how can they be protected?

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<sup>&</sup>lt;sup>4</sup> The so-called Bologna Process and the Lisbon Strategy are two significant recent developments impacting on European higher education systems. The Bologna Process is aimed at increasing the convergence of higher education systems in Europe through the compatibility of study and degree structures. This would enhance mobility within Europe. The wider aim is to develop a world class European Higher Education Area (EHEA), which would match the quality of the best universities in the USA and elsewhere. Nowadays the Bologna Process encompasses more than 40 European countries. The Lisbon Strategy – so called because it was agreed upon in the European Council of Lisbon in March 2000 – aims at transforming the European Union into the most competitive economic region in the world in 2010. It encompasses 25 countries and is coordinated by the European Union.

<sup>&</sup>lt;sup>5</sup> P. Curtis, 2004. *Howells warns of merciless university market.* The Guardian, 23 September. In http://education.guardian.co.uk/, accessed 23 September 2004.

<sup>&</sup>lt;sup>6</sup> For example, in the UK two 'super' universities were created in 2004 as a result of merges between institutions. Cardiff University merged with the University of Wales College of Medicine, becoming one of the largest in the UK (5,000 members of staff and 40,000 students). The Victoria University of Manchester and the Manchester Institute of Science and Technology (UMIST) merged to become the University of Manchester. Already in 2002, University College London and Imperial College considered a merger arguing that "joining together could help them become a 'global player' in the increasingly international higher education market" (BBC News Education. *Top Universities plan merger*. In http://news.bbc.co.uk/1/hi/education/2326511.stm, 14 October 2002. Accessed 13 April 2005).

In the 1845-46 Annual Report of Harvard University, President Edward Everett wrote that "[...] without collections in the various branches of Natural History it would seem almost ludicrous to require a professor to teach" (E. Everett *in* Kohlstedt 1988: 423). On condition of anonymity, a European rector told me that "Museums are a luxury we [the university] cannot afford". These two statements represent more than a lapse of 150 years in an institution which is over 900 years of age. At their core lie two completely different ideas of what a university is or should be. The two viewpoints stand for a major cultural gap between yesterday's university and the university of today and tomorrow.

## 1.1.2 The pressure on museums and collections

At the same time, both as a consequence of the developments described above and as a result of trends in science and teaching, courses such as archaeology, anthropology, biology and medicine have undergone profound curricular transformations. These transformations have often resulted in a decrease in the use of collections as a resource for research and teaching. Since the late 1980s, the fate ('crisis') of natural history collections has produced an extensive literature (e.g. Hounsome 1986, Diamond 1992, Alberch 1993, Krishtalka & Humphrey 2000, Gropp 2003, Mares 2005)<sup>7</sup>. Although caution is required when using the term 'crisis', the fact of the matter is that the use of specimens for research is now only a fraction of what it used to be and plays only a minor role in contemporary biological and medical research funding.

Every year rectors and deans across the world sit at their desk with their budgets in front of them, pondering how much of an 'entrepreneurial' university theirs is and measuring targets, performance indicators, outcomes and demonstrable impact, all of which were rare terms in the academic lexicon less than three decades ago. At the end of the day, they are likely to be searching the budgets for less relevant or redundant areas to slice – museums and collections often being the obvious 'easy target'.



Fig. 1.1 – One of the oldest pianofortes in the world, a treasure of the Museum of Musical Instruments, University of Leipzig (Inv. No. 170). Constructed in 1726 by Bartolomeo Cristofori, an instrument maker at the 'de Medici court in Florence (cf. Fontana & Heise 1998, Fontana *et al.* 2001) (photo J. Stekovics, reproduced with kind permission of the University of Leipzig).

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<sup>&</sup>lt;sup>7</sup> To the best of my knowledge, there has been no recent closure of any major natural history university museum in Europe, although rumours of such being forthcoming are frequent. Unfortunately, the same cannot be said of countless departmental teaching and research collections, particularly during the past 40 years.

Are university collections irrelevant for universities? No. Are they redundant for the fulfilment of their scientific, educational and social missions? No. Are they irrelevant for contemporary society? No. Universities have treasures of international significance, amongst which the world's oldest dress (Petrie Museum, University College London), the world's oldest percussion piano (Museum of Musical Instruments, University of Leipzig) (fig. 1.1), the lens with which Christiaan Huygens discovered Titan, the largest moon of Saturn in 1655 (Utrecht University Museum), the original Celsius thermometer (Gustavianum Museum, Uppsala University) (fig. 1.2), Linnaeus' original botany cabinet (Uppsala University), Dührers, Leonardos, Mirós, Henry Moores, artefacts and specimens collected by Captain Cook during his 18th century voyages of exploration, and so on. But, much more than 'treasures' in the strict sense of the word, universities have collections that constitute material evidence of how we came to know what we know about nature, about the universe, and about ourselves. As I will argue in this dissertation, this represents the main importance of university heritage — more than enough reason to be better known to the public.

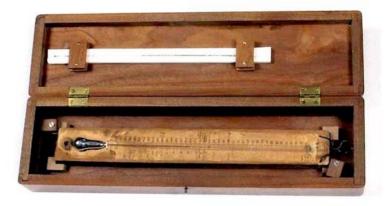


Fig. 1.2 – Anders Celsius's original thermometer at the Gustavianum Museum, Uppsala University (photo T. Thörnlund, reproduced with kind permission of Uppsala University).

Many universities are aware of the importance of their collections. Collections do, however, pose them with the dilemma that Rector Calzolari so well enunciated, which can be broadly characterised as: "What shall we do with them? And how?" When asked about how this problem could be solved in German universities, the Chancellor of the University of Leipzig, a man sensitive towards the value of collections and heritage in general replied, with a mixture of regret and frustration: "At the moment, the problem has no solution" (P. Gutjahr-Löser, interview 4 June 2004). This dilemma partly results from the vast political agenda imposed on universities (in which collections do not seem to fit), partly for lack of objective knowledge regarding what exists, and partly, from a lack of appreciation of the significance and potential of these collections. With respect to the latter, university museum and collections directors and curators are also to blame and so is the museum sector in general, as these often have not been particularly good advocates of the cause. This is now beginning to change and their voice is better heard. If there are solutions — a single solution applicable to all cases probably does not exist — then they certainly require an engaging dialogue between all and everyone involved.

# 1.1.3 Recent developments

As an organised group, university museums and collections woke up late to the changing university landscape, but when they did their vitality was impressive. The call for arms began in the 1980s and the collaboration efforts and reflection has been growing and intensifying ever since.

Worldwide, there are now associations of university museum professionals in nine countries, five of which are European: Greece (2004), the Netherlands (1997), Scotland (1998), Spain (2002), and the UK (1987)<sup>8</sup>. Some studies at the national level have been conducted to systematically examine the situation of university museums and collections, often with the active support and advice from national museum associations.

At the international level, some recent developments are also significant. The European network Universeum, established in 2000, issued a declaration signed by 12 of the oldest European universities stating that "[university] collections serve as active resources for teaching and research as well as unique and irreplaceable historical records" (Declaration of Halle; for full text, see appendix A10). ICOM's International Committee for University Museums and Collections (UMAC) was created at the General Assembly of Barcelona in July 2001, making UMAC the first association of university museums and collections of international scope. Perhaps more significantly, the creation of UMAC meant that, for the first time, the distinct identity of university museums was recognised by the most important organisation of museums and museum professionals worldwide. Together, these two bodies have produced a substantial number of publications on university museums and collections, amongst which two issues of Museum International (Vol. 206 & 207, 2000), the Treasures of University Collections in Europe (Bremer & Wegener 2001), ICOM Study Series (No. 11, 2003), and Proceedings of UMAC Conferences (2001, 2002) published in *Museologia* (Vol. 2 & 3). In addition, there have been several publications discussing matters at a national level, both quantitatively and qualitatively.

The issue of university museums and collections also caught the attention of international organisations devoted to higher education and culture. The OECD sponsored a volume on the management of university museums and collections (Kelly 2001), while the Council of Europe (CoE) developed a project on the heritage of European universities (see Sanz & Bergan 2002) and a *Draft Recommendation on the Governance and Management of the University Heritage*. Note that the CoE had already adopted a Recommendation indirectly related to university collections in 1998. In 2004, another stakeholder, the European network of museums of science and science centres (ECSITE), held a special session on university museums and collections for the first time in the history of their annual conferences. The same happened at the 4th Science Centre World Congress held in Rio de Janeiro (2005).

Finally, this growing interest has now reached universities themselves as well as their rectors. In 2004, at least six conferences specifically addressing the topic of university collections were organised by universities, some sponsored by national conferences of rectors and with some rectors actively participating<sup>10</sup>. Just a few years ago, there were none apart from those organised annually by UMAC, Universeum, and other professional organisations.

In short, the general context is one of considerable transformation. The university is redefining itself as an institution and the broader outlines of its future path appear to have been painted: still focusing on teaching and research, but increasingly market-driven, less dependent on public expenditure, and competing at a global scale. University museums have been facing great challenges and are, perhaps for the first time in their history, seriously in need of convincing their own parent institutions of the significance and relevance of their collections. Undoubtedly, university museums and collections are presently going through what is probably the most difficult, but at the same time most intense and interesting period in their almost 500 years of existence.

<sup>&</sup>lt;sup>8</sup> The non-European countries are Australia (1992), Brazil (1992), South Korea (1961) and USA (1980).

<sup>9</sup> Recommendation "Incidental Collections" (Rec. # 1375, 1998), CoE.

<sup>&</sup>lt;sup>10</sup> In Dartmouth College (USA) and at the universities of Lille and Montpellier (France), Louvain (Belgium), Halle (Germany) and Turin (Italy).

## 1.2 Organisation of the dissertation

The dissertation has two volumes: volume one contains the main text, while the appendices are found in volume two. The main text consists of seven chapters, organised as to provide a comprehensive overview. The list of references is included at the end of volume one.

Chapter 1 is the Introduction which you have just been reading. Chapter 2 describes the objectives, scope, approach and methodology of this research. It discusses field work and bibliographic sources and presents an overview of the number and types of institutions visited. Chapter 3 addresses the complexity and diversity of university museums and collections, which encompass a wide range of disciplines, sizes, and institutional types. The chapter discusses the two main levels that contribute to the complexity of university museums and collections - the collection level and the museum level - and reviews typologies of university collections commonly adopted, both in practice and in the literature. A survey of terminology directly related to university collections and museums is also discussed. Finally, it outlines and discusses the working typology that served as a basis for this research. Chapter 4 provides an historical overview of university collections and museums. It comprises the discussion of possible evidence for early uses of collections, speculates on the use of collections in medieval universities, and describes the role of the first historical records of teaching and research collections in universities. The chapter also addresses the second wave – or second generation – of university collections, resulting from an accumulation of significant historical equipment, as well as material evidence of the history of the university and student life. This second generation of historical university museums arose in the early 1900s and continues to exist, in conjunction with first generation collections and museums. Chapter 5 reviews the current state of knowledge about university collections and museums, both in terms of the literature and of recent initiatives at the national and international level. Chapter 6 reviews the present state of knowledge from the field. It discusses data collected during study visits, as well as recent bibliographic sources, to review the present situation of university collections and museums in terms of the three missions: teaching, research and public display. In particular, topics such as the general decline in collection-based teaching and collection-based research and museum-specific issues (such as mission, role of the public, mandate from the university, and legal status) are dealt with. A possible third generation of university museums, resulting from reorganisation trends, is also outlined, together with a discussion of the risks involved. Chapter 7, the final chapter, looks back at 500 years of university collections and discusses their significance for universities, the museum sector at large, and contemporary society. The chapter discusses limitations and weaknesses of this research and makes recommendations regarding future research areas.

There are 11 appendices (volume two). Appendix A1 discusses the problems related to estimating the number of university museums and collections in Europe. Appendices A2 to A6 are related to the data gathered during different stages of the field work. The terminology survey presented in Appendix A7 served as a basis for a discussion on terminological issues made in chapter 3. Appendix A8 presents a historical synopsis of university museums and collections (and related events), important in relation to chapter 4. Appendix A9 discusses the issue of present-day funding of university museums and Appendix A10 compiles relevant national and international documents — such as the *Magna Charta Universitatum*, the Declaration of Halle, and other position statements. Finally, to obtain a better insight in the frequency with which different institutions publish results of their research, a survey of three volumes of two renowned international journals in the field of systematics — *Cladistics* and *Systematic Biology* — was carried out. This survey is presented in Appendix A11.