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Bridging the digital divide:

libraries providing access for all?

“Libraries Designed for Users”

Nowadays Concept of Library Architecture and Interior

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Abstract: *The aim of the study was to emphasize the importance of library building as community asset. All – location of the library, architecture, layout, equipment and functions – matters when we talk about the place where users come to acquire knowledge, communicate, socialize and take a rest. Six library building projects (three Latvian library projects – the National Library of Latvia (the Castle of Light), the branch library “Vidzeme” (branch of the Riga Central Library), Pārventa Library (branch of the Ventspils Library), and three foreign library projects – the National Library of Belarus, the New Library of Alexandria (the New Bibliotheca Alexandrina), the National Library of the Czech Republic (the Eye above Prague)) were chosen to compare architectural solutions for the library needs. Several libraries were chosen to compare modern interior design approaches: the Art, Design and Media (ADM) Library at the Nanyang Technological University (NTU) in Singapore, the Taipei Public Library in Taiwan, the Strozier Library at Florida State University, the Engineering Library of the University of Auckland in New Zealand, the Coventry’s Arena Park Library in United Kingdom and the Library & Learning Resources (LLR) at the University of Borås in Sweden. The importance and interest of the study is to show that such issues as interior design and architectural solutions can be important in creating appropriate and friendly place for library users.*

Keywords: libraries, architecture, interior design.

Importance of Library Building as Community Asset

Role of a library has changed during last few years a lot. Previously libraries were a place for gaining information, studying and research. In digital age libraries have moved to a completely different level. Nowadays it is a place of communication and socializing with other people. Public libraries and university libraries start to change the “rusty” approach of a quiet place to a new modern place of meeting other people and using information in groups. We can also see how the architecture and interior in libraries has changed during the time. New shapes, colours and concepts are overcoming in newest projects and interior solutions in different libraries all around the world.

Interior Design Solutions

In the field of library interior, if we compare old classical or post-soviet libraries with the modern ones, we can observe several easily mentionable changes. In the old libraries there are mostly big reading halls with many reading places, bookshelves all around the room and restricted area for the librarian. Some libraries (scientific libraries, for example) have closed collections and users need to know which particular document they need before approaching the acquisition desk. On the other hand there are modern libraries which have a lot of open space, nice and comfortable furniture like sofas and armchairs, coffee-tables and many computerized places or workspaces for users to work with their laptops. Most of the libraries have free Wi-Fi Internet access, electronic catalogues and other technical equipment to make library functions more available for a greater range of users. It all matters when we look at latest trends in library interior and design.

We can compare how the library has changed during the time by looking at the old pictures and library furniture catalogues and comparing them with modern ones. New projects let much more light inside the buildings. We can observe that nowadays there are more bright colours in the libraries, upholstered or plastic furniture instead of wooden. Edges of the furniture become smoother. A lot of attention has been paid to children’s departments – they are more like playgrounds and in good cases include reading spaces for young parents and shelves with literature about children. It is very important to make library more like home or playground so that children would have good impression about the library and would return again and again.

The biggest challenge is to gain more teenagers and young adults to the physical library. The library needs to become “cool” and comfortable so that teenagers could consider it as a good place for meetings and hanging out together. Young people prefer comfortable workplaces and more freedom to move around and explore the space; they need a place to use their laptops and different zones to work. Many young people prefer to work in open space workplace together with others but still some of them want to work in silent rooms. There is also a big need of silent rooms in the library (Anandasivam & Cheong, 2008).

The libraries need to have all technological equipment to make working in the library as easy as possible (Childs, 2006). Users need to have approach to printers, scanners and electronic catalogues. Also the planning of the space in the library is very important so that users would not feel lost. The best approach is to plan all storeys in the same way. There should be different zones for different purposes – reading, web browsing, group works, references and recreation. There are many interesting ways how to make library building more comfortable and cosy.

Another very important aspect is the atmosphere in the library. There are different approaches

how to manage it and the choice should be based on type of the library and target audience – main group of users. Affiliation to an age group and cultural aspects need to be kept in mind. Young people are more flexible and accept new changes faster. Some young people would like to visit the library as they are visiting coffee-shops – have relaxed atmosphere where they can chat, study or have a rest (Pomerantz & Marchionini, 2007). All senses can be involved – music, nice but not annoying smell, good lightening, comfortable furniture, pictures on the walls and many other things can make users feel welcomed. Variety of different furniture, different zones and places to gather or be alone can provide different types of users with just what they need. The library might become a very good place for exhibiting art and at the same time it could create a special atmosphere and make the library more dynamic (Anandasivam & Cheong, 2008). Every library can find their own way how to improve and become more user-friendly by observing the users and their needs and wants.

Summary of the main characteristics of the new and classical approaches of the library interior are included in Table 1. The comparison is carried out by using observation of the libraries and doing source research (Anandasivam, K. & Cheong, C. F. 2008; Childs, P. 2006; Hulse, P. 2007; Pomerantz, J. & Marchionini, G. 2007; Tseng, S. 2008).

Table 1
Comparison of classical and new approaches of the library interior

Criteria	Classical libraries	Modern libraries
Concept of the library	Silent place for studying and working	Active place for retrieving information and socializing with other users
Space in the library	Much closed space, furniture close to each other	A lot of open space, space to move around between furniture
Rooms in the library	Big silent reading rooms, separated computer rooms	Big active reading rooms to use personal laptops and socialize with other users; separated silent reading rooms; additional computers in the library; special rooms for group-works
Access to the documents	Part of the collection is not available in open access	All documents are freely available in open access
Access to the librarian	Librarian works in separated area, hard to access	Librarian works in open service point, easy to approach from different sides
Lightning	Dark reading rooms with little lamps and extra lamps on reading desks	Bright reading rooms with a lot of light and extra lamps on reading desks
Security	Librarian is responsible for safety of the documents in the library; most valuable documents are not in the open access	Security is provided by security gates and security guides
Colours	Dark colours (brown, gray, beige, gold, deep red, deep green)	Bright colours (orange, blue, yellow, green, white, silver)
Furniture material	Heavy wood, chipboard	Plastic, textiles
Desks	Heavy, unmovable, made of wood	Light, easy to move, made from different materials
Chairs	Heavy and hard wooden chairs, may be with leather seats	Easy portable and comfortable chairs with soft padding
Shelving	Big and heavy shelves, very tall ones with additional ladders	Easy-to-reach shelves, movable shelves, automatic shelves
Acquisition desk	Big closed desk with librarian to hand out and receive documents	Self service machines to hand out and receive documents
Catalogue in the library	Card catalogue cabinet	Electronic catalogue machine

Technical equipment	Big old printing and copying machines with restricted access for users	Free access copying, scanning, printing machines
Leisure reading places	No specific leisure reading places in the library	Comfortable armchairs; bean chairs for young readers and children
Art in the library	Old classical paintings, big and heavy sculptures of writers, philosophers	Modern paintings made by new and mostly unknown artists, abstract sculptures, furniture made as artworks
Exhibitions	Closed exhibitions behind the glass	Open access exhibitions which could be instantly used

Library Building Projects

To analyze various extraordinary library building project solutions three national, two public and one regional public library projects were chosen. One of them was a library building reconstruction project, all the rest were new library building construction projects.

Examples of the Latvian library architecture

The National Library of Latvia

The project of the new building of the National Library of Latvia is called *the Castle of Light*. The new building of the library will be located on the left bank of the River Daugava between Akmens and Dzelzceļa bridges in front of the city's Old Town in Riga, Latvia. The part of the city on the left bank of the River Daugava is called Pārdaugava.

The National Library of Latvia was founded on Augustus 29, 1919. In 1928, there was first discussion about necessity to build a separate building for needs of the National Library of Latvia. In 1993, the first draft of the building was elaborated. In 1997, the volume of the building was reduced from 75 000 to 40 000 square metres with the aim to reduce construction expenses (Čaklais, 2002). In 1999, the General Assembly of UNESCO approved a resolution calling on member states and the international community to offer all possible support for the project of the National Library of Latvia. Similar support has only ever been received by the library in Alexandria, Egypt. In 2007, construction project of the library was elaborated. The foundation-stone for the new building of the National Library of Latvia was laid on June 20, 2008. In the "Law on the implementation of the National Library of Latvia building project" is appointed that the new library building must be implemented until the November 18, 2012 (Latvijas Nacionālās bibliotēkas projekta īstenošanas likums, 2003). Due to current economical situation the implementation of the project could drag on for two more years.

Latvian-born American architect Gunnar Birkerts designed the new library building as the hill of glass – a symbol of Latvian culture and an idea of revival – the Castle of Light which is one of the most important images of Latvian folk legends and folk songs. Designer group of institute *Pilsētprojekts* under the guidance of Latvian architect Modris Ģelzis elaborated the project. The 13-storey building (12 floors are above ground) is designed in a form of a pyramidal hill. Each floor will be smaller than the previous. On the last floor there will be a viewing platform. The building will be covered with glass panels.

Total costs of the library construction project were estimated approximately at 162.2 million EUR (114.6 million LVL). In case of delaying the library construction project the total costs can increase by 28 million EUR (20 million LVL).

A short description of the library building project is included in Table 2.

Table 2
Description of the National Library of Latvia

Criteria	Description
Type of the library	National library
Location	Riga, Latvia
Year of foundation	1919
Year of construction	2012 (predictable)
Architects/designers	G. Birkerts, M. Ģelzis
Description of the building	13-storey building of total area 40 000 square metres
Shape of the library	Pyramidal hill
Contribution	Approximately 162.2 million EUR (predictable)

The branch library “Vidzeme”

The branch library “Vidzeme” is a branch of the Riga Central Library. It is a public library. It is located alongside with a viaduct in Riga, Latvia. Near the library there is located the shopping centre “Domina” and train station “Zemitāni”. The library is easy of access by public transport for the urban population from the Riga centre and Vidzeme suburb of Riga.

The Riga Central Library was founded in October 1906. The branch library “Vidzeme” is one of the oldest Riga public libraries. It was opened in 1926. The building of the library was constructed in 1895. The reconstruction project of the branch library “Vidzeme” was developed in 2003. The launch of the building was realized on April 9, 2008. The new building was opened on May 27, 2008.

The building of the branch library “Vidzeme” was reconstructed within the framework of optimization concept of Riga Central Library and its branch library network. The author of the construction design is *Arhitekta L. Šmita darbnīca Ltd.* (Studio of architect L. Šmits). The building of the branch library “Vidzeme” is significant monument of wooden architecture and cultural heritage. It represents 19th century architecture style – eclectism. It can be identified by a form of gable, decoration of window embrasures and relief of outer doors. Frequently such kind of house-building in Riga was called as architecture of tenement. After the reconstruction the branch library “Vidzeme” became approximately by one third extensive than previous. It is located in 2-storey building of total area 1000 square metres. Within the project it gained new-built outhouse. The premises of the branch library became more cheerful and extensive.

The work of construction was estimated approximately at 1 million EUR (718 494 LVL). It includes work of general construction, reconstruction of central heating and water supply system, power supply, construction of elevator and household building, improvement of exterior area and other repair work.

A short description of the library building project is included in Table 3.

Table 3
Description of the branch library “Vidzeme”

Criteria	Description
Type of the library	Public library, branch of the Riga Central Library
Location	Riga, Latvia
Year of foundation	1926
Year of reconstruction	2008
Architects/designers	Arhitekta L. Šmita darbnīca Ltd.
Description of the building	2-storey building of total area 1000 square metres
Shape of the library	19th century architecture style – eclectism
Contribution	Approximately 1 million EUR

The Pārventa Library

The Pārventa Library is a branch of the Ventspils Library. It is a public library. The new Pārventa Library is located in virgin environment of secular trees in Ventspils, Latvia. Pārventa is a part of Ventspils which is situated on the right bank of the River Venta. The library is situated near the significant road crossing. Nearby the Pārventa Library is located sculpture-fountain of sand-dune pine-tree which is enchaining object. Until the summer 2009 the Pārventa Library was situated in premises of kindergarten.

The Ventspils Library was founded in 1920. The Pārventa Library was opened in December 1949. In 2005, Ventspils City Council made a decision regarding to build a new building for the Pārventa Library needs. The foundation-stone for the Pārventa Library building was laid on June 19, 2008. The new library building was constructed in July 2009 and opened on Augustus 6, 2009.

The authors of the new building of Pārventa Library are architects of *INDIA Ltd.* under the guidance of Pēteris Bajārs. The new library building is located in 3-storey building of total area 1500 square metres. The library is designed as amphitheatre reading room with bookshelves situated along the walls forming a spiral of it. The centre of the library remains hollow. The new library building has a form of rounded triangle, the combination of copper and glass creates a beautiful result. The interior of the new library is all in white colour supplemented with colourful accents. The facade of the library has inscription of the Latvian folksong in handwriting of the father of the Latvian folksongs Krišjānis Barons. In the building there is no stairs. The shifting from one floor to other is possible by walking along the easy floor slope or by panoramic elevator.

Total costs of the project were estimated approximately at 3.74 million EUR (2.64 million LVL). The project was financed by Ventspils municipality and means of state budget. Large part of the financing was donated by *Ventspils nafta termināls Ltd.*

A short description of the library building project is included in Table 4.

Table 4
Description of the Pārventa Library

Criteria	Description
Type of the library	Public library, branch of the Ventspils Library
Location	Ventspils, Latvia
Year of foundation	1949
Year of construction	2009
Architects/designers	P. Bajārs, I. Kalvāns, R. Jansons, D. Sotņikova and J. Penka
Description of the building	3-storey building of total area 1500 square metres
Shape of the library	Rounded triangle
Contribution	Approximately 3.74 million EUR

Examples of the foreign library architecture

The National Library of Belarus

The National Library of Belarus is located in Minsk, Belarus. It is situated in a park on a river bank and has a public observation platform looking over Minsk.

The National Library of Belarus was founded on September 15, 1922. The architectural project was developed in 2002. The new library building was constructed in January 2006 and opened on June 16, 2006.

The building of the National Library of Belarus was designed by Viktor Kramarenko and Michael Vinogradov. It was designed as a gigantic diamond – a symbol of the knowledge stored within the books. The library is located in a 72-metre high building. The 23-storey building is designed in the form of a rhombicuboctahedron and it has an area of 113 669 square metres. The building is covered with glass panels and during the day all 24 sides reflect the light and glitter like a real diamond. To maintain this image at night there is designed a lighting system. Monumental planes of the entrance portal are performed in a shape of pages of an open book. They are decorated with stones made artistic bas-reliefs, devoted to the development of Slavonic writing. The composition of the both planes represents a fragment of the model of the Universe as it was imagined in the 16th century.

Total costs of the project were estimated approximately at 62.92 million EUR (90 million USD).

A short description of the library building project is included in Table 5.

Table 5
Description of the National Library of Belarus

Criteria	Description
Type of the library	National library
Location	Minsk, Belarus
Year of foundation	1922
Year of construction	2006
Architects/designers	V. V. Kramarenko and M. K. Vinogradov
Description of the building	23-storey building of total area 113 669 square metres
Shape of the library	Rhombicuboctahedron
Contribution	Approximately 62.92 million EUR

The New Library of Alexandria

The New Library of Alexandria also called *the New Bibliotheca Alexandrina* is regional public library. It is located on the shore of the Mediterranean Sea alongside the ancient harbour in Alexandria, Egypt where the Royal Library of Alexandria is thought to have been located.

The New Library of Alexandria was built in memory of the Royal Library of Alexandria which was founded in the beginning of the 3rd century B.C. and lost in antiquity. The idea of reviving the old library dates back to 1974. The architectural design competition was organized by UNESCO in 1988. Construction work began in 1995. The new library building was officially opened on October 16, 2002.

The principal designers of the project are the Snøhetta Hamza Consortium: Craig Dykers, Christoph Kapeller and Kjetil Thorsen of *Snøhetta* (Oslo, Norway); Mamdouh Hamza, Ahmed Rashid and Moshhour Ghoneim of *Hamza Associates* (Cairo, Egypt). The library is located in a 13-storey building of total area 85 405 square metres. It has 11 overground cascading levels. It is designed in circular, tilting shape designed as an image of the sun (Egyptian hieroglyphs show the sun generally as a simple disk). The building spans 160 metres in diameter and reaches up to 32 metres in height, while also diving some 12 metres into the ground.

Total costs of the project were estimated at a price tag over 153.8 million EUR (220 million USD).

A short description of the library building project is included in Table 6.

Table 6
Description of the New Library of Alexandria

Criteria	Description
Type of the library	Regional public library
Location	Alexandria, Egypt
Year of foundation	3rd century B.C.
Year of construction	2002
Architects/designers	C. Dykers, C. Kapeller, K. Thorsen, M. Hamza, A. Rashid and M. Ghoneim
Description of the building	13-storey building of total area 85 405 square metres
Shape of the library	Circular, tilting shape designed as an image of the sun
Contribution	Approximately 153.8 million EUR

The National Library of the Czech Republic

The National Library of the Czech Republic was founded in 1781. “Eye above the City” (also called *the Eye above Prague*) is a name of the winning project for the new building of the National Library of the Czech Republic, it was awarded between 748 architecture proposals in 2007. Designer of the project is world-renowned Czech-British architect Jan Kaplický (died in 2009).

It was supposed that the National Library of the Czech Republic would be located at the edge of the enormous existing park of Letná in Prague, the Czech Republic. The three dimensional “blob” would hardly touch the ground. The new library building would be located in 9-storey building of total area 35 000 square metre; the greatest part of it – the storage of the books – was intended to be located in underground. The new library building was designed to be open and sociable. The new building would gently interact with its park surroundings. The “eye” on the top floor would offer view to the historical core of Prague and Prague Castle.

The architecture of the new building can be described as simple, modern, progressive, colourful and unique; keywords of the new architecture: private spaces, public spaces, architecture which invites people in, architecture with views, happy architecture, architecture for books, people and books dominate building, easy movement of the people, lifts and ramps, silent soft floor, soft acoustic ceiling, various shades of one colour, shiny columns, elegant book shelves with easy access, soft furniture everywhere, controlled daylight (The eye above Prague, 2007).

The new project was estimated to cost approximately 75.84 million EUR (2 billion CZK). However it was estimated that the new project could cost approximately 151.68 million EUR (4 billion CZK). For that reason it was decided to do reconstruction of the Klementinum that would cost only approximately 37.92 million EUR (1 billion CZK). Therefore the project was cancelled in 2008.

A short description of the library building project is included in Table 7.

Table 7
Description of the National Library of the Czech Republic

Criteria	Description
Type of the library	National library
Location	Prague, the Czech Republic
Year of foundation	1781
Year of construction	Cancelled in 2008
Architects/designers	J. Kaplický
Description of the building	9-storey building of 35 000 square metre

Shape of the library	Manner of organic shape – ‘blob’
Contribution	Approximately 75.84 million EUR

Conclusion

Architects and designers of the library building projects tend to use such architectural components that are significant to particular nation or symbolize significance of knowledge that is kept into the library and books. For example the Castle of Light symbolizes idea of freedom and faith (it is one of the most important images of Latvian folk legends and folk songs); monumental planes of the entrance portal of the National Library of Belarus are representing pages of an open book, but the shape of rhombicuboctahedron (shape of diamond) represents richness of the knowledge; main element of the New Library of Alexandria is circular, tilting shape which represents a symbol of the sun etc.

The architecture of the library building should be representative, multifunctional and flexible for use. It should be designed to be open and sociable. The architecture of the library building should invite people in and attract them to stay and return again and again.

Premises of the library should be pleasant and welcoming. Users need to feel comfortable regardless of their aim of visiting the library. They need to have possible choice to work in silence, chat with friends or group members, have an appropriate place to use their laptops or use the computers provided by the library, have free access to the collection and be able to find the most comfortable work / reading place for their needs and wants. Libraries should be comfortably planned so that users would not feel lost in the building. All technical equipment should be easily accessible and have instructions how to use it properly. Library furniture and design should depend on the target users considering main user groups – children, teenagers, students, adults, seniors. Public libraries have the most difficult task combining place for all of these. In this case a zone principle would be the most appropriate to satisfy all of these groups. Already small changes like art works displayed in the library can change the atmosphere.

References

- Anandasivam, K., Cheong, C. F. (2008). Designing a creative learning environment: NTU's new Art, Design and Media Library. *The Electronic Library*, 26(5), 650 – 661.
- Čaklais, M. (2002). *Gaismas kungs jeb sāga par Gunaru Birkertu*. Rīga: Pētergailis.
- Childs, P. (2006). Sssh! The quiet revolution. *New Library World*, 107(1222/1223), 149-156.
- The eye above Prague : a library for the third millennium*. (2007). (1st ed.). Prague: National Library of the Czech Republic.
- Hulse, P. (2007). The Transformation of the Engineering Library: Changes at the University of Auckland, New Zealand. *Library Hi Tech News*, 24(9/10), 32-37.
- Latvijas Nacionālās bibliotēkas projekta īstenošanas likums: the Law of the Republic of Latvia*. (2003). *Latvijas Vēstnesis*, 76(2841), May 22.
- Pomerantz, J., Marchionini, G. (2007). The digital library as place. *Journal of Documentation*, 63(4), 505-533.
- Tseng, S. (2008). Green library design and evaluation: the Taipei Public Library, Taiwan. *New Library World*, 109(7/8), 321-336.