

The Library at Universitat Pompeu Fabra, Barcelona, Spain

Associate Professor, Faculty of Economics Lance Burrows

1. Introduction

I was given the great opportunity of conducting research at the Universitat Pompeu Fabra in Barcelona, Spain from September, 2014 – August 2015. Before I explain the details about the main library, I will offer some information about the university in general.

The university is a fairly young university, in terms of European institutions. Barcelona is the capital of the province of Catalunya in Spain. The Catalan government approved plans to build the university in June, 1990, and the first lectures at the university were given on October 8, 1990. The lectures were held for around 300 students of the new degrees in Law and Economics and Business administration. Today, UPF focuses its studies in three areas of knowledge focused on the human being: the social sciences and humanities, the health and life sciences, and the ITC and communication sciences. The University has been structured into seven schools, a Polytechnic School, eight departments and three university institutes. Meanwhile, in recent years UPF has also been participating in a set of institutions and specialized centers focused on teaching, research and transfer activities, centers with legal personality and that constitute the UPF Group.

Moreover, in order to promote research and

transfer activities undertaken by university researchers and provide them with greater international visibility, the University is developing the UPF Research Park in the fields of social sciences, humanities, communication and information technologies. The UPF Research Park, which develops its activity at Ciutadella and Poblenou campuses, coordinates its activities in the fields of health and life sciences with the Barcelona Biomedical Research Park, located at Mar campus.

Thus, thanks to the development of these three campuses and science parks, the University has contributed to the regeneration of some areas in Barcelona as well as the promotion of new areas of creation and transfer of knowledge. Examples of this activity can be found, for example, in the rehabilitation of the Dipòsit de les Aigües, the current Library, or in the former army barracks in Wellington Street, nowadays occupied by the Barcelona Graduate School of Economics and the Pasqual Maragall Foundation (Ciutadella campus). Also, through the opening to the sea in the nineties, with the Olympics and the regeneration of the Vila Olímpica (Mar campus) or the regeneration of Ca l'Aranyó, the old textile factory placed in 22 @ (Poblenou campus). We should neither forget the building in plaça de la Mercè, headquarter of the Rector's office, in Ciutat Vella; the Born building, that hosts the UPF Foundation, or the Balnes building, house of

the Continuing Education Institute (IDEC), among others.

2. The Main Library at UPF, Dipòsit de les Aigües

Conversion to a Library

The Ciutadella campus of Barcelona's private Universitat Pompeu Fabra contains a contemporary architectural gem worth seeking out. Once the hydraulic cistern for the Ciutadella waterworks, built in 1880 by Josep Fontseré, the Dipòsit de les Aigües was converted to the school's Central Library in 1999 by the design team of Lluís Clotet and Ignacio Paricio. The massive, 3-foot-thick walls, perforated and crowned with tall brick arches, are striking; the trompe-l'oeil connecting corridor between the reading rooms is a brilliant touch.



*The exterior of the main library,
Dipòsit de les Aigües*

Originally designed in 1874 by Josep Fontseré, and completed in 1880 as the hydraulic cistern for the Ciutadella waterworks, the building is a Roman-like construction with 12-meter high brickwork vaults. Its use as a water tank ceased, and for one hundred years the building was used for several different purposes, including a retirement home, fire station, police department car park, and Court of Justice archives. It became the property



Aerial view of Dipòsit de les Aigües

of the Pompeu Fabra University in 1992. The architect design team of Lluís Clotet and Ignacio Paricio was commissioned in 1993 to create a library from the old water tank, and the Dipòsit de les Aigües library project was completed in 1999, creating diverse spaces and reading areas along the 65-meter long vaulted structure.

The conversion as a Library space was based on these principles:

- maintain the appearance and structure of the original building, gaining surface with the creation of a mezzanine floor
- increase exterior lighting by opening skylights in the ceiling
- combine the modern equipment and facilities result of the conversion with the original quality of the building.

This combination of features makes the Dipòsit de les Aigües an ideal space for concentration and individual work for our users.

The desire to harmonize the form and function of the building required a close understanding between those responsible for the conversion work and those who were to be responsible for running the library. Thus from the outset, this coordination been carried

out by a Campus Project Office.

The Campus Project Office was set up to coordinate the building strategy of the UPF, and included architects, lawyers and experts on urban planning.

In 1992, the Library and the Project Office conducted a joint feasibility study into the siting of the Main Library of the UPF in the Dipòsit de les Aigües, which served to demonstrate viability of the proposed scheme. The University commissioned the architects Lluís Clotet and Ignasi Paricio, who had previously been involved in work on the building, to produce an outline project.

A Technical Commission was set up to define the project and monitor its subsequent execution. Library staff have participated in the project at a technical level at every stage. The information provided by the Library underlined the need to conserve the basement of the Jaume I building, in order to provide more space, and to make the latter more functional. Using this as starting point, the main reading room of the UPF Main Library has been located in the Dipòsit de les Aigües building, thus creating a large area for study and research uses.

The siting of the reading room posed various problems in terms of the disproportion between the volume of the room and the available floor space.

The solution adopted was the construction of a mezzanine floor, 2.8 metres above the existing floor level, covering the entire area except for a large central island. This new mezzanine floor provides a considerable increase in the available floor area and receives abundant natural light from the high windows.

The spaces created by the mezzanine floor

are notable for their variety of heights: low spaces above the mezzanine floor, medium to high spaces above the middle of the mezzanine, and very high spaces in the central part of the lower floor. The siting of this mezzanine floor has not affected any of the main lines of the building or open spaces.

In 1999, a part of the large reading room in the Dipòsit de les Aigües building was opened to the public: The first phase of the conversion, commenced on the 21 st of July 1999, focused on the transverse volume containing the three lateral bays closest to the Jaume I building: some 3,500 square meters, equivalent to a third of the total surface area. Also, in this first phase an underpass was constructed, running just beneath the street, to communicate the Dipòsit with the Jaume I building: this linking space, nine meters across, also includes a reading room.

Entrance to the Library

At present, the entrance to the Main Library of the UPF is situated in the Jaume I building. This is the only entrance to and exit from the Library, with security control. All users entering the Library pass through this access. The spacious entrance area contains a circulation and bibliographic information



Entrance to the Main Library of UPF

desk and the OPACs for rapid consultation by users on foot.

Further inside, there are the computers for consulting the services offered by the Library and the resources available. Close to the desk, there is the reference collection, the Reserve Room which includes the documents recommended by faculty in their classes and other Library sections. It also accommodates rooms for group working, the users' training room, internal technical services and the Management of the Library. The passage which connects the Jaume I Library and the Dipòsit de les Aigües building contains a study room and a rest area.

The characteristics of the entrance circuit, combined with the bibliographic collection contained in the Jaume I building, and the proximity to the classrooms, mean that this space is most directly geared to the needs of undergraduate students. In this way, these facilities in the Jaume I building serve as a filter for the Dipòsit de les Aigües space, which is more specifically oriented towards individual study and research.

Interior of the Dipòsit de les Aigües

It was decided that the number of shelves should be limited in the interests of a better orientation of the users and a fuller appreciation of this singular space. The reading room features a combination of reading tables and book shelves, which serves to optimize lighting conditions and ensure a satisfactory division of the space.

Inside the building, 3,600 linear metres of shelving and 142 places for users have been installed without any violation of the existing fabric. It accommodates special collections.



Interior of the main reading room

Main reading room

The ground floor is devoted to library shelves, given that the natural light here is poor on account of the height of the walls. On the tables located near the desk are the computers to consult the Library catalogue and the other resources available.

On the first and second floor the tables are located along the sides next to the windows, with the bookshelves concentrated in the center. The space between the buttresses on the ground floor provides rooms for group working. On the first and second floor, the space between the pierced walls provides a large number of small areas where readers can work individually.

On each floor the spaces between the buttresses closest to the stairs on the corner accommodate the sanitary services. Adjacent to these are the vertical installation spaces and the lifts.

Construction and fitting out of the Library

The Library has been conceived on the basis of a modular system. The structure has

been conserved intact, with the intervention focusing on the partitioning of the space, the furniture and installations.

Lighting

In order to bring natural light into the central part of the interior space, the architects introduced a skylight which crosses the vaults of the roof and, in the reservoir, projects up from the surface of the artificial lake like a kind of island. Beneath these skylights the architects placed an inverted pyramid composed of four triangular mirrors.



Natural lighting in the main hall

These mirrors allow visitors on the ground floor to see the reflection of the water in the interior of the reservoir several metres above their heads, and the context in which the building stands, while visitors to the artificial lake see the reflection of the enormous void which opens up beneath the three metres of water, thus establishing a relationship between the interior and the mass of water.

The light is a basic factor in the quality of the atmosphere, of primary significance in establishing links with the exterior and permitting the identification of the surroundings.

The artificial lighting is incorporated into the furniture: on the shelves and on the tables, to do no damage to the building. The general ambient lighting is provided by halogen spots directed at the ceiling.

Flooring

The flooring of the reading room is a modular paving designed to allow the movement of all the installations. The floor slab is of concrete. The pieces of the flooring are finished with fitted carpet and are perforated to accommodate the emergency lighting.

Installations

One of the most important limitations on a building of this type is the impossibility of utilizing the ceilings or the interior space for service ducting.

In view of this, one of the advantages of the mezzanine is the possibility of concentrating all of the ducting and cables in this new ceiling.

The flooring can be taken up to access all of the installations, including the air ducting system. It consists of a suspended floor of concrete slabs laid on metal supports.

The shelves, as fixed fittings, serve to support the fire hoses – thus leaving the fabric of the building intact.

Furniture

The concrete floor slab of the mezzanine is virtually a furniture element inserted in the

existing structure, between the walls of the original building, with a series of vertical elements anchored to the pillars to support its lightweight structure.

In the voids of these walls there are architectural fittings of woodwork, extremely simple in their design, which provide construction solutions to geometrical and functional problems. These are set into the metre-thick walls, but are not movable. For instance, the “bench” designed to take advantage of the space between the stacks, when this is not a circulation space, to accommodate two small tables.

The Main Library of the UPF in the Future

When the Dipòsit de les Aigües building is fully operational it will initially have some 9,000 linear metres of shelving, which will hold approximately 350,000 volumes, and 600 reading places, including some twelve study rooms (of 14 square metres each) for postgraduate students, plus some ten study rooms for 4 to 6 people. But, if we sum the reservoir building with the Jaume I space, the Main Library of the UPF will have, approximately, 15,000 linear metres of shelving, which will hold 600,000 volumes, and 1,400 user places.

3. Conclusions

What emerges from this project is how surprisingly ideal a building with a structure which seems at first sight absolutely alien to the needs of a library has proved to be, and how the distribution of the walls and the distance between these has turned out to be truly optimum. The four metres that separate them perfectly accommodate a reading desk and the space required by the readers to move between the shelves mounted on the

walls. If this space had been even half a metre narrower, the present layout would have been impossible.

The Dipòsit de les Aigües building is a space inscribed within the larger space of the General Library, combines two elements: that of modernity and that of the quality of the space. The element of modernity reflects the commitment to providing an effective and efficient response to the needs of the university community, while the element of spatial quality is the result of a skillful adaptation of the spaces to their new uses. As it has been said, the spacious reading room in the Dipòsit de les Aigües is an aid to concentration and encourages a less massive use thanks to its smaller work spaces. Its interior induces a sense of tranquility and silence rather like a monastic space, while the Jaume I facilities are designed for a fairly intensive circulation and movement of users.

The UPF Library currently has, in addition to the Main Library, three branch libraries (Rambla, França and Mar) in the buildings where teaching takes place, with all of these providing the same services. This geographical dispersion has not, however, prevented the creation of a single catalogue and a common circulation system. This means that the computer system allows users to request, pick up and return documents at any Library site. Therefore, they do not need to go from one Library site to another.

The UPF Library data

Opening hours

The library opens from 8.00 am to 1.30 am from Monday to Friday with no interruption. And on Saturdays, Sundays and bank holidays it is opened from 10.00 am to 9.00 pm. It only

closes 5 days a year.

Users 14,549

Surface area 7,850 m²

User places 1,473

Collection 308,711 monographs/ 8,505 serials