

What paths for University museums and collections: Universities' showcases, communication tools, research and teaching objects, cultural artefacts?

Though commemoration is a regular process within the scientific communities, those that emerged in France in the 1980s were different in many ways¹.

First of all, they were made public by using strong communication tools, gathering media. Secondly, they did not concern one institution or one discipline in particular but most of the French research institutions; it was the whole scientific community that was involved in this collective celebration of science. Last but not least, most of these commemorations came together with a strong concern with material heritage preservation: paper archives, instruments, buildings, scientific collection. This specific concern on material heritage was certainly reinforced by the development of the STS's field more interested by social understanding of science than scientific knowledge itself and needed new kind of historical material rather than books and printed papers².

It is this raising concern within the scientific community for heritage preservation that I would like to discuss in this presentation. How heritage process was put in place? By whom? What was at stake? Was it successful? What impact on university collections and museum? To study these points I would focus on the University Louis Pasteur of Strasbourg.

To start with I would like to give general assertion in order to understand the global frame in which heritage process appeared within scientific institution during the 1980s.

This heritage concern, together with the commemorative "fever" is not specific of the scientific field. The late 1970s and the 1980s are indeed characterized by a strong development of the heritage concern in various academic fields, as well as other kind of area like for instance rural heritage, industrial heritage. In that sense it was a national process.

Science faced strong changes during the 1980s one talk about a change of regime meaning that its governance, its actors, its legitimacy, its place among society changed strongly. To put it quickly, the model that existed since the Second World War and for some aspects since the late 19th century seemed to be over: the end of the Welfare State which imply less public money ; the emergence of new scientific disciplines which induced a new

¹ Pnina G. Abir-Am and Clark A. Elliot (eds), Dossier « Commemorative Practices in Science: Historical Perspectives on the Politics of Collective Memory », *Osiris*, 14, 1999.

² Soraya Boudia, « Le patrimoine des institutions scientifiques comme objet de recherche », *Lettre de l'OCIM*, 84, 2002, p. 45-49.

hierarchy between scientific disciplines: molecular biology, computing sciences instead of physics for instance ; Short term research processes very innovative with short term economic impact; a “deep” crisis of confidence toward science³.

These deep changes claimed for the scientists to be more involved in communication to the public. The new society of communication that emerged at that time would reinforce this need as well as provide new tools for mass communication⁴.

Entering cultural arena would also be seen as a mean in order to re-establish a dialogue with general public. Started during the 1970s but strongly developed in the 1980s with a deep support of the State, scientific and technical culture emerged as an answer to the urge need to re-open the debate between science and society⁵.

Thus commemoration, communication, scientific and technical culture testified not only of the deep changes that occurred within scientific institution and their role within society but appeared also as tools to adapt to these changes. All three contributed to the setting of scientific heritage preservation plans, though in a very different way, with different objectives that sometimes leads to tensions.

I would like now turn to the example of Strasbourg and analyse the various events that helped the “production” of scientific heritage and what forms it took to give objects of the past a value to the scientists.

I would claim that heritage preservation is a commemorative act “acte mémoriel”

At the beginning of the 1980s, scientists of the University Louis Pasteur of Strasbourg, mostly physicists, but not only, usually retired or about to be, but not only, undertook to preserve various scientific instruments of the University. In 1982, they created an association called AMUSS, association for science Museums in Strasbourg. Their goal was “to valorise and animate existing scientific museums and collections and to create a Museum of science and technology in Strasbourg”⁶. The University Louis Pasteur already had two university

³ Jean-Marc Lévy-Leblond, « Défisciences », *Alliage*, 22, 1995, p. 2-6.

⁴ Pierre Fayard, *La communication scientifique publique. De la vulgarisation à la médiatisation*, Lyon, Chronique Société, 1988.

⁵ Andrée Bergeron, *La culture des savoirs : culture scientifique et technique et universités, Rapport pour la Mission de la culture et de l’information scientifiques et techniques et des musées*, Paris, Palais de la découverte, 2000.

⁶ <http://misha1.u-strasbg.fr/AMUSS/assos1.htm>

museums: a museum of zoology managed both by the city of Strasbourg and the University, a museum of mineralogy and a botanical garden. All three were built by the Germans at the end of the 19th century. In addition to these museums few scientific collections were also exhibited, and still are, in showcases in various departments of the University, for instance, collections of anatomy or palaeontology⁷.

The main preoccupation of the AMUSS's members was the preservation of obsolete scientific instruments by organising a systematic collect. Their actions eventually led to various achievements, the main one being is certainly the preservation of scientific instruments in various fields like physics, chemistry, and physiology. They managed also to create few showcases within the university mostly in physics department, and used the instruments preserved during exhibitions.

Many events helped the setting up of this « organised » preservation of scientific instruments led by the AMUSS. One can name the numerous moved of physics laboratories planned at that time which raised concern about what should be done with the old stuff, one can also name the celebration of various centenary anniversaries: for instance, the 100th years of the Institute of physics, the astronomical observatory, the 500th hundred years of the University which certainly reinforced the commitment of the scientists to their history and indeed even gave opportunities to write it⁸. In that field the AMUSS was not the only actor and other successful projects should be named like the building of a museum place in 1986 within the astronomical observatory with astronomical instruments in showcases, the strong commitment of physicians who created also an association in order to preserve the medical instrument heritage of the hospital of Strasbourg, or in 1996 the opening of the museum of seismology and terrestrial magnetism within the historical seismological station of the university. Thus, new kind of collections and museum were created within the university, in addition to those that already existed namely the usual university collection used for teaching and research. They were created by individuals who worked with or without the acknowledgment of their peers and may establish an association in order to legitimate their action and make it more visible within their institution. These heritage preservation plans within scientific institution usually emerged when important changes occurred: the closure or the moving of a laboratory, the retirement or death of a major figure, or more profound changes like mutation within scientific disciplines. This kind of mobilisation usually supports

⁷ For a general presentation of the university collections and museums of the universities of Strasbourg see : <http://collections.u-strasbg.fr/>

⁸ *Les sciences en Alsace, 1538-1988*, Strasbourg, Oberlin, 1989 ;

the collect of obsolete instruments within laboratories or trashes. This process sometimes goes hand in hand with the writing of self-history, the one of a collective adventure to which member of the association participated.

However efficient this process and the commitment of scientists with their heritage would be it could not take place without many tensions. Heritage is attached to the past when science should rather be driven by future and innovation. Consequently, to understand the viability or non viability of heritage preservation within scientific institution, one as to take into consideration other imperatives defined by scientific institutions at the same time with which heritage preservation was mobilised.

One of this major imperative was the used of heritage to develop scientific and technical culture.

The 1980s and the 1990s are strongly characterized by the development of scientific and technical culture. The law of orientation and planning for research and technological development in 1982 which inscribe the diffusion of scientific knowledge as part of the mission of the researcher, but also the law of 1984 which stated the diffusion of scientific culture and information as a mission of Universities were certainly a strong expression of the outburst of STC in France in the 1980s.

Many scientists within the University of Strasbourg were strongly involved in the building of what would be called a scientific and technical culture before the law makes it official. The main testimony of this early involvement is certainly the building of the planetarium in 1981, the first university planetarium created in France. Next to scientists, but also association like AMUSS, two research laboratories in social sciences were also involved in the definition of objectives and means for the development of a scientific and technical culture policy.

The relationship of this various actors led to the creation at the end of the 1980s of the concept of « Jardin des sciences », garden of science. The aim was to “create a place of communication, dialogue and exchange between academics and the general public »⁹. The three main mission were: firstly, the diffusion and animation of scientific and technical culture; secondly, the preservation and « the valorisation of scientific and technical heritage of Strasbourg and its area » ; thirdly, the development of history of science researches linked to the creation of « regional conservatory for scientific archives »¹⁰. The Jardin des sciences was

⁹ Proceeding of the University administrative Board, session of the 27th february 1990, p. 11.

¹⁰ Op. cit., p. 11-12.

eventually created in 1989 and took the administrative statute of an association directed both by the University Louis Pasteur and the city of Strasbourg. Funds were provided by the state and regional councils for four years. However, this association disappeared and was dissolved, “because of tension between its various actors and the limited impact of its actions: there was not a real strategic understanding of its role and only acted as a funding provider for local structures with no common activities”¹¹.

However the idea of « Jardin des sciences » was kept and a new project emerged lead in the end of the 1990s. In 1998, the Mission culture scientifique et technique was created, to set up the new ambitious project. A study of feasibility was asked to the Cité des sciences et de l’industrie in Paris, which submit an orientation note in august 1999. The main idea of coordinating the activities of the various structures of the university involved in the diffusion of scientific culture was kept. However, the Jardin des sciences should take a more materialised form support by a science centre. This Admiral ship should be built within the institute of zoology, which included at that time both research laboratories and the museum. This institute should be renovated in order to build a new museum “with a new museography, [...] using collections but also integrating hands on apparatus, space for debate and presentation of science in the making, in order to question the impact of new scientific discoveries on society”¹². The role of heritage and the role of museum were rethought, modified, renovated, even rebuilt in order to, on the one hand, « give Strasbourg a proper equipment for public understanding of science », on the other hand offer a showcase of the scientific researches pursue at the ULP. The head manager of the project, previously working at the Cité des sciences, underlined “ the gap between what the university museum show and the scientific skills within the university. The researchers do not find a place to express themselves within the university museums. In other words, the equipment that should be put in place should take into account the questions that sustain scientific research in Strasbourg and inform the general public: especially in research field like molecular biology and sciences of the matter”¹³. This strong claim on the development of scientific culture based more on a science centre model than on a traditional museum of science using collections as a starting point cause lots of tensions that slowed the development of the project. Though they are many

¹¹ Jean-Yves Méridol, « L’expérience du Jardin des sciences à l’université de Strasbourg I », in Regard sur le patrimoine culturel des universités, patrimoine artistique, scientifique, technologique, Séminaire national interministériel : ministère de la Culture et de la Communication et ministère de la Jeunesse, de l’Éducation nationale et de la Recherche organisé par l’Espace culturel de l’Université des sciences et technologies de Lille 1, 1-2 avril 2004, <http://ustl1.univ-lille1.fr/culture/agenda/04/patrimoine/txt/16merindol.pdf>

¹² *Ibid.* ; see also *Le Jardin des sciences*, Etude de définition, ULP, avril 2002.

¹³ *Strasbourg magazine*, 131, mai 2002, p. 17.

other reasons, as always with such ambitious project and strongly politically linked. However, it is interesting to underline that part of the tensions were due to the compatibility of such a renovation with the preservation of the collections, especially the one of zoology. This story is a good illustration of the ambiguous relationship of a scientific institution with its heritage.

We have many example in France in which quite quickly scientific and technical culture policies and actions get ride of their linked with heritage preservation. One of the most speaking example of this divorced is certainly the building of the Cité des sciences et de l'industrie, the final project gave very few place to scientific collections and heritage, though many of scientific instruments were collected and storage built at the first step, and despite the involvement of historians of science and techniques and the creation of a department of history of science attached to the new created science centre. The only testimony of this heritage concern is the sub-marine which is still in the park. The astronomical telescope of Paris observatory "la grande lunette coudée", which was supposed to be also in the park, was not as lucky. It is now getting rusty under the ring road next but outside the storage.

This unfinished or intermittent mobilisation of heritage, carried by the development of the diffusion of scientific and technical culture, is also well illustrated in Strasbourg. The story of the Jardin des sciences, still in the writing, underline several elements that allows us to better understand what is at stake with heritage preservation process during the eighties and the nineties. Especially, it put into lights the ambiguous relationship that keep up both the aim to develop a scientific culture and to preserve scientific heritage. These aims emerged at the same time, were built one to another, mutually mobilised one another to find their legitimacy and get funds. However, this common development reach its boundaries quite quickly, the scientific culture took its distance with heritage in order to promote an innovating science, dynamic and attractive.

The question of heritage place within scientific institution is not an obvious one, even though museum structures already exist, and despite of a deeper reflection on the role or the status of the University and science within society. The act of preservation is not enough in itself; on the contrary, its legitimacy is strongly connected to other stakes. Thus if heritage was regularly mobilised since the 1980s to built a scientific culture, it was also as regularly excluded. Is one of the specificity of heritage process engaged by scientists express by this perpetual re-invention?

This ceaseless fluctuation of what heritage is used for, and the goal that sustain heritage preservation plans, certainly make scientific heritage different from other kind of heritage which are more taken upon and take in charge by professionals. In other words, if heritage process is not excluded from scientific institutions, long term heritage preservation policy, which necessarily include rules as regard its management, its exhibition, its professional knowledge and skills is yet to find a legitimacy, even to make sense to lots of scientific institutions.

Nowadays, scientific heritage benefited from the strong interest that emerged for the last five years on university heritage. The university heritage became a new key for scientists to open cultural space and established a new dialogue with the city. The Jardin des sciences that would be put in place at the beginning of next year expresses both this strong concern about university heritage preservation in a whole including humanities collections like Egyptology or ethnology and a urge need to offer open space and events where science is debated but also displayed or even teach to general public. Strong discussions are still going on in how to mix these two concerned without having one of them built by excluding the other. I am convinced that only by finding the right equilibrium between those two objectives would it be possible to achieve both.