

The Second Hand Library Building

Sustainable Thinking through Recycling Old Buildings into New Libraries

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Abstract:

Old buildings are being recycled into libraries all over the world. Many buildings were given a new purpose, such as an old grain silo, a post office, barracks, a brewery, a factory, a railway station, and a horse stable, to name but a few that were transformed into a library.

The process of rededication of a building with a former different usage into a library means per se a special aspect of sustainability – it is quite obviously a matter of recycling. The transformation of an existing building with a prior non-library function into a library brings the challenge and the opportunity for sustainable thinking in library planning. As non-renewable resources are decreasing, reusing and recycling are going to become increasingly necessary in the future. The recycling of old buildings means reducing the ecological footprint of library buildings in a cost-effective and efficient way. Beside "green" aspects like water conservation, energy conservation, recycled or sustainable building materials, indoor air quality, and solar power from photo-voltaic panels, the planning of an adaptive reuse is a very different task than the planning of a library in a totally new building. Some best practice case studies from libraries, not only in Germany, but other countries in Europe will be presented as well.

"We are ecologically interdependent with the whole of the natural environment; we are socially, culturally, and economically interdependent with all of humanity; sustainability in the context of this interdependence, requires partnership, equity, and balance among all parties."

The second hand library - a way of reducing the ecological footprint

Why should libraries be sustainable buildings, and what is sustainability with regard to an adaptation of an old building for library use?

Old buildings are being recycled into libraries all over the world. Many buildings were given a new purpose, such as an old grain silo, a post office, barracks, a brewery, a factory, a railway station, and a horse stable, to name but a few that were transformed into a library. Recycling of buildings will become increasingly important in the future. Conversion and reuse of old buildings with a former different usage into a library means per se a special aspect of sustainability. Revitalization includes elements and features to lessen its energy and environmental impact on our planet. Being green is an element of being sustainable, but sustainability is actually a larger and more holistic concept than being green. A matter of sustainable thinking is the realization of reducing the ecological footprint because of the chance of bringing green aspects into an old building. The proportion of libraries adapted from old buildings when compared to construction of new building is likely to remain significant in the future, especially in the developed parts of the world. Our paper will show the advantages of sustainable thinking by recycling of old buildings into libraries: the aspects of ecology, culture, urban regeneration, finance and corporate identity.

Libraries as non-commercial public buildings are especially suited to give examples to illustrate the idea of sustainability, to distribute and to disseminate this idea to the people, and to promote civic involvement in sustainability. The Seattle Public Library gave a good example when "the architects and contractors who designed and built the Central Library were committed to constructing a sustainable building that meets the *Sustainable Building Policy of the City of Seattle*". The purpose of this policy is "... to demonstrate the City's commitment to environmental, economic, and social stewardship, to yield cost savings to the City taxpayers through reduced operating costs, to provide healthy work environments for staff and visitors, and to contribute to the City's goals of protecting, conserving, and enhancing the region's environmental resources."²

¹ Declaration of Interdependence for a Sustainable Future, UIA/AIA World Congress of Architects, Chicago 1993.

² The Sustainable Building Policy of the City of Seattle, Section 6.9.1. www.spl.org/locations/central-library/cen-building-facts/cen-sustainable-design.

An old subject in a new context

For a long time adaptation of buildings to library use was mainly characterized by the rejection of the re-use an old building and the emphasis on the benefits of a new building: "A librarian must never accept an old building which has previously been used for other purposes."³

In 1985 there was a turning point in the librarians' debate. At the IFLA conference in Budapest there was a discussion of what conditions must be fulfilled for an old building to be converted into a library and what must be considered when remodeling. This seminar initiated a change in the discussion: "Not all the advantages are evident in every project, but when one considers and contrasts a large number of these re-used, converted premises, one can discover a substantial number of differing factors which have definite advantages."

In 2007 Santi Romero pointed out the possibilities of reuse and developed a typology of adaptable buildings and identified the advantages and disadvantages of the conversion and the specific aspects of renovations by different building types .5 He compiled a list of different conditions which a re-used building should meet. He points out the positive aspects, the symbolic value, meaning for the cultural identity, the urban situation, the most central location, the architectural heritage, the distinctiveness of the architecture, and the acceptance by the population.

In 2011, Frank Seeliger gave an overview over the current state of research.⁶ In the same volume case studies from Germany, Switzerland and Austria were presented by the speakers.⁷

Some Examples

Sustainability means also preservation of cultural heritage, historical identity of places and buildings, and preservation of the "genius loci". Some examples should illustrate the idea of revitalization as a sustainable revitalization and may draw librarians' and architects' attention to best practice examples of revitalization, and to encourage them to look around and find their own ideas for reusable buildings in their own environment.

Library of Braunschweig University of Art, former EXPO-exhibition-building of Mexico (2002)⁸ Changed from a temporary construction for the EXPO 2000 at Hannover, Germany (Architects: Legorreta+Legorreta, Mecico City/Los Angeles) to a permanent use as a library. One of the 43 nation-pavilions: The Mexican Millennium Pavilion.⁹ The architecture of the building is represented by a large crystal box, using very light material (glass and steel) because it had to be a temporary construction. This was a singular change to get a new

³ Sven Plovgaard, Seminar of the IFLA Library Buildings and Equipment Section in 1975 staged in Finland, cit. after Papp (1987), p. 58.

⁴ Kroller (1985), p. 13.

⁵ Romero (2007).

⁶ Seeliger (2011).

⁷ Hauke/Werner (2011b).

⁸ Stiller, F. (2011).

⁹ Gonzáles (2000).

library building within a very short time, because it was the opportunity to reuse the pavillon just after the EXPO closed their doors.

The building consists of an outer and an inner cube structure. The interior was specially designed for the necessities of the library by KSP Jürgen Engel architects. A connecting building to the University was added (only one story with basement). Here are the offices of the staff. So that the Expo-pavilion is an example of a library building, which consists only of space for users and collection, with the administration located in a separate building (like Norman Fosters does it in his project "Berlin Brain" of the Freie Universität Berlin¹⁰). Closed Stacks are in the main building of the university too. The cube measures 18 x 18 m and a height of 18 m. The inner cube is 11 x 11 m, and 12 m high. There are 4,5 levels and a basement. There is enough space for 60 user desks and 80.000 volumes on open shelves. The top level of the inner cube is reserved for exhibitions and events. Because the whole library consists only of one room, there are some acoustic problems but sound insulation and sun protection were improved. Minus: an extension of the building is not possible.

It fits well with a university of Art. Transparent, very clear, open to the outside, with a striking interior cube in colorful yellow, it became the new symbol of the entire university, with a high level of identification of students and teachers.

Municipal Library Luckenwalde (Germany)¹¹

The Municipal Library of Luckenwalde is a transformation of a railway station (2008). A station building from the beginning of the 20th century in a small town half an hour train ride from Berlin. It was transformed by ff-architekten Berlin / raumbewegung. An excellent location for all citizens especially for those who take the train. Because the building had not sufficient space for 45.000 volumes and 50.000 users a year, a shimmering golden extension was added for the childrens' library (ground floor) and the library for young adults (first floor).

Library of the Lucerne University of Applied Sciences and Arts, Switzerland (end of 2011)¹²

A nearly 30 years old logistic center of the Swiss Mail. A library and university building by the Swiss architects Enzmann + Fischer (Zurich).

A very excellent location: near the main station in the middle of the city with good access to public transport and near by the Convention Center KLL (designed by Jean Nouvel). Costs: less than a half of a new building of this size and location. Typical for many projects of converted buildings is the surprise of more space than needed! Chance for Cooperation with partners: another university, the Lucerne University of Teacher Education (PHZ), will join a collaborative use of the building. With space for 300.000 volumes and 670 user desks, this is nearly perfect space! The Library is the pivotal point of the building, right in the middle, on the first floor.

Positive: very flexible use of space of this type of building, allows the load carrying capacity of the floor to be improved. Challenging: to bring light into the big spaces, the incomparable

¹⁰ Diecks/Werner (2004).

¹¹ Sanne (2009).

¹² Schelling (2011).

effect of daylight: More natural light for the impact on cognitive and psychosocial well-being and energy-saving. 13

Negative: low ceiling height (less than 2,95 m), therefore shelving is not very efficient – it's a compromise!

An impressive history: La Biblioteca comunale degli Intronati di Siena - The Public Library of Siena¹⁴

The Biblioteca degli Intronati in Siena is one of the most historic cultural institutions in Siena. The library in via della Sapienza was founded in 1758 through a donation, given by the archdeacon and University Professor Sallustio Bandini. The collection was brought to the "Palazzo" dell'Accademia degli Intronati, the library's home until today. Other donators followed Bandini's example so that the collection expanded up to ca. 550 000 volumes, including 63000 manuscripts and 1 091 incunabula and illuminated books and other historic and precious items like 50 000 autographs etc. today.

Like other Italian libraries with a similar history over a long time the Biblioteca degli Intronati had to be seen and was used as a kind of 'museum': a historic collection in a historic building with a historic reading room etc. - beautiful and admirable, but nothing to be called a "Public Library".

The history of the building goes back to the 13th century, when a couple of medieval houses were destined to become a so-called Domus Misericordia, serving poor or sick people, orphans, and pilgrims. More buildings such as a church and a public fountain etc. were added, a medieval lane between via della Sapienza e via dei Pittori was overbuilt and remains hundreds of years later as today's so-called "vicolo". But all the construction works stopped rapidly with the plague in 1348.

In 1408, under the influence of pope Gregor XII the Casa della Misericordia got a new chance and became Casa della Sapienza. During the following centuries more buildings were added, famous architects were involved to realize a prestigious building, suitable for the home of the University of Siena, "La Sapienza", and the scholarly society called "Accademia degli Intronati". After 1758, when the library came to the Palazzo, it rapidly grew up and occupied by and by more space of the Domus, dislodging other institutions from the complex of buildings.

A new era was born when in 1999 the library got financial support from the state as well as from sponsors. A new concept was created to develop the "biblioteca per presenza" into a "biblioteca circolante", based on the IFLA/Unesco Manifesto for Public Libraries15. New and more space was needed to offer a children's library as well as 70 000 volumes on open shelves, 100 reading seats, space for 14 OPACs and Internet research, and all the other modern library services.

¹³ Sands (2002).

¹⁴ Biblioteca comunale degli Intronati, via della Sapienza, I - 53100 Siena, Italy, www.bibliotecasiena.it/. For further information see: Or (2006).

¹⁵ www.ifla.org/VII/s8/unesco.manif.htm.

But instead of building a new library, the overbuilt old medieval lane, the vicolo with all the small medieval houses on the left and the right hand side was rediscovered and re-used. Special solutions had to be found regarding safety and security, conservation issues, structural analysis, and organizing enough space for offering open shelves instead of storing the books. Some compromises had to be accepted, e.g. not all rooms have natural light, there is no large central reading room, and the architects had to design special furniture and open shelves for 70 000 volumes etc.

But the most important thing is that a very user-friendly library was created where people – both adults and children – like to come and stay for reading and learning, for meeting people, for feeling comfortable. It is a very special, individual library, not confusable with other places and not possible or imaginable at any other place of the world. More important than some compromises is that users will identify the place as "their" library and enjoy the very specific atmosphere. Wow!

Sustainable development and sustainable construction

Contrary to earlier dictum that projects where buildings are transformed into libraries could not become really good libraries, we can point out successful examples of the very last years from Germany, Italy, Austria and Switzerland: Public libraries, academic libraries and special libraries.

This requires that the old building is adaptable enough for library use, although "it is not realistic to expect the same level of functionality as we would expect from a new building" 16. To preserve the symbolic value of the old building, helpful for the urban-planning of the special location, the library will bring a lively atmosphere to the old place.

The benefits for sustainability are referring ecology, cultural heritage, concerning the urban regeneration, finance. Sustainability concerning the reuse of an old building means: Less land consumption, no disposal of the entire building instead of conservation of the heritage.

It is a growth area for the future, because in times of empty public budgets investments are often harder to enforce as renovations, redevelopments, upgrading, and mergers of institutions in existing objects. Often the dreaded effects of an order for conservation may be an opportunity to develop an old building to new use. A series of advantages are obvious: the buildings are often architecturally valuable properties in prominent locations. The charm, the ambiance of a distinctive urban building or even a building that is enshrined in the public consciousness can be useful for the image of the library – and it does not have to be a real baroque city palace! The history of the building can be inspiring for the carrier as a decision aid for planners and librarians, but then later for the users of the library, who enjoy the new response to the old building as exciting and unusual. This could allow a joint use by different partners using one single building at the same time (libraries and tourist centers, educational institutions, shops or something else), looking forward to unexpected synergies. In a broader sense this is also about sustainability - the re-use of built space: a valuable resource not only historically in case of prominent buildings. You may expect some financial support e.g. from the European Union (for countries of the EU), whether for historical preservation measures, or energy recovery from urban development programs to motivate decision makers to a new library. The architect discovers with a professional look the

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¹⁶ Romero (2007), p. 227.

potential of an apparently useless building that can be re-used by the new purpose: libraries, the largest non-profit educational and cultural institutions and places of communication with their specific qualities.

To encourage librarians to sustainability

We should encourage librarians as well as architects to think about the special value of an adopted building for library use. Sustainability as part of the Corporate Identity of the library, not only concerning energy-saving, but as part of the strategic aims of the library. Sustainability is more than going green.

It becomes more and more obvious that to re-use and adapt an old building to transform it to a library is not necessarily a case of a bad substitute or a less-than-ideal solution. Librarians should be more open-minded for the sustainability of re-use and should focus on the chance of transform an adaptable building to a high-level ecological-friendly library. To accept an old building may be the first step to reduce the library's ecological footprint.

The experience of the mentioned projects shows that nothing should be idealized. "Second Hand" is in a positive sense cost-saving, but can also restrict creativity: For the planning librarian the pressure may become very hard with possibly many preset conditions of the building. The risk is to expect too little for the new library in an old re-used building and therefore the librarians may demand too little. In some older buildings the load bearing limits of the floor may not bake them suitable as a library. But even academic libraries today are no more focusing on compact shelving, they have said goodbye to the myth of fully flexible space. In the digital age there are very few libraries still mainly thinking of book stacks! On the other hand, many library projects benefit from the converted building because they suddenly get more space available than planned, because second hand does not necessarily fit perfectly.

We can learn from many projects that the re-use of a building is often a cheaper, often a surprising and realistic opportunity with an acceptable compromise, the alternative of a long and uncertain hope for a new building in the future.

Sustainability in Library Buildings through LIS Student's Education

Last but not least we think that there is a special aspect of sustainability in building libraries that should be taught to LIS students and new librarians so that the new generation of librarians will adapt the ideas and goals of sustainability in library buildings through recycling old buildings for excellent library use.

In our case we used the model of project seminars at the Berlin School for Library and Information Science in Germany. Every year the school offers a course called "Turning a book from idea to realization". The goal is to publish a book related to any library and information science issue. The students' task is to define an interesting subject and to find authors who are experts in their field. The students not only invite these authors to write an article on the chosen issue but to "peer review" the articles and to make them ready to print. Furthermore they have to find a publishing house who accepts an open access counterpart beside the printed version.

After two book projects published on "Library Buildings and Equipment" in 2008/09¹⁷ and "Best Practice Examples in Library Buildings and Equipment" in 2009/10 the theme in 2010/11 was "Secondhand, but Excellent! The Reuse of Old buildings for Library Use" 19. The exclamation mark in the book's title should make clear, first that excellence is definitely a requirement, and second that the projects described in the book are excellent examples of how to reuse an existing building for library use.

The students' task was not only to find out new best practice examples of recycled buildings in Germany, Austria and Switzerland but to invite and motivate the responsible librarians and/or architects to write an article about how they found an appropriate building, how they managed all the issues regarding the location factor, suitability of the building for library use, the capacity for heavy book shelves, the restrictions for the protection of historic monuments, the implementation of sustainability in their professional work.

The students met the German-American architect Robert Niess who also serves as Professor for "The Architecture of Re-building" in Düsseldorf, Germany. Together with his wife Rebecca Chestnut the architect has transformed a historic entertainment building in Berlin into a Public Library which was the winning competition for the "Renovation and Expansion of the Landmark Buildings at Luisenbad for a Library" in 1988²¹. Since then his office has become renowned for innovative designs for the restoration, refurbishment and expansion of historic buildings. These architects also have transformed a factory in Wildau near Berlin into a "Wow" university library²².

As a result of that meeting a very interesting interview about his points of view, his ideals, his experiences and also the critical points of reusing old buildings is also published in the book.

To make the book more useful for the target group – which are building librarians as well as architects and building authorities – a literature review of national and international published books and articles on that issue was added. About 150 references were chosen for the Bibliography including overviews in English and German as well as articles on best practice examples from Germany, Austria and Switzerland.

Through different surveys about 750 examples of re-used buildings mainly in Germany, Austria and Switzerland were identified. A selection of 150 interesting examples is listed in the book, including some details like the building's former use, the year of transformation and the website.

The book will be published in 2011 by the German LIS publishing house Bock + Herchen who also agreed to publish the preprint version on the Humboldt University's edoc server – available with open access without any restrictions.

¹⁸ Hauke/Werner (2011a).

¹⁷ Hauke/Werner (2009).

¹⁹ Hauke/Werner (2011b).

²⁰ www.chestnut-niess.de.

²¹ www.berlin.de/citybibliothek/bibliotheken/luisenbad/.

²² www.th-wildau.de/bibliothek.html.

The students are rather proud of the seminar's result. It was a lot of hard work for them. They got credits for the seminar, but they did more than they needed to do for the credits: They presented the project at the BOBCATSSS Symposium 2011 in Hungary, at the German Library Conference 2011 in Berlin as well as at the IFLA Poster Session 2011 in San Juan, Puerto Rico.

We are quite sure that this special aspect of sustainability is delivered not only through the LIS students' education which they might carry into their professional work in the future, but also through their engagement in the international discussion of the idea of reusing old buildings for excellent library use.

Conclusion

We would like to finish our presentation with a proposal:

In our mind "Sustainability" should be the 12th factor according to the top 10 qualities (actually there are 11 because of the "Oomph!") of Andrew McDonald!²³

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²³ McDonald (2007).

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