
Modern Public Library Buildings and Their Functions: A Case Study of Three Public Libraries in The Netherlands

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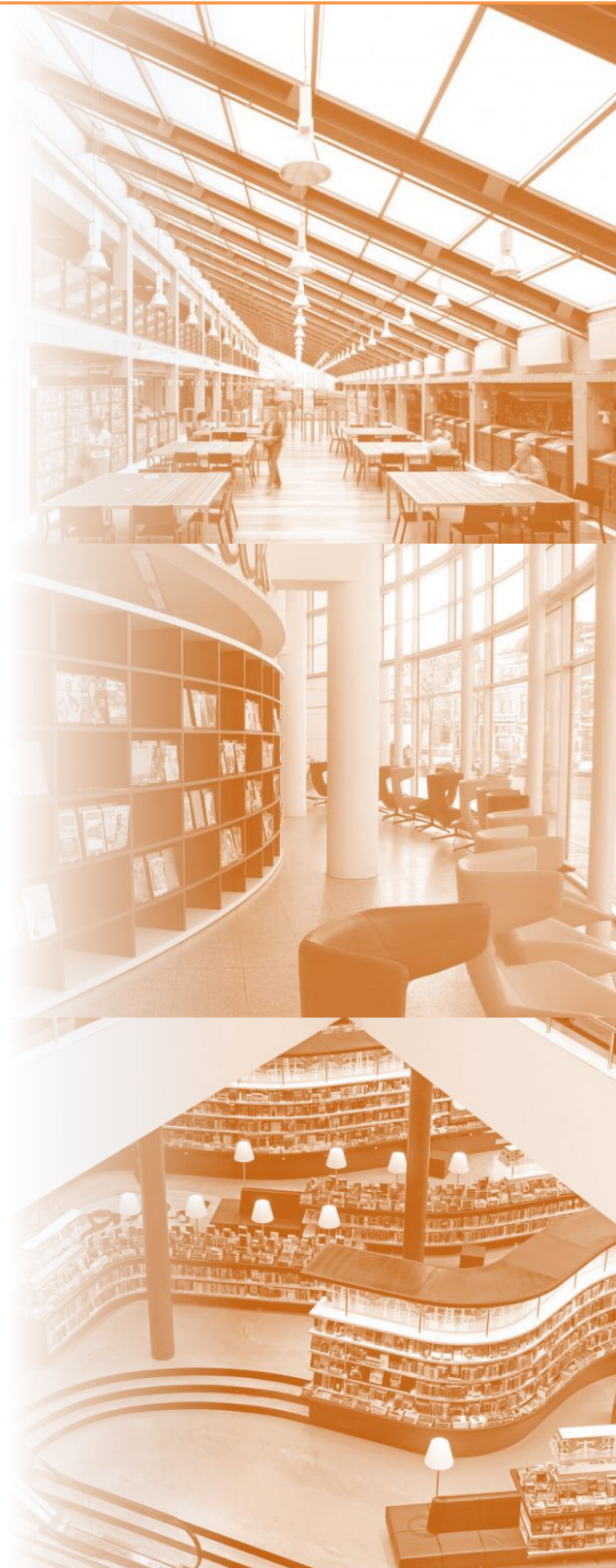
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Introduction

Throughout history, the library has been a centre of knowledge and culture in most civilizations. It has been developed and adjusted to fit in the contexts of each place and time, the same way it is adapting to the digital revolution that is happening now. Driven by the introduction of new technologies and a rapid change in information and communication technology, modern libraries had to change and adjust in multiple aspects in order to be accepted by their users. Each type of library has its own role to play in society and displays slight variations in the way they cope with the changes. This study, however, focuses only on public libraries in the Netherlands for a number of reasons.

Public libraries, one of the most common types of library, serve the general public, as the name implies. According to the UNESCO Public Library Manifesto, public libraries are ‘the local centre of information, making all kinds of knowledge and information readily available to its users’¹ on the basis of equality of access for all, regardless of age, race, sex, religion, nationality, language or social status. In a way, they are the libraries of the people, and this results in them being the frontline of all libraries which are most likely to be affected first by changes in information technology. For this reason, it is justifiable to study the change from where the wave first hit.

Despite the fact that there are many countries all over the world, especially the United States and the United Kingdom², that are more advanced than others in the library science field, Dutch public libraries are chosen for this thesis for specific reasons. Although the Dutch library field is not the strongest of all, it had evolved dynamically over time to catch up with the changing needs of users. The Dutch are known for their innovative mindset and their will to overcome obstacles which make them a successful nation. This characteristic of the Dutch is reflected in the constant changes in public libraries from common aspects such as library services to adjustments in a higher level, such as the re-constructing of the entire national library system. While they are not afraid to change as the library field is in constant flux, most of the public libraries in the Netherlands still maintain their identity that is connected to their local users. In other words, modern public libraries took their community's attitude into account when deciding for any changes. There is a close link here to library design. According to Hugo van den Bos, strategy director of Dutch graphic design studio Koeweiden Postma

¹UNESCO, UNESCO Public Library Manifesto

<<http://www.unesco.org/webworld/libraries/manifestos/libraman.html>> (1 July 2014).

²These two nations have many reputable graduate schools in Library Science and produce a large number of studies on libraries and librarianship.

during a lecture at the Tokyo Designers Week in 2008, 'Dutch design is simple and powerful'.³ Dutch design is functional, even minimalistic, yet also experimental and innovative. For these reasons, modern Dutch public libraries are indeed fascinating institutions and deserve closer attention.

In the Netherlands, a policy of restructuring and renewal of the public library system has been in place for well over ten years. It follows the many changes in the nature of accessing information and the rise of the digitization of media and information, which threatened the use of public library services. In 1998 the Dutch Council for Culture (Raad voor de Cultuur) called for an administrative reform of the public library network, which was the starting point of a massive process of library renewal between 2001-2007. Many changes were applied to almost every aspect of public libraries, such as library services, the function of libraries in society, and the organisation of libraries on a local and provincial level.⁴ This attempt to modernize the concept and function of public libraries resulted in a number of newly built modern public libraries all over the country. These new library buildings look very different from their older counterparts, yet share some prominent components among themselves. The modern buildings are designed to put more emphasis on user spaces, which is in contrast with the traditional focus on storage resources. Consequently, there is a significant change in library architecture to a more functional and user-oriented concept.

Winston Churchill in a speech on the occasion of the rebuilding of the House of Commons in 1951 said: 'First we shape our buildings and afterwards our buildings shape us.' Clearly, the relation between a building and its users is strong and undeniable.⁵ It could be interpreted from this quote that even though a building is a result of the design that comes from the experience and expectation of people who are involved with it, once the building is used, people who inhabit or work in the building are inevitably shaped by the building. The change may not be visible on a physical level, but the architecture does have effects on human behaviour. The method of studying users' behaviour by analysing library buildings has been used before in the history of libraries, for example in a study by Adam Arenson on English nineteenth-century library design before the age of public libraries.⁶ Arenson studied the selected libraries' social function and how people used them by looking at the library's design,

³The New Institute, 'What is Dutch Design?'; <http://design.nl/item/what_is_dutch_design> (1 July 2014).

⁴F. Huysmans and C. Hillebrink, *The Future of the Dutch Public Library: Ten Years On* (The Hague: SCP, 2008), pp. 20-21.

⁵P.M. Parker and C. Richards, *Architecture and Order: Approaches to Social Space* (London etc.: Routledge, 1994), p. 2.

⁶A. Arenson, 'Libraries in Public Before the Age of Public Libraries: Interpreting the Furnishings and Design of Athenaeums and Other Social Libraries, 1800-1860', in J.E. Buschman and G.J. Leckie, *The Library as Place: History, Community, and Culture* (Westport, CT etc.: Libraries Unlimited, 2007), pp. 41-60.

decoration and furnishing. Much can be learned from small details such as the colour of wallpapers ‘that never tire and always please’, to something bigger such as the use of the ‘tête-à-tête, a chair for two that makes the sitters face each other to encourage conversation’⁷. For this reason, it could be said, experiences and expectations toward libraries in one period can shape libraries in the next period. In a way, modern libraries represent the thinking of the past.

In order to define the characteristics of the library of the future in the Netherlands and evaluate the efficiency of the existing ones, this thesis aims to study the shared functions and characteristics of modern Dutch public library design. It includes a small-scale user survey on how the buildings serve their purpose from the users’ perspective. For this purpose, three modern public library buildings, regarded as first-class in terms of their architecture, were selected as a case study. They are the DOK Library Concept Centre in Delft, the Almere Public Library and the The Hague Public Library. The data for this thesis is collected from policy documents and secondary literature, as well as by field research in the form of surveys, interviews and questionnaires. By exploring these topics, this study aims to look at how modern public libraries in the Netherlands may develop in the future.

As studying the past can help us to better understand present, the first chapter of this thesis will provide the necessary background knowledge and information. The first half of this chapter explores a generic definition of the public library, including its origin, purpose and development in general, while the second half will focus on the same subject, but only in the Dutch context. This section looks at the history of public libraries in the Netherlands, the library system that is used at present and the main goals that libraries are trying to achieve in the future.

Chapter 2 is dedicated to the research part of this thesis. The chapter starts with brief information of the three selected libraries and their contexts, followed by a description of the research method and tools that were used for this study. The collected data will be analysed and presented with numbers and figures.

To elaborate on the findings, Chapter 3 considers the shared characteristics of modern library buildings in the Netherlands, which are derived from the comparisons made in the previous chapter and observations that were made during the field research. Several main components of the buildings, such as the architecture, exterior and interior design, space management, facilities, furnishing, decoration and colour theme will be discussed to identify

⁷Arenson, ‘Libraries in Public before the Age of Public Libraries: Interpreting the Furnishings and Design of Atheneaeums and other Social Libraries, 1800-1860’, p. 46.

the trend of Dutch modern library buildings. It also predicts which way the trend will head by taking all the previous parts into consideration.

As the term 'Modern Library' will be used frequently in this study, it is wise to give a clear definition of the phrase to avoid confusion. Since a library re design process can take a surprisingly long time, often ten to twenty years from the initiation of the user study to the day the library re opens its doors, a 'Modern Library' in this context is a library that has just been built or entirely renovated with the aim of modernisation.

1. Public libraries in the Netherlands

1.1 *The Origin, Purpose and Development of Public Libraries*

Libraries have been present in many civilisations since ancient times, but the public library as we know it today is only two centuries old.⁸ It is difficult to identify the first 'public library', because it depends on different factors such as ownership, free use or function. However, it can be said that in the Western world the concept of the public library emerged around the mid-nineteenth century, starting in the United States and the United Kingdom. Before the introduction of the public library, institutions with similar functions used to be called by different names and existed in different forms, but they all consisted of two things: books and circles of users, which is perhaps the reason why C.C. Jewett, the founding librarian of the Smithsonian Institute in the US, referred to these places as 'social libraries'.⁹

In the eighteenth century, education and professional and philosophical debate were flourishing as a result of the Enlightenment. Wealthy gentlemen founded exclusive societies for these activities, which often had a library. Besides being a formal space for reading and working, these libraries also functioned as parlours where members came to relax after work as an alternative to 'immoral' leisure activities such as drinking and gambling. At that time, the libraries were the best place for young men who came to big cities to pursue their profession and to meet new people. The club libraries often were male spaces reserved for an elite group of people, not open to outsiders including women.¹⁰ Once these social libraries had formed a sense of community, people visited them to casually read and have conversations with others. This resulted in a library architecture combining both cosy and home-like aspects and a solemn atmosphere, as reflected in their furnishing and decorations. Books in these libraries were acquired according to readers' needs, since not all readers could afford buying every book they wanted to read. This required a more professional organisation, to systematically manage the libraries with basic services. As Murison put it:

A library is more than collection of books; if it is a collection of books it must have been made with some definite purpose and not just accumulated by some series of accidents. More often a library is a selection of books, the books having been chosen with some discernment according to the use to which the library is put. The existence

⁸In this context, it means being public in a way that it is truly open to all, not just to groups of people.

⁹Arenson, 'Libraries in Public before the Age of Public Libraries: Interpreting the Furnishings and Design of Atheneaeums and other Social Libraries, 1800-1860', pp. 41-60.

¹⁰Arenson, 'Libraries in Public before the Age of Public Libraries: Interpreting the Furnishings and Design of Atheneaeums and other Social Libraries, 1800-1860', p. 42.

of the books together does not automatically give them the status of a library.¹¹

In the nineteenth century, some of these 'reading rooms' developed into more open institutions and became accessible to a more varied group of people. This new type of library did not only become public in the sense of being a public place, but also because the gradually began to serve middle class people, men as well as women. The sense of privacy and privilege was gradually replaced with publicity and equality. The appearance of new groups of readers caused changes in the design. For instance, when the libraries became accessible to women, the furnishing were made to look more domestic, with fireplaces and comfortable sofas. Nevertheless, club libraries still continued to exist because they served a different target group.

A major turning point occurred around the middle of the nineteenth century when a movement for public libraries emerged in many countries. Even though the social libraries had become more public, they were still reserved for privileged people from the upper and middle classes. There was a growing need for real public libraries where everyone had equal rights to use of them. National governments took the matter into their hands and began to establish official public libraries all over their countries. The details and developments differ per country, but they all share some fundamental characteristics. In general, public libraries are funded by the government, but contributions can also be made by local government and sometimes libraries themselves have to raise money themselves. Despite receiving money from the government, public libraries usually operate under the aegis of a board which takes care of public interests. Library services and materials are accessible to all, although there are reasonable fees for special services and membership. Lastly, the services are voluntary. No one should be forced to use libraries or pay for special services if he does not want to. Generally, the mission of a public library is to provide materials and services to people, regardless their age, sexe and social or racial backgrounds, for their personal development. Furthermore, public libraries must support and promote reading habits and literacy skills for people throughout their lives through collection development, services and additional activities. Libraries should also uphold the awareness of local cultural heritage, while at the same time creating an inspiring environment to encourage recreation. Lastly, they should be places that connect people and strengthen the bonds of community.

Modern public libraries have developed and improved in many ways, thanks to advanced technologies and specialist knowledge. Libraries today are no longer book-dominated, because other mediums such as microfilm, CD, DVD and other electronic

¹¹W.J. Murison, *The Public Library: Its Origin, Purpose, and Significance* (London: Clive Bingley, 1988), p. 4.

platforms have become more important and the main focus of a library has shifted from collections to users. In the last decade, there has been a global trend of declining library use, which has led to many closures of library branches and a big cuts in library funding. In order to survive this crisis, public libraries have initiated massive changes in order to attract users to their services.

1.2 Public Libraries in the Dutch Context^{12 13}

In the Netherlands, the first call to establish public reading rooms was made in 1850, but national and local governments did not react to it. Only at the end of the century, public reading rooms were founded, but they were only for the working class. After that there a few more institutions were founded that functioned similarly to public libraries, but they were not successful due to the lack of funding and their inability to attract readers. Around the turn of the twentieth century, the concept of public libraries finally spread in the Netherlands following examples from the United States and the United Kingdom, and an important book on free public libraries written by Dr. E. Schultze. At last, public libraries were now established one after the other in main cities such as Groningen (1903), Leeuwarden (1905), The Hague (1906) and Rotterdam (1907).¹⁴ These early public libraries were managed separately by various organisations and church groups, before being united by Vereniging van Openbare Bibliotheken in 1908. The association, which is run by committees, was founded to promote the establishment, maintenance the status of public libraries, including setting strategies and giving advice to ensure that the libraries develop in the same direction. Today, the association is also responsible for marketing, branding and digital collection development of public libraries all over the country. Since 1970, when public libraries extended their branches and services to cover most provinces in order to distribute books and promote reading, acquisition, binding and other supply services have been centralised at Stichting Nederlandse Bibliotheek Dienst (NBD/Bibliion) following an agreement between the associations of publishers, booksellers and public libraries. By reducing the overlap, public libraries, especially small ones with few staff, can focus more on providing efficient services.

Despite the centralisation of work, the Dutch public libraries are not all under the same authority. The libraries are usually governed by associations of members, which elect library committees to manage the libraries within their own municipalities. The funding of public

¹²P. Schneiders, *Lezen voor Iedereen. Geschiedenis van de Openbare Bibliotheek in Nederland* (The Hague: NBLC, 1990).

¹³Murison, *The Public Library: Its Origin, Purpose, and Significance*, pp. 106-113.

¹⁴L. R. McColvin, *The Chance to Read: Public Libraries in the World Today* (London: Phoenix House Ltd, 1956), p. 106.

libraries is strongly related to the three governmental levels: national, provincial, and municipal. In the Public Libraries Act of 1975, it was stated that 'both the central government and the municipal and provincial authorities provide grants for public libraries under the conditions for central government grants for public libraries, commonly referred to as the central government grants conditions¹⁵, which were introduced in 1921.'¹⁶ Consequently, the four main sources of income of public libraries are grants from the three levels of government and members' subscriptions and fees, though children up to eighteen years are exempt from membership fees.

Nowadays public libraries have to strive hard to improve their services and user satisfaction because, in order to receive subsidies, the libraries must have a proper building, provide well-rounded collections, and employ trained librarians. However, the government grants are rather small and tend to decline even further, as can be seen in the massive budget cuts of 2010. For this reason libraries increasingly need to partially fund themselves, for instance through higher annual subscriptions, although these slightly reduce the use of the library by people who cannot afford the membership fee and it is in contradiction with the primary objective of the 'free' library. From statistics compiled since 1990s it can be observed that the use of Dutch public libraries has been declining because of the digital media revolution and changing information retrieving behaviour.¹⁷ In the face of these problems, many public libraries rely on the help and advice from related organisations.

Apart from the VOB, there are a few other organisations that take care of different tasks. In 2010, the Dutch Public Library Association was split into three library related organisations: 1. the Dutch Public Library Association (Vereniging Openbare Bibliotheken, VOB); 2. the Sector Institute for Public Libraries (Sector Instituut Openbare Bibliotheken, SIOB), which takes care of the overall integrated services, and the project organisation; and 3. Bibliotheek.nl, which administers public library digital services and infrastructure. Bibliotheek.nl also provides a professional national website and digital services for other public libraries. The libraries can make use of its apps and e-collections, as well as the collections of the Central Discotheek in Rotterdam, the National Library and the Digital Library for Dutch Literature, which are also accessible through this platform.

At the moment, Dutch public libraries have responded to the growing importance of lifelong learning. They aim to provide materials and services to support individual personal

¹⁵De Rijkssubsidievoorwaarden 1921 (RSV-1921)

¹⁶*The Public Libraries Act and the Library Council Act in the Netherlands* (The Hague : Ministry of Cultural Affairs, Recreation and Social Welfare and Dutch Centre for Public Libraries (NBLC), 1979), p. 5.

¹⁷ Huysmans and C. Hillebrink, *The Future of the Dutch Public Library: Ten Years on*, pp. 125-147.

development, which will give people access to better education and job opportunities. The libraries also cooperate with formal educational institutes to provide students with supplementary materials for their studies. This leads to libraries having to modernise their appearance in order to attract young users.

Regarding the design of a library, retail concepts have been applied to many libraries to ensure access to information and improve user experience. These concepts are an adaptation of the way in which retail businesses such as bookshops and department stores present their products. The new branch library in Zwolle was the first to use this concept and it proved to be successful with an increase in library visits and circulation. Other libraries also took up this concept and re-designed their existing buildings with advice from library associations. Some libraries were fortunate enough to construct new buildings which were designed with the concept in mind from the beginning. Some libraries, however, because of their specific contexts and tasks, decided not to use this approach. That they still were able to provide excellent services. Both types of the libraries were chosen for this study.

2. Field Research : Studying Selected Modern Libraries

2.1 Research context

In order to find the shared characteristics of modern libraries in the Netherlands in practice, a small-scale field research was conducted in three selected libraries. Even though this is a small number, a consequence of limited available time, these three libraries should represent their peers in a satisfactory manner. Apart from the main research question, which is discussed in the previous chapter, this study aims to explore some more specific questions, such as the following:

- Who are the users of the libraries?
- What are the users' motives for going to the library?
- What are their opinions on the library architecture?

Because this research focuses only on libraries with certain outstanding features, it does not include branch libraries but restricts itself to the central ones. Therefore, the word "central" will be left out in this work.

The three libraries chosen for this study are DOK (Delft), The Hague Public Library (The Hague) and The New Library (Almere). Information on their background is provided in the following sections.

2.1.1 DOK, Delft

The DOK (DiscOtake, Openbare Bibliotheek and the Kunstcentrum) Library Concept Centre is a small, yet interesting public library located in the historic centre of Delft. As the name implies, DOK is not just a library, but a combination between different kinds of cultural institutes. It is located on Cultuurplein (Culture Square), and fits in perfectly with the surrounding buildings. DOK is regarded by many people as the most modern library in the world and has attracted a great deal of attention after winning the 'Best Library of the Netherlands Award' in 2009.

As the public library of Delft, DOK aims to present a rich cultural view of the historic city, while engaging new technologies and new experimental projects. To accomplish this challenging goal, the Dutch architecture firm 'Dok Architecten'¹⁸ was assigned to design the exterior and 'aatvos', a dutch design studio, was responsible for the interior concept. The outcome of this collaboration is a four-storey building with an eye-catching glass facade, which is decorated with graphics of books, making the library look like a big bookshelf. Yet it

¹⁸There is no connection to the name of the library.

is transparent enough to let passer-by's see the activities inside the building.

DOK replaces the old public library of Delft, which had run out of space to store the growing collections and could no longer support the increasing number of users. So the city of Delft decided to use the 'Hoogovenpand' building as a new site because of its flexibility and accessible location, making it an ideal place to construct a library. The Hoogovenpand originally was an office building, apartment block and later a supermarket, before it was renovated into a building where DOK cohabitates with shops, restaurants, apartments and a bike storage area.

On the outside, the shell of the building has remained untouched. The architects retained the 1970s exterior of the building, with the exception of the new front. This has resulted in a modern looking library which harmoniously fits in with the neighbouring buildings. As Liesbeth van der Pol, the architect of this project, said: "The idea was to create a building that would fit in with the historical architecture of Delft, while showing the ultramodern functions of the media library."¹⁹ The inside of the building was, however, completely cleared out and a number of changes were made to the building's structure, including the removal of some walls and the ceiling on the ground floor to create more space and to provide an open atmosphere to the library lobby. In most areas, the walls and ceiling were left unpainted, revealing the main structure of the building in bare concrete, as part of the imagined industrial look. It is softened by the use of interior components such as innovative furniture, soothing colours, and the warm natural light that covers most parts of the library. According to Marijke Timmerhuis, advisor to the library's policy and project management at DOK, lighting was the first priority when the building was planned. Apart from the glass walls that are used on the facade, there is a huge glass roof in the heart of the building that allows natural light to illuminate the entire library.

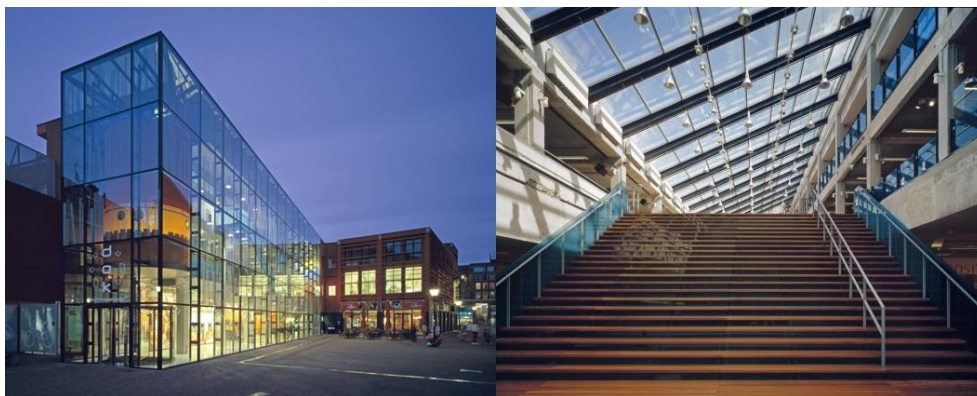


Figure1: The building and the atrium of DOK

<http://www.archdaily.com/266672/mediatheek-delft-dok-architecten>

¹⁹'Delft Media Library', *Architecture Week*, 28 January 2009

<http://www.architectureweek.com/2009/0128/design_1-2.html> (3 July 2014).

The library was opened to the public in 2006. At that moment, it was quite ahead of its time and received much positive feedback. Because DOK views itself not just as a library, but as an information community centre, it offers various creative materials and services to all visitors. DOK holds a wide variety of printed and digital collections such as books, magazines, newspapers, and films, as well as games, music and works of art that members can borrow. Besides presenting itself as a client-friendly place, DOK also tries to attract different groups of users by enthusiastically embracing new trends with the help of new technologies and exciting gadgets. Believing in the connection between gaming and learning, DOK provides Nintendo Wii and PlayStation consoles for use in the library and the service has clearly increased the number of teenagers visiting the library. For music lovers, there are I-pod chairs which give users an entirely new musical experience through built-in speakers and a big screen, as well as the U-tank that allows members to download Bluetooth content to their phones to listen to regardless of location. In addition, DOK also tries to connect people with other tools, such as a digital surface that can read information from library cards and use the data to add value to other services. With this technology, members can for example view pictures of their neighbourhood back in time, with descriptions. Thus people from different generations can be connected, such as an elderly person showing his grandchildren where he used to live while the kids can learn about the past. With all these unique services, DOK easily has become a place where people can truly enjoy themselves. As one of the staff members of DOK, Erik Boekesteijn²⁰, put it: 'When the people, the most important collection of the library, are happy, the library has a future.'

Because it is Dok's mission to be the most advanced library in the world, the librarians and staff are inspired to be creative and think beyond the library walls. The test-and-learn approach²¹ has been applied from the very beginning, for example by testing different kinds of chairs for use in the library. Nowadays, new ideas from the library staff and members are constantly encouraged and being tested to provide better services. The main project now is to digitize all of the library's paper and cd collections by 2015. The project is making steady progress; recently DOK has finished digitizing its entire music collection, making all of the music available digitally. The library can now use the space that was used to store CDs for other services and activities.

²⁰He works in the Science and Innovation department at DOK and founded Doklab, a concept development and design company that focuses on Storytelling Tools for Libraries, Archives and Museum.

²¹The practice of testing ideas in a small number of examples to predict an impact on bigger groups.

2.1.2 The Hague Public Library, The Hague

The new Central Public Library of The Hague is situated in the city hall complex in the Spui district of the old city. In the recent past this area had lost its economic and cultural importance, but re-development and renovation started in the first half of the 1980s when a Dance Theatre and the Anton Philips Concert Hall were built to bring more cultural activities to the neighbourhood, followed by the construction of the city hall and the library in 1995. At that time, the need was felt to centralise all the city's administration offices in one place, including the municipal archives and the former public library of The Hague on the Bilderdijkstraat. The new building occupies a central position at the busy junction of the Spui and Grote Marktstraat. This intersection divides the city centre into four parts: the shopping quarter, the national government quarter, the housing quarter and the office quarter.

The famous American architect Richard Meier designed the multifunctional building, which stands out because of its size and white look, hence its popular nickname 'Ijspaleis' (Ice Palace). Basically, the building consists of two long 'L' shapes that are joined together in the middle. The eight-floor library (only six floors are opened to visitors) is placed in a round form at the north-western corner facing the market across the street. The current design is the result of negotiations between the architect, who first wanted to create a conventional library, and the library staff, who wished

'an open and lively centre of information, preferably comparable to a cozy, busy department store. Such a library does not shut itself off from the city and the world around it, but actually tries to be a part of it. One can talk – though with moderation, of course – laugh and walk around. Whoever wants to concentrate undisturbed on his book, takes it home, or withdraws into one of the study cells.'²²

As a model Meier was shown the new and dynamic Central Library of Rotterdam, after which Meier made many changes to his original design, especially with regard to the ground floor. In the new plan, the ground floor looked animated with circulation desks, newspapers, magazines, and a library café. The locations of the collections were designed in order to attract people. Popular books such as novels and children's books are located on the second floor, while books about technology and science are on the highest floor. The interior was designed by Schulz Bibliothekstechnik, a German company specialized in library design. All floors have almost the same ground plan, with an information desk behind the escalators and tables and seating surrounding the book cases. The white metal furniture reflects the

²²F. Feddes, *The Cityhall and Library-Complex of Richard Meier in The Hague* (Rotterdam: NAI Uitgevers, 1995), p. 42.

characteristics of the building.

Although the absence of colour makes the building appear simple, modern and bright, it also has some downsides. The nickname 'Ice Palace' potentially harmed the library's image, which was countered in 2006 by a thorough renovation by aatvos, a design studio that had experience with transforming other libraries and did an interior design for DOK. Major changes were made to the ground floor, which is now filled with attractive book showcases, and the first floor, which is turned into a space for activities, including a professional radio and television studio.²³ On other floors, some of the old furniture was replaced by more colourful and comfortable chairs and book cases. Each floor now has its own colour theme which is related to 'the author' of that floor. It was a smart idea to make this low-budget change by attaching colour signs to both ends of the existing shelves and using wallpaper to lighten up the whole atmosphere of the library. According to John van der Linden, an expert on library architecture and interior design at The Hague Public Library, such renovations will occur once every ten years, if the budget suffices. The upcoming renewal will include new bookshelves with interesting geometric shapes in the children and young adults' area and new counters for library staff on every floor.



Figure 1 : The city hall-library complex, or "The white/ice palace".

Source : <http://www.accessibletravelnl.com/travel/Guided-tour-The-Hague.html>



Figure 2 : Examples of the 2006 renovation.

<http://www.aatvos.com/project/the-hague-city-library/>

<http://www.burikenburik.info/projecten/detail/bibliotheek-den-haag>

²³More information and picture of the renovation project can be found on aatvos's website: <<http://www.aatvos.com/>>.

The Hague Public Library has four basic functions within the community: Information, Education, Culture and Meeting. It presents itself as a centre of information and knowledge by providing both materials and space for studying. Extensive study facilities are available on every floor and free wifi bring students who want to study in a quiet atmosphere to the library. As to the educational aspect, many activities involving children's learning such as reading hours and story telling programmes are organised regularly to prepare children to become life-long learners. The library also supports events that aim to help people to understand other cultures in an enjoyable manner, such as comics contests. Lastly, the library functions as a meeting place for people, not only within the circle of regular users, but also potential new users. An example is the Oral History project, that invited elderly people to come to the library and share their recollections of the city when they were young. The project helps the library to capture lost knowledge of the past, while at the same time breaking the isolation and solitude of many elderly people.

When it comes to the collection, The Hague Public Library holds a massive amount of library materials on many subjects, both physically and digitally. As the library's emphasis was on education before changing its policy to include more general books, there are books in all levels of content, from highly technical works to books for pleasure. The highlight of the collection is the music sheet collection, which is the biggest one in the Netherlands. There also a near-by music practice room, where users can play the piano and other instruments.

Apart from its impressive collections, the library is also favoured because of its multinational character. The Hague is one of the most international cities in the Netherlands as it is the base of many foreign and international organisations, businesses, institutes and embassies. Out of approximately 500,000 residents, only half are Dutch; the other half are people from more than a hundred nationalities.²⁴ The library serves this multinational community by offering large foreign language collections, Dutch language learning materials and newspapers from all over the world available through various newspaper platforms in the library. In addition, the library frequently organizes literary reading groups, theatre performances, concerts and exhibitions. With these services, customers, regardless of their background, enjoy coming to the library.

In the future, The Hague Public Library aims to become a more virtual library and digital community. The availability of digital materials will be increased and more attention will be directed towards educating people in computer literacy. The library also plans to be

²⁴'International The Hague: Facts and Figures', The Hague, 9 May 2014: <<http://www.denhaag.nl/en/residents/to/International-The-Hague-facts-and-figures.htm>> (6 July 2014).

more internationally oriented and put greater emphasis on its social and cultural role in the community of The Hague.

2.1.3 The New Library, Almere

'De Nieuwe Bibliotheek' (The New Library) is the public library of Almere, the youngest city of the Netherlands, located in the Flevopolder, which was reclaimed from the sea in the 1950s. It has won many awards and was chosen the best library of the Netherlands by the Dutch library journal *Bibliotheekblad* in 2012.

Almere has existed for around three decades since the first house was built in 1976. In 1984 the city became a municipality. The idea of the new town was to relieve the fast growing population of Amsterdam and Utrecht. Almere has from the beginning been open to architectural innovation and experimentation. The fact that people have witnessed Almere's development and are part of its future is in fact part of the city's identity. To make the city planing explicit, in 1997 Rem Koolhaas of The Office for Metropolitan Architecture (OMA)²⁵ came up with his master plan for the city centre as a recreational and shopping centre. The heart of the city is intended as a meeting place for residents from the different residential areas of the city. Many cultural facilities were included in this plan, including the new library.

The old public library of Almere was built in 1976 not far from the location of the new library. It had served the people of Almere well until the day the collection grew too large and users began to complain. To design the new library, thorough user surveys were conducted to determine who the customers were and what they wanted. Eventually, the library drew up detailed 'Customer profiles' that played a major part in designing the new library. From this research, it seemed that different groups of users had different interests and different ways of using the library. At the same time, there were connections between the subjects that each type of users liked. Armed with this analysis, the library developed the idea of section planning, which shaped the present new library.

The new library was innovatively designed by Jereon van Schooten of Meyer & van Schooten to be an iconic place that represents the minds of the people in this city, which is one of Europe's fastest growing urban centres. The building can be seen from afar due to its grand scale, the modern black appearance and the triangular shape. It is built on a slope, according to Koolhaas's master plan of combining living, shopping, and parking space in the city centre. The ground level is a space for traffic and parking and above it there is a curved ground level area on a six-metre high slope. For this reason, the ground floor of Almere Public library is

²⁵A leading international partnership practicing architecture, urban planning, and cultural analysis led by six partners, including Rem Koolhaas.

composed of nothing more than a small empty area behind the entrance and an escalator leading to the lobby. The floor of the first floor is sloped upwards. As visitors walk across the floor, they will reach the second floor without realising. From that point on escalators are used for moving between the upper two floors. Even though most of the space in this building belongs to the library, there are a few shops on the ground floor and a complex of luxury apartments. The library benefits from this combination because most of the residents of the apartments are regular users, while the shops attract people and make the area look lively even before and after the library's closing time. The won the 'Architectuurprijs Almere' in 2010



Figure 3 : The building and the interior design of Almere public library

<http://www.contemporist.com/2010/11/18/almere-library-by-concrete-architectural-associates>

For the interior, the firm 'Concrete Architectural Associates' was appointed to overhaul the entire public space within the library. The design, which brought earned the architects the 'Lensvelt de Architect Interior award', is very unlike any standard library structure and looks rather more like a big department store with various specialised shops inside. The library has taken a commercial approach by regarding users as customers and adopting a retail concept such as is used by book stores and Ikea. Instead of using standard bookshelves cramped with books, custom made shelves of five different shapes are used to break the monotony of the rows of books. Books are presented in the same way as they are in book stores with their covers facing out, making it easy to read the titles. As staff member Marga Kleinenberg²⁶ puts it: 'The New Library derived a retail concept from non-library businesses so that people can navigate through stores and locate the titles they are looking for with ease, whereas they tend to be confused in traditional libraries.; In addition, she says, 'the old library survey suggested that 80% of the customers do not visit the library with a specific idea of what they want to lend and make their choices by browsing the collection'²⁷ For these reasons, books are no longer categorised by numbers, but by subject. Books on subjects that catch the attention of

²⁶A team manager of communication, events and development at Almere Public Library who oversaw the project.

²⁷M. Kleinenberg, 'Almere Library and the Retail Concept';

<<http://elsfutursdelabibliotecapublica.wordpress.com/documentacio/almere-kleinenberg>> (7 July 2014).

the same group of users are placed close to each other to create sections. For example, 'The High Tension' section consists of books about finance, computer science, management and sci-fi and thriller novels. It is the first section that can be seen from the lobby because the target group are male customers who are less patient than other groups. The section is strategically situated close to the circulation desks so that male customers can take the books they want and check them out in a short time. The rest of the section planning is also laid out according to the types of target groups. There are two types of customers: the 'run shopper' who wants to get what he/she wants as fast as possible, and the 'fun shopper' who enjoys leisurely browsing through bookshelves. However, the fact that the longer customers stay in the library, the more likely they will use library products and services is true for both groups. The library makes customers stay longer by providing comfortable seats and facilities such as free wifi, computers, printers, copying machines and a reading cafe where food and drink are served. A lot of money is also spent on training staff to turn the library into a place where people feel welcome. Staff are now more friendly and active than before, and they are easily distinguished from customers by their uniform.



Figure 4 : Books are presented in the same way as they are in book stores

<http://www.contemporist.com/2010/11/18/almere-library-by-concrete-architectural-associates>

Besides books on various subjects, the new library also has other lending mediums, namely CD, DVD, audiobooks, games, reading aids, e-books and e-readers. Newspapers and magazines in different languages are also available in the reading cafe. Digital collections are accessible through computers within the library and some of them are partially accessible from customers' homes through the use of a member account. On the top floor, there is a dynamic game and multimedia department which is controlled by 'the game master', a librarian who can give instructions and advice regarding the devices used. The new library also fulfills its role as a study place and a learning centre by providing a large study area as well as private study rooms which are extremely popular among students. In the future, more

students will come to study at the library because the library has entered into an agreement with nearby educational institutions that do not have their own libraries to host their learning materials for the students. Besides this cooperation, the library aims to serve as a community centre, by providing space for local events and allowing newly-wed couples to use the library as a photo-shoot location.

2.2 Research Method

The research consists of two parts: a check-list part and a user survey part.

2.2.1 A Check-list

To make the comparison between libraries more explicit, this research uses a check-list of user-related considerations with respect to the architectural design of the library. The check-list is mainly based on William W. Sannwald's book *Checklist of Library Building Design Considerations*²⁸ with some selections and adjustments to make it suit the context and purpose of this study. There are 146 questions in total that are divided into six main sections examining various aspects of library architecture, namely site, exterior, interior, section planning, materials handling and storage, and telecommunications, electrical and other equipments, with sub-topics in every section. The lists are organised in the form of questions that can be answered as YES, NO, or No Answer with a space for a note. (The form is provided in an appendix.) Data from this part was gathered on the spot by observing the libraries first-hand. In the case that the answers could not be obtained by observation, questions were posed to library staff members.

2.2.2 A user survey

To form a comprehensive, point of view, this section is designed to gather data from users, the receiving end of the result of the design. The library architecture satisfaction survey contains eleven qualitative and quantitative questions which are grouped into three sections. The first part is intended to establish general user profiles, the second part examines the user's purpose for using the library, and the last part asks for their opinion on the library building. Primary data was collected by conducting face-to-face interviews with fifteen sample users from each library.

Samples were selected by a random sampling method²⁹ and the brief interviews were conducted afterwards only with the user's consent. The interviews were done in a rather

²⁸W. W. Sannwald, *Checklist of Library Building Design Considerations* (USA: ALA Editions, 2008⁵).

²⁹Random sampling is a form of probability sampling. Each member of the population has an equal chance of being selected.

informal fashion with open ended questions to make users feel comfortable with sharing their opinion freely while the data collector wrote down the answers and took notes of interesting additional information. (The survey form is provided in an appendix.)

2.3 Findings

The findings from the three selected libraries are quite similar in some areas, yet different in others. They indicate some patterns which will be discussed further in the next chapter. In this section, the findings are presented as raw data without analysis, or with a little explanation where necessary.

2.3.1 Findings from the check-list part

- **Site**

- Location – All the libraries have excellent locations. They are close to the target community and situated in an area that is frequently visited by members of the community for their daily activities.

- Accessibility – All the libraries are easy to access because they can easily be reached via public transportation. All the locations are less than ten minutes walking distance from the city's central station. Bicycle access is strongly encouraged, but private vehicles are not because the parking lots are not a part of the library and require some fee.

- Size – All the libraries provide adequate space for the current needs and there is room for future expanding or remodelling.

- Environmental issues – One of the libraries' neighbouring facility causes occasional problem. (Fish smell from a weekly market next to the library reeks into the building and causes nuisance to the users.)

- **Exterior**

- Landscaping – The libraries have no or little control over their landscapes as the libraries do not own the surrounding land. However, the existing landscapes enhance the overall design of the buildings and they are visually satisfying.

- Building exterior – All of the buildings are aesthetically pleasing during both day and night, and they are constructed from easy to maintain materials. Sunlight, glare, and excessive ultraviolet radiation are controlled by architectural design and additional sunscreens. None of the outdoor walkway surfaces are slip-resistant.

- Signage – The answers are quite varied in this section. Two of the libraries have satisfying signs which are large, well-lit and clearly visible from passing cars, while the sign of one library does not stand out much because its colours blend in with the surrounding.

- Book return facilities – All the libraries have book return facilities, but none of them can be used during closing hours because they are all located inside the building.

- **Interior**

- Entrance – In all the libraries, circulation and information desks, online catalogue and shelves can be seen almost immediately from the entrance. Near the entrance there is space for public bulletin boards, display and pamphlet racks, announcements of library events and lobby seating. There appears to be a good traffic flow in the entrance area, but in one library it is a bit crowded by display shelves which are placed quite close to one another.

- Circulation desk facilities – In all the libraries, a circulation area is located close to the entrance and clearly visible and identifiable. Checkout queuing does not create obstacles or block the traffic flow for entering and leaving the building. The circulation desks have the appropriate height for adults, but none of the libraries have a special counter that would fit the height of children and people in a wheelchair. If there are computers on the desk, the screens are not fully visible to the customer.

- Reference facilities – None of the libraries have a separate reference desk. Reference services³⁰ are done at other desks with a specialised librarian in each section.

- Children's facilities – A children section in every library is physically and psychologically pleasant and inviting to children with the use of imaginative piece of furniture, cheerful colours, interesting geometric shapes, and graphic designs, while it is arranged in such a manner that adults are not reluctant to use it. There is comfortable seating for adults to share books with children. All of the shelves are lower than usual as they are scaled for children, yet only one library provides a separate children rest room in the children area which is scaled for children. Two of the libraries use furniture and equipment without sharp corner or edges. The areas all come with a lot of free space for activities or can be emptied by removing furniture without too much effort. In all cases, a children area is secluded from other parts of the library to lessen the noise which might disturb other users.

- Young adult facilities – The young adult section of all the libraries is located next to a children section and shares a seating area. However, the young adults area is usually

³⁰A definition of reference work according to the American Library Association (ALA): 'Reference Work includes reference transactions and other activities that involve the creation, management, and assessment of information or research resources, tools, and services. Creation and management of information resources includes the development and maintenance of research collections, research guides, catalogues, databases, web sites, search engines, etc., that patrons can use independently, in-house or remotely, to satisfy their information needs. Assessment activities include the measurement and evaluation of reference work, resources, and services.'

quieter and has more privacy. It is closer to the children section than to the adult section.

Reading materials in this area are mostly books that young adults need to read for their study and novels in the sci-fi, fantasy or chick-lit genres.

- Multimedia facilities – In all the libraries, the multimedia section has enough mediums for customers' needs. The use of media devices inside the area is possible without interference from external noise or disturbing other customers by making use of headphones.

- Special collection / Rare books / archives – The three libraries do not have any of these sections with special regulations.

- Meeting and seminar rooms – The use and accessibility of these facilities varies in each library. If the meeting and seminar rooms are available for public use, they are mostly used as multi-functional rooms for other activities and events and located far from the main entrance, usually on higher floors which are closed off from the rest of the library. The rooms' entrance areas are quite narrow, consequently they may not be able to handle the arrival and departure of large groups. The rooms themselves are equipped with necessary equipment and have control over lighting as the light from outside can be blocked to make the rooms dark enough for presentations.

- Convenience facilities – All the libraries have at least one rest room close to the entrance and other rest rooms in the building are easily identified. However, one library has only one rest room for the entire building and requires a small fee to use it. All the libraries provide public access for photocopiers, computers and printers with clear signs and instructions. Vending machines are commonly seen in the library close to the study area, while clocks are not always displayed in all major areas.

- Display cases – In all the libraries, display cases are located in high-traffic areas, especially the entrance area, and they make the overall environment more interesting. The display cases and shelves are suitable for displaying the libraries' products and services and greatly draw users' attention. On these displays shelves, library materials can be arranged in an attractive way to promote them.

- Public art³¹ – There are a number of public art works scattered all over the three libraries. They are usually made by local artists and are only temporarily on display before being replaced by other works of art.

- Interior signage – All the libraries have consistent signage in terms of shape, size, layout, type size, font size and placement throughout the building, with an effective

³¹Public art refers to works of art in any media that have been planned and executed with the specific intention of being displayed in or around the library.

writing style that conveys the intended information to customers correctly. Signs for important information such as regulations, warnings, instructions for self-service facilities and opening hours are well designed and easy to read because of their font, size, spacing, contrast and colours. An information board that identifies the main library services and products and their locations is usually placed close to the entrance.

- **Interior design and finishings**

- Service desks – In general, the types of service desks that can be seen in the libraries are information desks, circulation desks (which are equipped with self-service checkout machines), children desks (which are always lower than other kinds of desks), young adult desks (sometimes combined with the children desk) and media desks. A reserve desk and a reference desk are uncommon as the tasks can be done at other desks. These desks are located in a location which is clearly visible to customers in need of help; usually they are the first thing customers would see once they enter the respective area. All desks are ergonomically designed for both staff and customers to easily and safely use them and usually come with self-service features such as checkout machines, online catalogues and photocopiers. In two of the libraries, the desks look open and accessible, yet still protect staff from potentially aggressive customers. One library has big, round and secure counters, but these will be replaced with more open desks during the next renovation. Conversations can be conducted at the desk with some privacy, while noise from the desks rarely interrupts nearby space because they are not too close to shelves or seating areas.

- Seating – All three libraries have several types of seating which are suitable for different ages and purposes. The ratio of relaxing chairs and tasking chairs is different in each library. If the chairs are to be used with desks, they have no arms. As for lounge seating, there are chairs that can easily be moved and chairs that are heavy enough to prevent customers from casually rearranging them. All chairs look safe for use and they are placed in such a way that personal space is still maintained. People, especially elderly users, do not appear to have problems getting in and out of chairs.

- Tables – There are tables intended for different kinds of activities such as a small round tables for socialising, and rectangular tables for working and reading. The tables are sturdy and have a work surface material that is suitable for their intended use. However, study rooms for individual study are always crowded and not enough in number according to customers' opinions.

- Lighting – All libraries have excellent lighting. The light is sufficient for reading in all parts of the buildings and there are task lights which are appropriate for carrels,

workstations, desks, lobby areas and shelving areas. In shelving areas, the lights provide sufficient illumination even at the lowest stacks. Lighting is also used to highlight displaying cases and public art. Usually, a certain area of the library that is the main attraction has special lighting.

- **Windows** – All libraries have enough windows of different kinds. Glass walls are used in at least one side of building, especially on the lower floors on the side that faces a public space where people pass by. On the upper floors, some of the windows are placed at eye level, the outside view giving users an awareness of their surroundings which has a positive psychological effect. Too much sunlight is prevented because the windows can be shaded to prevent light from interfering with activities in the library and library materials are stored not too close to windows to protect them from direct sunlight which could cause paper deterioration. None of the libraries have operable windows that can be used in case of emergency, but this is not a problem as there are other proper emergency exits in the building.

- **Flooring** – All the libraries have different types of flooring in the buildings. In general, the floor-covering materials are chosen with regard to the convenience of maintenance. However, one library's main reading hall has wooden floors which is continuous from the main staircase. Dirt and stains can be spotted clearly on the floor because wood is harder to clean. In the areas that are covered with carpets, the carpets usually have dark colours to conceal soiling and resist fading. Carpets and resilient flooring are used in the areas where noise control is needed, such as the reading or study areas. Ceramic tiles are used on the rest room floors for their sanitary appearance and ease of maintenance.

- **Walls** – In all the libraries, the wall finishings are suitable for the rooms' function and usually have a neutral appearance. In some areas, special materials have been applied to make the environment more interesting.

- **Colour** – All the libraries pay a great deal of attention to the use of colours in view of their psychological effects on users and staff. In all cases, one or two colours have been selected as the main theme colour and other colours were added up later to identify different areas, usually related to the function of those areas. Even though colours vary in different areas, the colours of the book stacks as a rule are only black or white in order not to distract attention from library materials. Trendy colours have been avoided.

- **Materials handling and storage**

- **Shelving** – As all libraries have limited space, adding more shelves is not the best option to deal with the increasing amount of library materials. The libraries have

sufficient shelves to meet their current and future needs as long as they continue deselecting obsolete library materials. The shelves have the appropriate height and width for their intended use and have clear labels on both ends. As for the arrangement, all libraries have different shelving arrangement patterns. In one library, shelves are arranged in geometrical patterns, mostly with lines, squares and rectangular shapes, to act as partitions and create small squares to provide privacy to users. Another library has positioned its shelving in a sequentially parallel conventional pattern to let users easily locate materials. The third library has broken the monotony of shelving by using five different types of custom-made curved shelves that creates different patterns of arrangement. The shelves in every library are sturdy enough to bear the weight of library materials and are standardized in design and colour. However, sharp edges are not necessary absent except in children section. Throughout the three buildings, shelves are placed with sufficient space between one another for the sake of user flow and accessibility. Common features of the shelving systems are built-in lights, shelf dividers, movable book supports, range and shelf-label holders. All the shelves for periodicals have a space for displaying the current issues in the front and space for storing older issues at the back, which can be accessed by opening or tilting the shelf door.



Figure 5: The shelving at DOK (right), The Hague Public Library (middle), and Almere Puclic Library (left)

http://www.architectureweek.com/cgi-bin/awimage?dir=2009/0311&article=design_4-3

<http://www.contemporist.com/2010/11/18/almere-library-by-concrete-architectural-associates>

- **Telecommunication, electrical, and other equipment**

- Electrical power – In all libraries, there is sufficient power distribution throughout the entire building. Most of workstations and study carrels are equipped with sockets and the wiring is easily accessible. Cords and cables are usually protected and out of sight of users except in the library in place that has an industrial design concept. Some cables can be seen but they are out of reach of users. None of the libraries collect a fee for using electricity.

- Workstation equipment – It is common to find online public access catalogues (OPAC) and internet terminals on every workstation in all libraries.

- Miscellaneous electrical equipment – As computers now can play almost any

kind of multimedia, there is no need for separate video monitors, television monitors and audio players in the library. The media players are not controlled by library staff. None of the libraries have public access to cable television, local broadcast or teleconferencing and distance-learning facilities.

2.3.1 Findings from the survey part

2.3.1.1 DOK

- **Profile**

- Membership:

Member ³²	User ³³
9 (60%)	6 (40%)

- Gender:

Male	Female
8 (53.3%)	7 (46.7%)

- Age:

1-20 years old	21-60 years old	More than 60 years old
3 (20%)	10 (66.7%)	2 (13.3%)

- Visiting frequency:

Everyday	Once a week	2-3 times a week	Once a month	Less than once a month
-	3 (20%)	6 (40%)	4(26.7%)	2 (13.3%)

- Travelling time to the library:

5 Minutes	10 Minutes	15 Minutes	20 Minutes	More than 30 Mintes
7(46.7%)	4(26.7%)	1 (6.7%)	3 (20%)	-

³²'Member' refers to a library visitor who has subscribed for membership at the library and owns a library card.

³³'User' refers to a library visitor who does not have membership. Users can use most of the materials and services provided in the library, but they are not allowed to borrow materials.

- **Library use** (one person can choose multiple purposes)

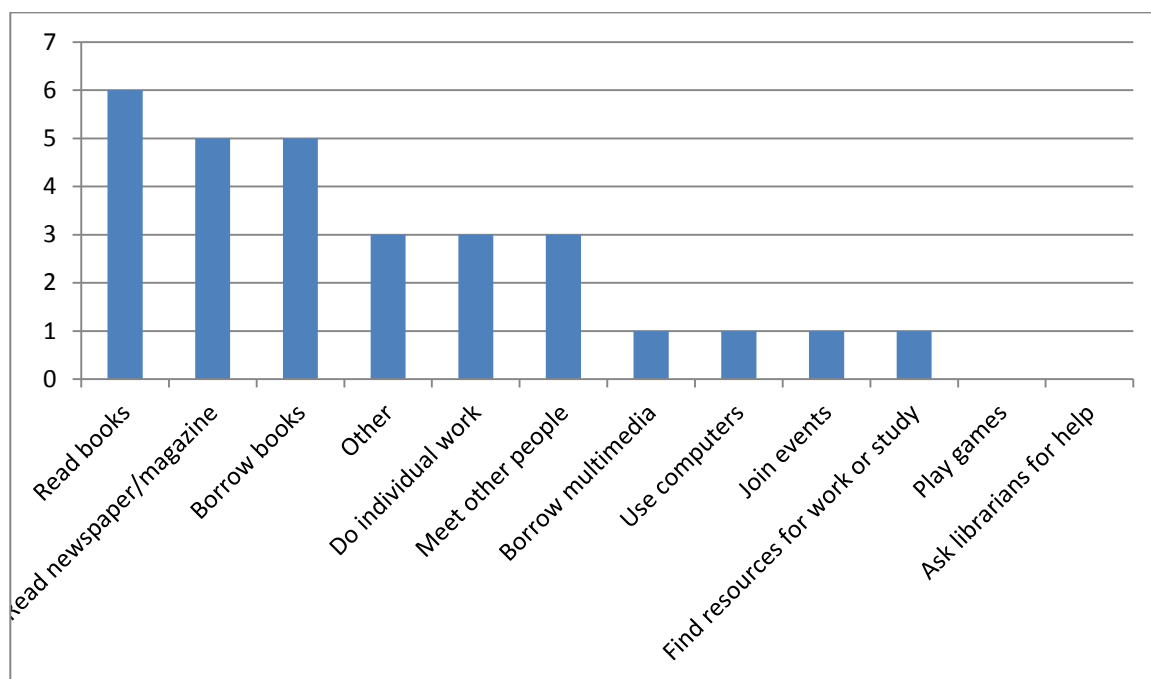


Figure 6: Reasons for coming to DOK.

- **Satisfaction level of the overall physical design of the library**

Very satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Very dissatisfied
9 (60%)	5 (33.3%)	1 (6.7%)	-	-

- **The extent to which the library's design is suitable for users' need**

Very suitable	Somewhat suitable	Neutral	Somewhat unsuitable	Very unsuitable
9 (60%)	6 (40%)	-	-	-

- Positive opinions about the library architecture.

- The lighting is terrific, especially in the main reading hall where plenty of natural light shines through the glass ceiling. The light in this area is suitable for working and reading, while the dim warm light in the other areas makes them more cosy.
- The atmosphere is lively and friendly.
- There are so many windows which make the library looks clear and open.
- The shelves are arranged in a way that makes many small square boxes. Reading in these boxes provides a greater sense of privacy.
- There is a lot of space.
- There is a lot of seating of different kinds for different purposes.
- Eating and drinking is allowed in every part of the library.
- The furniture is comfortable and interesting.

- There is a variety of library materials and services, especially in the children section.
- The library is not too quiet, with good background music from the media section.
- The colourful interior is appreciated more by female respondents.
- The industrial look is appreciated more by male respondents.
- Negative opinions about the library architecture.
 - The staircase that leads to the main reading hall is too big and long.
 - There is no slope on the stair case for a baby cart or wheelchair. (This respondent feels uncomfortable using the elevator.)
 - There is no place for breast feeding.
 - There are not enough comfortable chairs, especially the armchairs on the armchair/multifunctional platform, which are always taken.
 - The temperature can be too warm in summer.
 - Tables in the main reading hall are too large and have to be shared with other people, so the respondent cannot work in private.
 - The industrial look makes the building looks unfinished.
 - The wooden floor looks dirty.
- Suggestions for improving the physical design of the library:
 - Add a slope path on the main stair case.
 - Create more private space for studying.
 - Cover the wooden floor with carpet to reduce noise from walking.
 - Add a facility for suggesting new books.
 - Increase the font size of all the signs in the library for the sake of elderly people.
 - Add more comfortable chairs.
 - Use several small tables instead of a few big tables.

2.3.1.2 The Hague Public Library

- **Profile**

- Membership:

Member	User
4 (26.7%)	11 (73.3%)

- Gender:

Male	Female
7 (46.7%)	8 (53.3%)

- Age:

1-20 years old	21-60 years old	More than 60 years old
3 (20%)	9 (60%)	3 (20%)

- Visiting frequency:

Everyday	Once a week	2-3 times a week	Once a month	Less than once a month
5 (33.3%)	3 (20%)	6 (40%)	-	1 (6.7%)

- Travelling time to the library:

5 Minutes	10 Minutes	15 Minutes	20 Minutes	More than 30 Minutes
1 (6.7%)	6 (40%)	3 (20%)	3 (20%)	2 (13.3%)

- **Library use** (one person can choose multiple purposes)

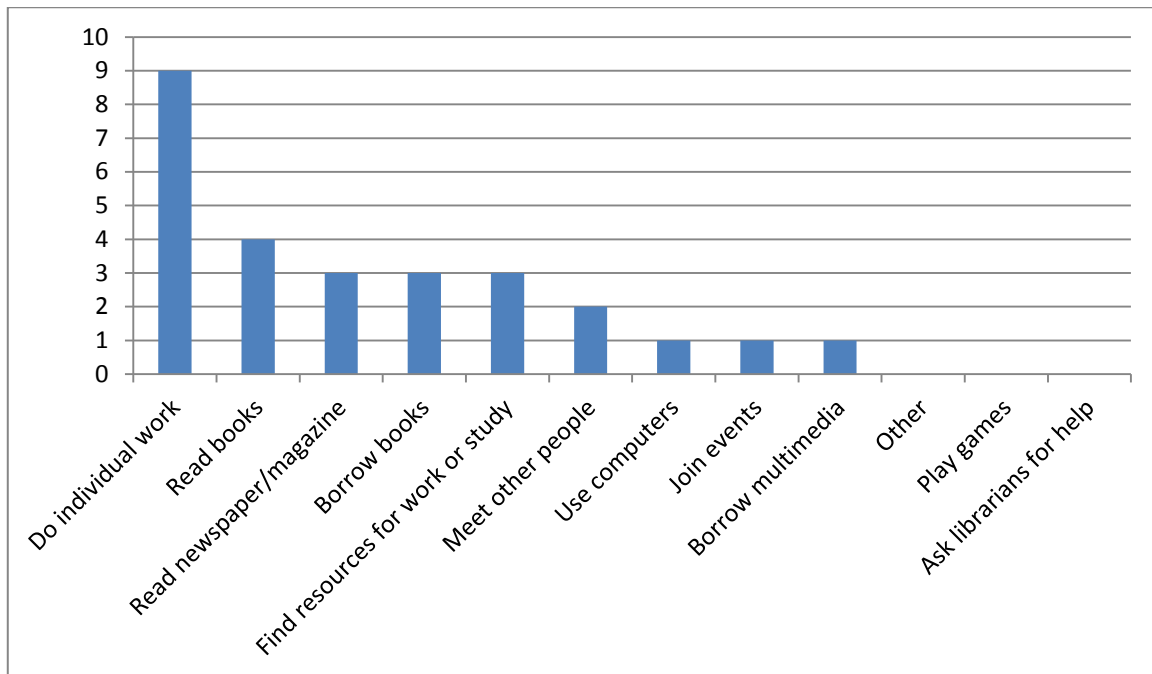


Figure 7: Reasons for coming to The Hague Public Library.

- **Satisfaction level of the overall physical design of the library**

Very satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Very dissatisfied
6 (40%)	7 (46.7%)	2 (13.3%)	-	-

- **The extent to which the library's design is suitable for users' need**

Very suitable	Somewhat suitable	Neutral	Somewhat unsuitable	Very unsuitable
7 (46.7%)	7 (46.7%)	1 (6.7%)	-	-

- Positive opinions about the library architecture.

- The lighting is good. There is sufficient light for reading, especially in the areas that are close to windows.
- There are many big windows.
- The atmosphere is bright and clear because of the white colour.
- The ground floor looks really welcoming.
- Most of the areas in the library are impressively quiet.
- There are many seats for doing individual work.
- There are different types of chairs to choose from.
- Escalators and elevators are useful for the elderly.
- There is a big space and professional sound equipment on the first floor to hold activities and events.
- The library looks more lively after the renovation in 2006.
- The design of the library and the rest of the building is harmonic.
- There are tables in different heights.
- The library is clean.

- Negative opinions about the library architecture.

- The number of restrooms is not enough for users. They can be cleaner and should be free.
- In the study area, chairs are placed quite close to one another at long tables, therefore there is little personal space.
- There are not enough relax chairs such as armchairs and sofas.
- The relax chairs in the magazine area are not comfortable for elderly people because the back of the chairs is too low and hurts one's back.
- It is hard to navigate through shelves and locate the desired books.
- Noise is amplified by of the design.
- The overuse of white colour is monotonous.
- The building is designed by foreign architects and it does not represent the city as much as it represents the architects' style.
- The use of space in the library is ineffective.

- Suggestions for improving the physical design of the library :
 - Add more private study spaces.
 - Add more free toilets on every floor or every other floor.
 - Divide library space into various smaller areas to control noise.
 - The counters should be designed in a way that makes people feel more comfortable to ask for assistance from staff; staff members should go with users through the shelves when helping them find materials.

2.3.1.3 The New Library, Almere

- **Profile**

- Membership:

Member	User
9 (60%)	6 (40%)

- Gender:

Male	Female
6 (40%)	9 (60%)

- Age:

1-20 years old	21-60 years old	More than 60 years old
4 (26.7%)	9 (60%)	2 (13.3%)

- Visiting frequency:

Everyday	Once a week	2-3 times a week	Once a month	Less than once a month
4 (26.7%)	5 (33.3%)	4 (26.7%)	2 (13.3%)	-

- Travelling time to the library:

5 Minutes	10 Minutes	15 Minutes	20 Minutes	More than 30 Mintes
3 (20%)	11 (73.3%)	3 (20%)	2 (13.3%)	-

- **Library use** (one person can choose multiple purposes)

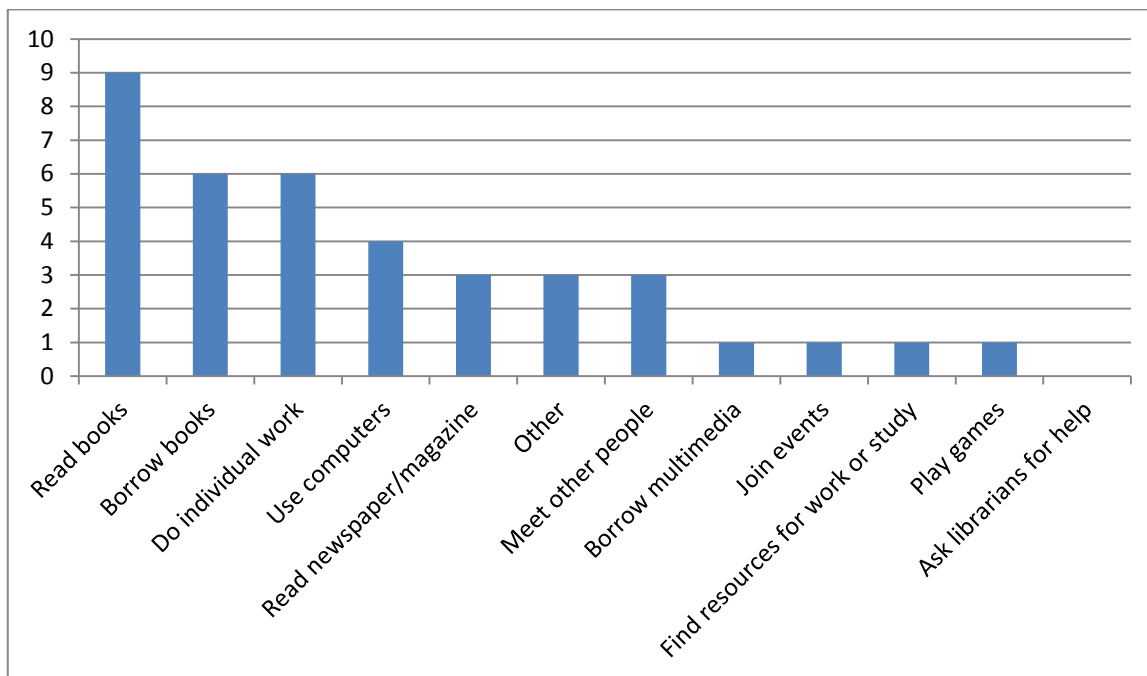


Figure 8: Reasons for coming to The New Library, Almere.

- **Satisfaction level of the overall physical design of the library**

Very satisfied	Somewhat satisfied	Neutral	Somewhat dissatisfied	Very dissatisfied
14 (93.3%)	1 (6.7%)	-	-	-

- **The extent to which the library's design is suitable for users' need**

Very suitable	Somewhat suitable	Neutral	Somewhat unsuitable	Very unsuitable
13 (86.7%)	2 (13.3%)	-	-	-

- Positive opinions about the library architecture.
 - There are many choices of comfortable seating.
 - The library has a great view of Almere.
 - There is a lot of space.
 - The section plan is good, especially in the way the living section is placed close to the children section, allowing parents to read while watching over their children.
 - The library is located close to other important places in the city.
 - The library reflects the city of Almere with its vitality and new opportunities.
 - The library has a sense of openness, modernity and creativity.
 - The library is a 'sociable place'.
 - The design and furniture are safe for children.
 - There is sufficient natural light for reading.

- The sound from the piano in the lobby is soothing.
- Negative opinions about the library architecture.
 - Computers are dirty at the end of the day.
 - Noises from other areas can travel quite far through the building, causing disturbance to other users.
 - The café is quite distant and secluded from other parts of the library.
 - There are not enough coffee table for reading newspapers. (The respondent was found sitting on the lowest row of a shelf, reading a newspaper which was put on the ground.)
 - In the afternoon, it is hard to find an empty seat with a desk.
 - The graphics of the library name on the glass wall blocks the view of the scenery.
 - The names of the sections do not give a clear idea about the materials they contain.
- Suggestions for improving the physical design of the library :
 - Add more individual study facilities.
 - Create a small café on the first floor for people who want to read while drinking coffee.
 - Add more coffee tables or tables that are large enough for reading newspapers.

2.3.1.4 Field Research Conclusion

In this section, the data gathered from the survey is shown in statistical bar chart. Please note that it represents only the results of this study and can not be used to draw a generalised conclusion due to the limited number of respondents. In order to get more accurate information, further research is needed.

- **Profile**

- Membership:

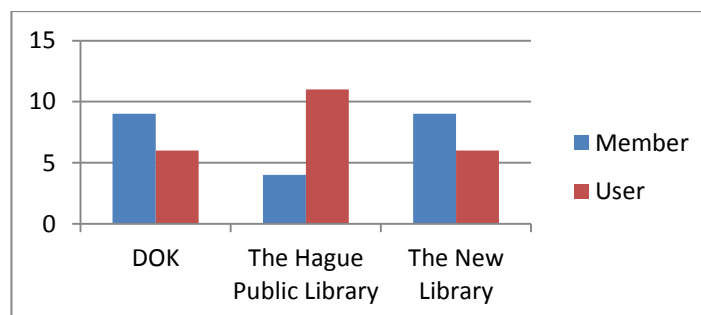


Figure 9: Diagram showing the ratio of memberships in each library.

The diagram shows that DOK and The New Library in Almere share the same ratio of membership. Both libraries have a slightly larger number of members than users respondents, while The Hague Public Library's number of users is almost twice that of its members.

- Gender:

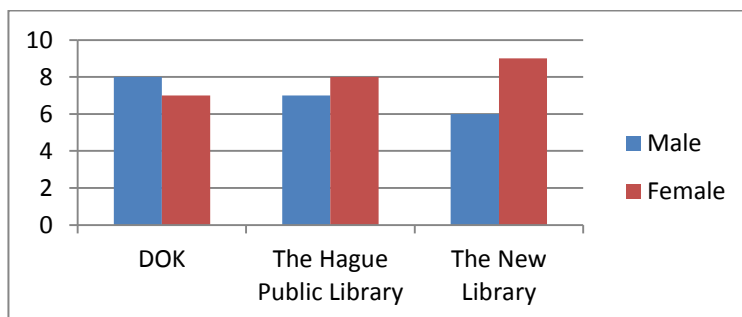


Figure 10: Diagram showing the ratio of genders in each library.

All libraries do not show much difference in the ratio of visitors' gender.

- Age:

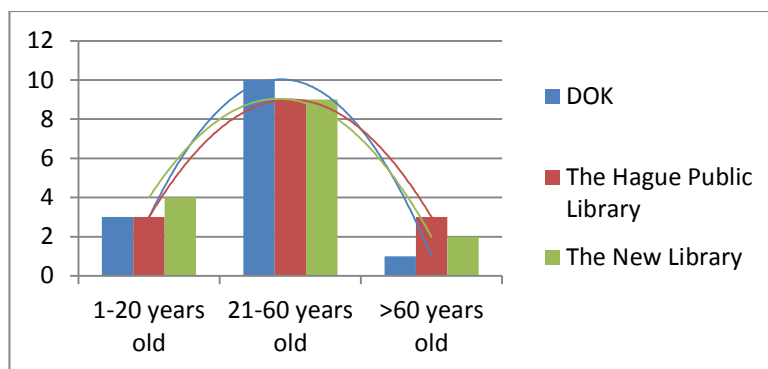


Figure 11: Diagram showing trends in visitor's age in each library.

The age ratio of users of all three libraries shows the same pattern. The age group that visits the libraries most is the group of people from age 21 to 60 followed by the group of people who are less than 21 years old (less than a half of the first group). Elderly visitors aged over 60 years constitute the smallest group of people who visit the library.

- Visiting frequency:

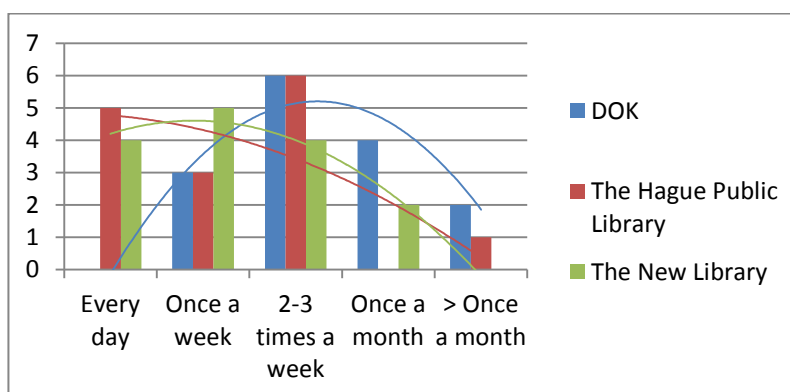


Figure 12: Diagram showing trends in the visiting frequency in each library.

Overall, The Hague Public Library and The New Library, Almere show relatively similar trends on how often their visitors come to the libraries; the cluster ranges from every day to two to three times per week. The highest frequency of The Hague Public Library is two to three times per week, while the peak frequency of The New Library, Almere is one time per week. Only DOK shows a different pattern. Even though DOK's highest frequency is two to three times per week, like The Hague Public Library, none of its respondents visit the library every day and they tend to visit the library less often than visitors in other libraries.

- Travelling time to the library³⁴:

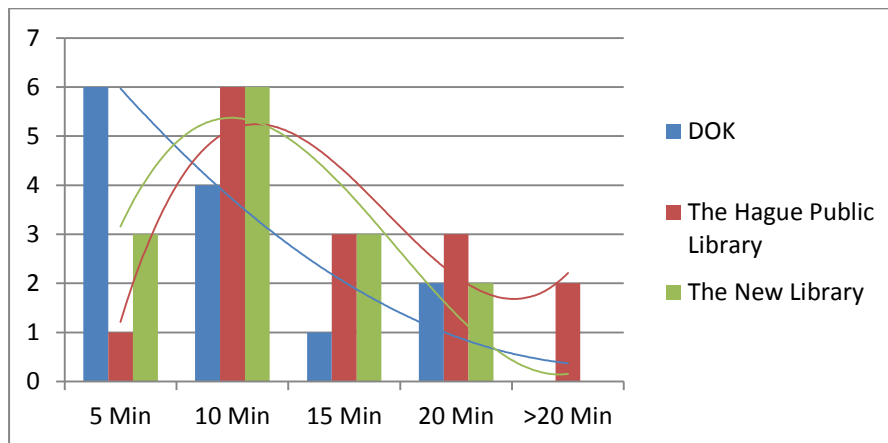


Figure 13: Diagram showing trends of travelling time in each library.

Again, The Hague Public Library and The New Library still share almost the same pattern. Both libraries are ten minutes away for most of the respondents. However, DOK has a significantly higher number of respondents who can reach the library within just five minutes. When it comes to travelling time to the library, DOK takes the least amount of time, followed by The New Library, Almere and The Hague Public Library, respectively.

³⁴In this study, only the amount of time it takes responders to travel from home to the library is considered. The method of travelling (walking, cycling, various forms of public transport) are not counted.

- **Library use**

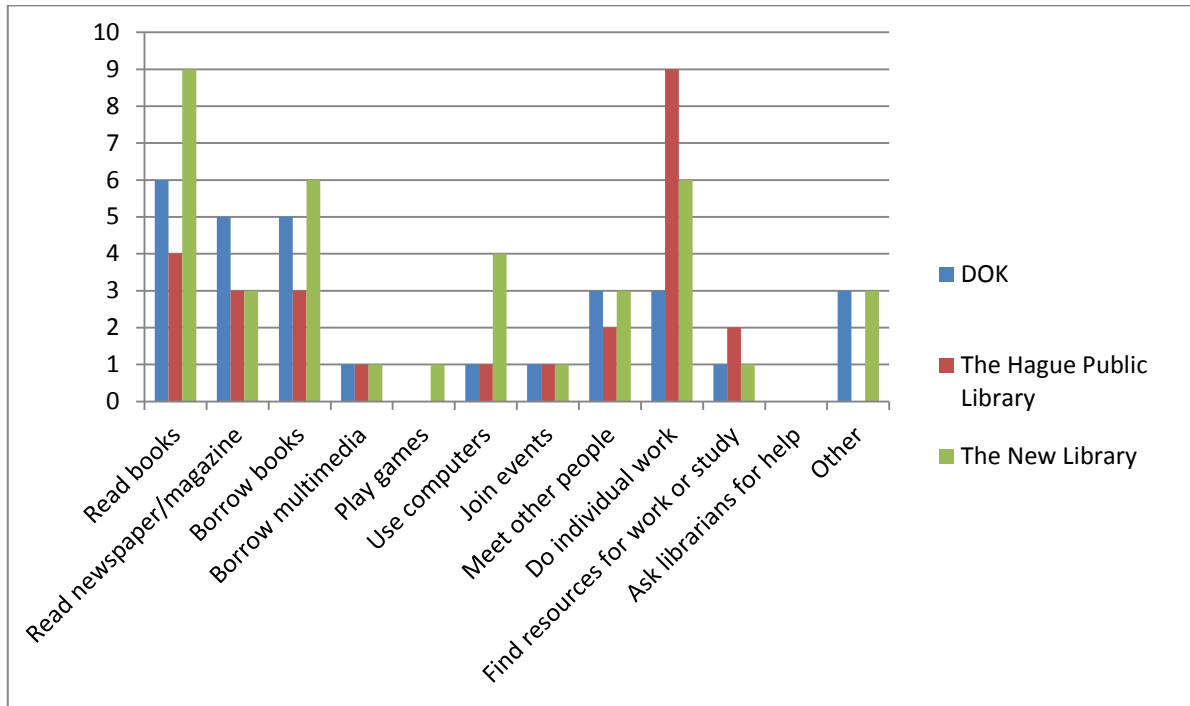


Figure 14: Diagram showing a comparison of reasons for coming to the libraries.

On the whole, ‘Read books’, ‘Read newspapers/magazines’, ‘Borrow books’ and ‘Do individual work’ are the main reasons of visitors who come to the libraries. There are a number of interesting data that can be seen in this chart. First of all, while the majority of respondents of DOK and The New Library visit the libraries to read books, most of the respondents of The Hague Public Library go to the library to do individual work, mainly study and homework. Among that number, there are a few respondents who stated that they come to the library only for a quiet space for doing individual work and they have never used any of the library’s materials or services and do not plan to do so in the future. Secondly, out of 45 respondents, none are familiar with asking for an assistance from librarians and feel uncomfortable to do so. Thirdly, respondents from The New Library show a slightly larger interest in using computers in the library. Lastly, there are six respondents from DOK and The New Library who gave the exactly the same answers about their reason for coming to the libraries, which are accompanying their young children to the children section, reading books and meeting other people.

- **Satisfaction level of the overall physical design of the library**

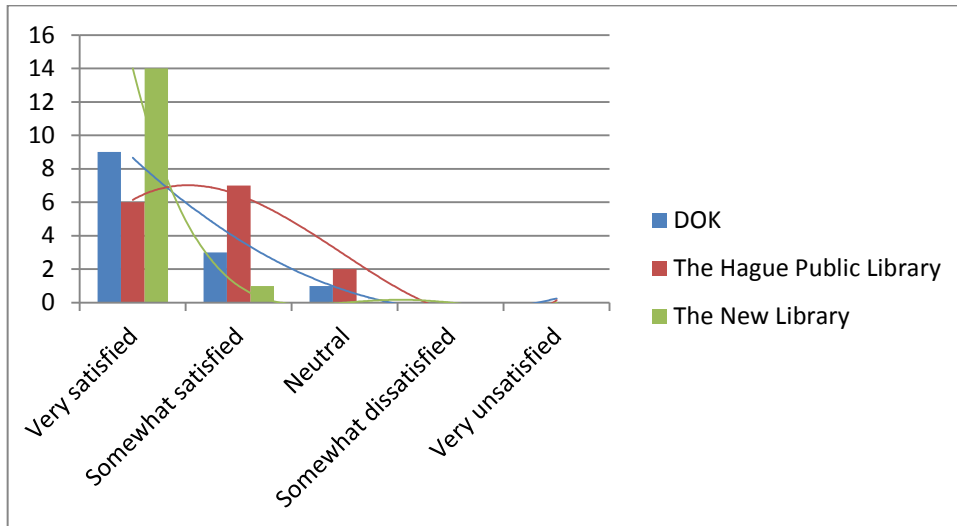


Figure 15: Diagram showing the satisfaction level of the overall physical design of the libraries.

When asked to what extent one was pleased with the overall physical design of the library, none of the respondents said that he or she was dissatisfied. The trends in satisfaction level of the overall physical design of DOK and The Hague Public Library are somewhat similar, except that the majority of DOK respondents are very satisfied, while the majority of The Hague Public Library respondents are also pleased with the design but on a slightly lower level. The remarkable data from this diagram is the satisfaction level of the overall physical design of The New Library. Fourteen out of fifteen respondents stated that they are very satisfied and there was no one who felt neutral or dissatisfied with the design.

- **The extent of how the library design is suitable for users' needs**

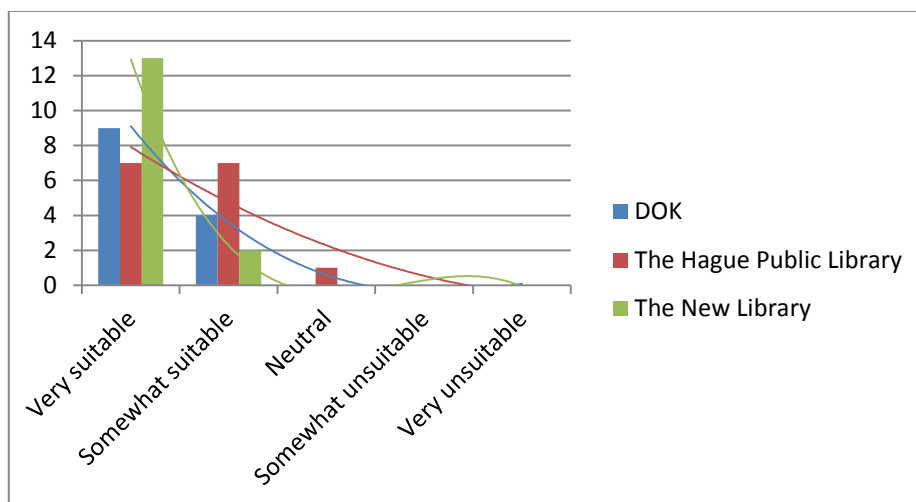


Figure 16 Diagram showing the extent to which the library designs are suitable to users' needs.

The trends of libraries' suitability to the needs of users shows a connection with the trends of the satisfaction level of the overall physical design of the libraries that was mentioned above. DOK and The Hague Public Library's trends are still relatively close to each other, with a slightly different curve as The Hague Public Library scores the same number in 'Very suitable' and 'Somewhat suitable'. The New Library, Almere still has the highest rate of suitability with thirteen responses for 'Very suitable' and two responses for 'Somewhat suitable'.

3. Trends in Modern Library Building in The Netherlands

3.1 Early Planning of the New Library

3.1.1 The Building Team

Because libraries nowadays take up new functions and have become more complex than before, the planning of a new library requires interdisciplinary knowledge as well as cooperation between library science and architecture. Library staff is responsible for clearly defining and conveying the desired concept, purpose and functionality, while architects and designers work to make sure that those conditions will be met on a realistic basis. In most cases, the building team mainly consists of permanent members such as the library manager, librarians, architects and interior designers. Specialists and consultants can be included in the team but they may not be involved in the whole process. In the traditional approach, the process usually starts off with letting an architect and a specialist first work together on the architectural aspects, while the furnishing is done at a later stage. In the new approach, all parties involved are included in the team from the beginning and actively participate in assessing the decisions made during the planning phase. Library staff are encouraged to take part in the process as much as possible because they are the best building consultant. As they have first-hand experience with working in a library, their opinions and ideas are practical and offer more insight than those of outsiders. Perhaps the best example of this can be seen in the planning of The Hague Public Library. As mentioned in the previous chapter, the American architect Richard Meier redesigned the library after receiving a more detailed explanation from the library manager. He also took part in the interior design process, which was given to a different interior design firm, by choosing the furniture, thus ensuring it fitted his design. This cooperation resulted in a library with consistent design on the inside and outside.

3.1.2 Choice of Building

Once the building team is formed, a decision must be made regarding the location of the new library. Apart from selecting a site close to the target community with high accessibility, a decision has to be made between constructing a new building or adapting an existing one. There are pros and cons to both choices which also depend on other important factors such as location, accessibility, budget and library concept, so it is vital for the team to carefully weigh the advantages and disadvantages of each choice before making a decision.

Constructing a new library from scratch allows the team to design more freely as the building will be based on the intended functionalities, but it usually requires a greater budget

and more time to finish the project. On the other hand, adapting an existing building tends to cost less, yet it comes with some limitations as it was not originally built for the desired purpose and functionality. According to Wim Renes and L.B. Rook's study³⁵ on furnishing and decoration of adapted buildings, both types of new libraries, new buildings and renovations, were equally used in public library building projects in The Netherlands from 1980 to 1984. From their statistics, it can be concluded that a newly constructed building will be less popular over time, while an adaptation of an existing will be accepted more, especially in branch libraries.

The field research conducted for this study reveals some noticeable differences between these two types. Overall, The Hague Public Library and The New Library, Almere that were originally built for library purposes, are more harmonious in their overall design and give a sense of unity. For example, The Hague Public Library is consistent in its use of white colour and modern looks in the same way that The New Library includes round shaped designs in most of its features, such as curved chairs, shelves, counters, rugs, even in the graphics in the library and on the website, to maintain its concept. On the contrary, even though the architecture of DOK library in Delft is beautifully done, there are some areas where the old and new features do not blend, according to visitors' opinions.



Figure 17: DOK's industrial look

<https://www.flickr.com/photos/dokdelft/2363242349/>

As Godfrey Thompson states in his book on library architecture³⁶, 'The business of converting an old library to a new, or using some other form of building as a library has been going on for at least a hundred years, but it has received far less critical attention than the creation of new library buildings.' It is indeed tricky to combine the old and new aspects

³⁵W. Renes, and L.B. Rook, 'Furnishing and Decoration of Adapted Buildings', in M. Dewe, *Adaptation of Buildings to Library Use* (Munich etc.: Saur, 1987), pp. 105-133.

³⁶G. Thompson, *Planning and Design of Library Buildings* (London: Architectural Press, 1973).

seamlessly while still maintaining the distinction between the two. When specifically asked about the library architecture, a few respondents from DOK mentioned that the ground floor looks unfinished because the ceiling and upper half of the walls are left unpainted and some cables can still be seen hanging. In other words, the industrial and modern looks are both good by themselves, but when used together, a proper bridging between the two styles is needed.

3.1.3 Consulting Guidelines, Standards and Checklists

Even though there are many library guidelines and standards available from various library associations, in the three cases studied here, guidelines and standards were barely used during the planning phase, and none of the libraries used the *Checklist of Library Design Consideration* that was used to create the research tool in this thesis. The plan and design were mainly based on detailed user studies conducted by the libraries themselves. Libraries give higher priority to user studies than to the opinions of their staff or guidelines because if they would still follow the old practices, they would be more likely to end up with the same old things. User studies give libraries new perspectives and realistic data, which is essential for the entire design process. After all, the library's success mainly depends on the user experience, thus user opinion should be taken into serious consideration from the early stages of library design.

3.2 User Relations

As the most important mind-set for the library has changed from 'preservation' to 'communication', the main driving force also shifted from librarians to users and this caused several changes. To connect with their users more, most libraries changed the terms they used to refer to users to other words with positive meaning. According to an online poll on the *Library Journal* main web page³⁷, library staff prefer to refer to people who use the library as 'patrons', 'customers', 'users', 'readers', 'members' and 'clients' respectively. On the contrary, R. David Lankes asked listeners about this topic in a podcast and found out that more than half of the respondents preferred the term 'member' over other words.³⁸ The choice of words is more delicate than it seems because words often have subtle meanings. 'User' is the term used in library science. It is librarian jargon and does not sound natural in real communities.

³⁷The result of the poll can no longer be accessed through the *Library Journal* website, but there is a blog post providing some information and a screen caption of the poll. The blog post can be accessed through: <<http://stephenslighthouse.com/2008/07/26/what-to-call-library-user-communities/>>.

³⁸R. David Lankes, 'Members not Patrons or Users', *The Atlas of New Librarianship*, 2011, <http://www.newlibrarianship.org/wordpress/?page_id=1052> (16 July 2014).

Furthermore, it implies a concept of 'being used' which can cause negative feelings. 'Patrons', 'Customer' and 'Client' are more business-oriented and sound like there is money involved. As for 'reader', the word is too limited since a modern library provides many kinds of materials and services. Among all the words, 'member' has the most positive meaning as it is related to a concept of belonging to a community, however, if the word is to be used, a library must find a way to distinguish 'members' who actually subscribe to a membership and those who do not. In the three cases discussed here, people who use the libraries are called 'customers' or 'visitors', partially to conform with the non-library concepts that are adapted to improve library services.

3.3 Library Function

In the publication *The Future of the Dutch Public Library: Ten Years On*³⁹ that came out in 2008, the future roles and functions of the Dutch public library were predicted on the basis of the circumstances and goals at that time. Since then, six years have passed and so far, Dutch public libraries have indeed been heading towards the goals they are trying to achieve. According to a document issued by VOB) entitled 'Guideline for Basic Libraries'⁴⁰, the five core functions of public libraries are: provision of knowledge and information, education, culture, reading and literature, and meeting and debate. These functions have a great deal of influence on the design of the library building and its services.

3.3.1 Provision of Knowledge and Information: The Library as a Storehouse of Knowledge and Information

Among the five core functions, this one is of the greatest concerns. Because of the rise of the internet as the main source of information for new generations, libraries are slowly losing their place as a provider of information. For this reason libraries must adapt themselves to the new information retrieving behaviours. As people slowly become familiar with conveniently getting answers on-line, instead of seeing the internet as an enemy, libraries see it as an opportunity and use the internet to add value to their existing services. A library's role in knowledge has shifted from 'an information holder' to 'an information portal', which means owning and keeping knowledge in a library is less important than providing access to knowledge to members. However, libraries have to filter those outside sources to ensure its role as a reliable source of knowledge. Another development is that, in general, libraries have

³⁹Huysmans and C. Hillebrink, *The Future of the Dutch Public Library: Ten Years On*, pp. 41-42.

⁴⁰'Richtlijn voor basisbibliotheken', *Vereniging Openbare Bibliotheken*, December 2005

<http://www.debibliotheken.nl/fileadmin/documenten/2005_richtlijn-voor-basisbibliotheken_vob_vng.pdf> (20 July 2014).

been providing knowledge to their community in the form of the circulation of materials, consultation and answering questions. What used to be a one-way relationship where libraries are 'providers' and users are 'receivers', there has been a gradual move towards a two-way relationship where users also participate in creating knowledge and give it back to the libraries. In most cases, libraries act as a means to collect 'stories' from locals on specific topics, usually a history of their community, and then convert and preserve it on a medium, which will be added to the existing collections. This creates a circle of knowledge reproduction where knowledge is used to create more knowledge, which will benefit the community as a whole. Because of this, modern library buildings tend to be more involved with technology and have an advanced infrastructure for ICT (Information and Communication Technology).

3.3.2 Education: The library as a Centre for Development and Education

A library is one of the foundations for life-long education for people of all ages. Besides providing materials and facilities such as study areas and multimedia that support students and people that are engaged in self-study, libraries also offer courses or workshops in information skills⁴¹ and other related skills. Some groups of users, especially elderly people, express a need to acquire such skills and it is the role of the library to help them because information literacy, according to the Alexandria proclamation of 2005,

... empowers people in all walks of life to seek, evaluate, use, and create information effectively to achieve their personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes social inclusion of all nations.⁴²

Many modern public libraries establish collaborations with other educational institutions, especially if they have tight budgets to develop their own collections. For these reasons, the design of a modern library should include considerable space and facilities for educational purposes in order to support the growing need for such a service.

3.3.3 Culture: The Library as an Encyclopaedia of Art and Culture

Because of the importance of the public library's mission to promote culture, libraries organise many services and activities to achieve that goal. It is common for public libraries to have a space to exhibit the work of local artists and cultural heritage objects, or host a cultural

⁴¹Information literacy is defined by The National Forum on Information Literacy (NFIL) as the ability to know when there is a need for information, to be able to identify, locate, evaluate, and effectively use that information for the issue or problem at hand.

⁴²'International definitions'. *Information Literacy*, <<http://www.informationliteracy.org.uk/information-literacy-definitions/definitions-of-il/>> (20 July 2014).

event, in order to provide access to cultural expression. People who visit a cultural event at a library could be potential users. Sometimes, libraries collaborate with other cultural institutes such as art galleries, museums and exhibition centres by giving information about cultural events held in those places. It is usually done by designating a location for selected brochures or posters in the library lobby. Therefore, modern public libraries usually have a space that is specifically designed to be able to hold events and activities, however, in most cases the space is multi-functional and can be used for other purposes as well.

3.3.4 Reading and Literature: The Library as a Source of Inspiration for Reading and Literature

Public libraries in the Netherlands promote reading and literacy for all age groups by providing suitable materials for each of them. The reading materials are selected to match the needs of the local population according to their age. Children are exempted from membership fees to develop a good reading behaviour and there are books with large font size for elderly people, thus making it possible for them to continue reading despite of their deteriorating eye sight. In addition, various activities to promote reading are regularly organised, mainly for young audiences. The one service that can be used to measure the success of this policy is borrowing. However, book borrowing in public libraries has been declining since the early 1990s. One of the reasons is the competition between libraries and bookstores to be book providers. One research points out that large inexpensive bookstores to some extent reduce the household use of public libraries, especially in medium-income families.⁴³ Even though libraries have a wider range of titles and a lower turnover rate, they can not provide new titles as fast as the bookstores due to cataloguing processes. People with medium-incomes have a lot of influence on decisions on library funding because they are the primary voting group. Therefore, libraries have started to adopt some of the practices of bookstores and other non-library businesses to increase the use of library materials. This has resulted in new, more interesting interior design, shelving arrangements similar to those used in bookstores, better marketing, and fewer restrictions.

3.3.5 Meeting and Debate: The Library as a Podium for Meeting and Debate

The present situation in meeting and debating functionalities of Dutch public libraries is still unclear because it is difficult to analyse without sufficient information. VOB has records showing the increase of visitors each year, but there is no evidence of how this statistic can

⁴³J. A. Hemmeter, 'Household Use of Public Libraries and Large Bookstores', *Library & Information Science Research*, 28 (2006), pp. 595-616.

relate to conversations and debates. Perhaps this function should be discussed by looking at other studies on the same subject. In one research⁴⁴, surveys were conducted in four townships in Norway to find out how public libraries function as meeting places and who uses that function. The research group designed a questionnaire and had a professional survey organization conduct the survey. After a systematic analysis, the findings were detailed and interesting. It was found that public libraries are used for several types of meetings which can be roughly grouped as low-intensity and high-intensity meetings. A low-intensity meeting includes accidental meetings with friends and neighbours, engaging in conversations with strangers, using a library as a meeting point before going somewhere else, and being exposed to other people. A high-intensity meeting covers the use of the library space as a public sphere such as joining meetings with famous people, carrying out joint activities such as working on an assignment together with friends, classmates or colleagues, using the library to find out about activities in the community, and virtual meetings. Each type of meeting is popular among different types of people. The overall conclusion is that people with lower incomes, young people and immigrants use the library as a meeting place more than people with high incomes, people who are older and natives. This is supported by another Norwegian? research about immigrant women and their use of a library as a meeting place.⁴⁵ According to this study, a library acts as a bridge between immigrants' culture of origin and the new country's culture. It offers a safe place where immigrants can gradually move from observing the new culture to participating in it. In the Netherlands, though there is no recent research on this topic, people appear to be using the library as a meeting place to some extent. From observations made during the field research, it seems that people who are of non-Dutch origin meet and socialise at the libraries more than the natives. When interviewed, they said that they come to the library regularly to socialise and learn more about the Dutch language and culture. However, drastic financial cuts have caused a reduction of staff which has reduced opening hours. This also limited the opportunities for people to meet in the library and made it more difficult to organise events on weekday evenings. In conclusion, it can be argued that the meeting place function drives the library as a form of social capital, as defined by The World Bank:

social capital refers to the institutions, relationships, and norms that shape the quality and quantity of a society's social interactions. Increasing evidence shows that social

⁴⁴S. Aabø, R. Audunson and A. Vårheimb, 'How Do Public Libraries Function as Meeting Places?', *Library & Information Science Research*, 32 (2010), pp. 16-26.

⁴⁵R. Audunson, S. Essmat and S.Aabø, 'Public Libraries: A Meeting Place for Immigrant Women?', *Library & Information Science Research*, 33 (2011), pp. 220-227.

cohesion is critical for societies to prosper economically and for development to be sustainable. Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together.⁴⁶

Because of this, it is no wonder that meeting spaces in modern library buildings have been noticeably increased. As a promoter of social capital, libraries create a welcoming atmosphere with comfortable furniture and a friendly interior design, thus creating a living room where people of different communities can connect.

3.4 New Space Management

Because of the changes in library functions, the library space needs to be adjusted to accommodate the new activities. Flexibility is an obvious necessity shared among libraries in the Netherlands; they are prone, for instance, to choose furniture that is movable in order to support the multi-functional use of space. For mobility reasons, movable furniture such as light-weight chairs and book cases on wheels is becoming more common in libraries. Since a reading room can be turned into a space for organising other activities by rearranging the furniture, the use of limited library space is now more efficient than ever. In most libraries, one can typically divide the library space into three parts, which are: user services space, library media space, and library staff space.⁴⁷ These three spaces display slightly different trends so they will be discussed separately.

3.4.1 User Services Space

As modern libraries have stopped being book-dominated and are now more user-oriented, more attention is paid to the user services space. Libraries have to cater to more varied needs from various groups of users. At the time when the space was planned for the library's convenience, users were 'invisible' as there was hardly an attempt by libraries to study their users. Libraries nowadays regard users as individuals that have different personal needs and characteristics and this helps libraries to serve their community better.⁴⁸ For instance, users

⁴⁶'What Is Social capital?', *The World Bank*, <<http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTSOCIALDEVELOPMENT/EXTTSOCIALCAPITAL/0,,print:Y~isCURL:Y~contentMDK:20185164~menuPK:418217~pagePK:148956~piPK:216618~theSitePK:401015,00.html>> (28 July 2014).

⁴⁷K. Jakovlevas-Mateckis, L. Kostinaitė and J. Pupelienė, 'Conceptual Principles of the Planning of Modern Public Libraries', *Liber Quarterly*, 14 (2004), <<http://liber.library.uu.nl/index.php/lq/article/view/URN%3ANBN%3ANL%3AUI%3A10-1-113371/7864>>

⁴⁸A good example of a recent library-user study is *De klant is koningin: handboek voor de openbare bibliotheken in Nederland*, a free access publication of VOB (Vereniging Openbare Bibliotheken). The handbook was written based on a research called 'Wie is de klant?'. It gives detailed information about seven groups of library users and their characteristics, interests and lifestyles, including their preferences in genres of books, magazines, websites, social networks and radio channels, which libraries can use in user service planning. The handbook (in Dutch)

with different learning behaviour require different spaces. Some like to read alone quietly, while others prefer to read in groups for occasional discussion. There is a significant number of people who come to the library just to carry out individual work. They are mostly students or non-academic users who make use of library space, but not of library materials. This means that libraries should consider providing more non-library facilities within the library. These facilities may include a cafe, a study or work area equipped with enough power ports, a gallery or exhibition area which can function as an idea store, and a meeting place with furniture that encourages conversation between users. Libraries should also be aware that users have diverse preferences; it is necessary to understand the need and nature of users and offer a sufficient variety of seating within the library so that each user can find something that suits his personal preferences. This is demonstrated by the field research for this study: one respondent of the Almere Public Library was found sitting on a shelf of a bookcase reading a newspaper which was laid on the ground. She explained that reading a newspaper on coffee tables hurt her back and the tall tables in the nearby area were too small to lay down a newspaper. A young girl at The Hague Public Library was found doing her homework at a wooden table which was different from other tables in the library. Due to her short height, she found this table comfortable and suited her best. She stated that this is the only place she would sit in the library; if it was taken, she would rather go home than sit at a table which was too high for her.

3.4.2. Shelving Space

The size of shelving space in modern libraries has been shrinking for a couple reasons. First of all, the changing of the role of libraries from 'information holder' to 'information portal' has also affected their physical space because there is no longer a need for a huge space to store physical objects; instead, more materials are accessible digitally and in some cases these materials can even be shared among libraries. More and more library materials now are digital-born and they are slowly becoming more preferred than their printed counterpart. As for the existing printed materials, even though the scales differ, all three libraries discussed in this study have a plan to digitise their printed material. Another reason for the decline of shelf space is a merging of media. Because nowadays most media such as cd, dvd, audio tape and microfilm can be viewed or listened to digitally through multi-functional devices such as computers, there is no longer need to separate the areas for different media. This also leads to merging of sections and service desks, which greatly saves costs. It is now common practice

can be accessed at: <http://www.debibliotheken.nl/fileadmin/documenten/2008_de-klant-is-koningin_handboek_openbare_bibliotheken.pdf>.

that instead of dividing shelves by media type, modern shelving areas are grouped by subject, audience or use.⁴⁹ The rearranging of shelving space in DOK Delft demonstrates this point as it has recently removed its entire cd and dvd music collection and turned the available space into an area where users can play some musical instruments such as piano and guitar with more seating to support the increasing number of users, while the music collection is accessible digitally via music stations.



Figure 18 : I-pod chairs with built-in speakers

<http://www.livegreenblog.com/design/dok-delft%E2%80%99s-library-concept-centre-aat-vos-8484/>

3.4.3. Staff Working Space

In general, staff working space, except service desks, has always been separated from the rest of the library. It is usually a closed or semi-closed area which takes up the least space in the library, approximately 7 to 30 percent of the whole space. This number will decrease in the future because the ongoing computerisation and automation of library processes will reduce librarians' work. Even though the back office area is hidden from users, it is usually designed as an inspiring place to work. Normally, it consists of areas where staff can work individually, and communal areas which staff can use for meeting, co-working and socialising. Most common areas are well equipped with tools and support efficient collaboration between staff members.

3.5 Partnership

Presently, numerous modern libraries are co-existing with other institutes in the same building. The idea is not entirely new, since in the past libraries were sometimes part of a larger organisation, but the difference is that now libraries are co-existing with other cultural institutes, and sometimes with non-library related partners such as residential areas and

⁴⁹A. Khan, *Better by Design: An Introduction to Planning and Designing a New Library Building* (London : Facet Publishing, 2009), p. 10.

stores. This collaboration would bring a number of benefits to all partners if they share the same goal and add value to one another. All members' roles should be complementary, not competitive. Other than the combination of living space, working space and recreational space in Almere Public Library, which was already mentioned in the previous chapter, another example can be drawn from The Hague Public Library. Being situated within the same building as the city hall and sharing its ground floor with the Tourist Information Office (VVV), the library has more chances to be found by potential users, while the benefit also works the other way around.

3.6 Lighting

When it comes to library lighting, the best lighting for library is quite controversial as it is different for all parties involved in terms of quality, function, aesthetics and intensity. The lighting needs to be wisely designed according to the overall architecture and its functions. In the old days, the structure of libraries was rather simple with a reading room which has bookshelves lined up in the same direction, reading tables, and big windows on one side to let the natural light in. Over time, the architecture of libraries has changed to larger and more complex multi-storey buildings. Because of the increasing size, some areas can not be reached by daylight so they need to be illuminated by artificial light. Decisions on the library building planning used to be done step by step, but now the lighting design is included at an early stage of the overall design and is developed concomitantly with other aspects. Due to energy-saving issues, daylight is chosen to be the main source of light in many libraries, but it comes with limitations. Even though natural light is freely available, it is hard to control. The intensity of natural light varies with several factors, such as the season, the weather and the time of day, and can greatly affect the brightness and the temperature of a library. Therefore it is necessary to include some protection such as screens or curtains to reduce the transmission of ultraviolet rays that can harm library materials and transfer the heat throughout the construction. For this reason, windows play an important role in modern library buildings. Their purposes are not only to provide light, but also expose people to a small amount of sunlight and allow people to enjoy the surrounding view for psychological reasons. Other than the sense of openness, giving people outside views allows them to estimate the time with their biological clock and to know the state of weather. As for artificial lighting, it is used as a complementary to the natural light for different tasks in the library. Two areas that usually rely on task lighting are the reading/working area and the shelving area.

- User area

The concept of ‘the more the better’ does not apply to the lighting for reading books or writing because too much reflection from the surface of the papers can harm readers’ eyes. This is why the most important consideration for task lighting is not the high intensity, but the right position of the lighting fixtures. The ideal lighting for reading/working provides enough visual contrast while avoiding glare and shadow which can disturb the activities. In general, the light should come from the side or over the shoulder of the readers; lighting that is too strong and comes from the front side of readers should be avoided at all costs. As for lighting in areas for other activities, such as meeting rooms or event areas, the lighting should be customised to fit the nature and requirements of those activities. Another consideration is that lighting intensity should be varied to match the needs of the readers in different areas and to avoid monotony. One example from the field research is the lighting in different reading areas at DOK. In the main reading hall, where most people do their individual work or read newspapers and magazines, there is a high intensity of natural light that shines through a glass-roof atrium, giving the library a sense of space and light. The main reading hall is braced with two more relaxing areas where dimmer and warmer artificial lighting is used to enhance the cozy atmosphere of the multimedia and novel areas. Many respondents mentioned that they found the variation of lighting suitable for their tasks and make the library more interesting.



Figure 19 : A comparison between two different lighting in DOK

<http://www.anthempressblog.com/2013/11/11/anthem-library-of-the-month-dok-delft>

<https://www.flickr.com/photos/dokdelft/2364045066>

- Shelving area

The lighting design in shelving areas can be challenging because reading the spines of books on shelves is one of a few visual tasks in a library that must be done vertically. In a conservative design, shelves are usually placed in rows with narrow aisles, making it difficult for light from above to reach all the materials on the shelves, especially on the lower shelves. Realising that, modern libraries adjust their shelf placement and make use of additional

lighting. There are three sources of light that can be used in shelving areas: room lighting, direct shelf lighting, or a combination of both. Room lighting is flexible for positioning the shelves, however, if the main lighting of the room is natural light, shelves are usually placed far enough from windows to avoid direct sunlight. For this reason some shelves do not receive enough light from the windows or other room lighting, therefore they need additional light to give readers a clear view. These additional lights are usually built-in or attached to the shelves. They are carefully designed to properly illuminate the shelves in order to let people browse through them without difficulty or distraction. Each library has its own way to achieve this as is shown in the case studies. The shelving areas in The Hague Public Library do not need additional light due to the fact that the building itself is very bright with natural light and room lighting. In addition, the use of white colour and the light colour floor covering also brightens up the lower shelves. In the Almere Public Library, where shelves are in non-traditional shapes and are 582 metres long in total, LED strips and mirrors were attached directly to the shelves. LED lighting was chosen because its low voltage is safe for the books and it shows the books in their accurate colour.⁵⁰



Figure 20 : A bookshelf with LED strips at Almere Public Library

http://www.lighting.philips.com/pwc_li/main/shared/assets/images/project/bibliotheek_almere

3.7 Layouts and Signs

In modern design, navigating through a library has become easier thanks to an improvement in layouts and signs. It not only reduces the frustration of users when they can not find their way through the library or locate the needed materials, but also lessens the work of library staff in giving directions to users who have lost their way. In general, the layout is designed by listing all the desired sections and services, grouping the related ones together, and deciding

⁵⁰'Library Almere', *Philips*, <http://www.lighting.philips.com/main/projects/bibliotheek_almere.wpd> (25 June 2014).

where to place those groups.⁵¹ By doing this, not only are people more likely to be able to navigate through the library, but the use of library materials and users' satisfactory can also be enhanced. This is demonstrated by Almere public library. After the introduction to the library of a retail shop concept which arranges sections according to user profiles⁵², the library's customer base increased by 43% and lending increased by 21% within five years.⁵³

In addition, a good sign system also contributes to smooth navigation. Even though it is impossible to define the best signing system because it is different for each library, there are some universal rules and criteria for a good signing. Povl Abrahamsen explained in an article⁵⁴ that one of the elementary rules is that a sign should be placed in the spot where the users expect to find it, with the right angle to the main traffic flow. At the same time, the sign should be immediately recognisable, yet not distract too much attention from the surrounding environment. The Hague Public Library did well in this respect, as there are directory signs placed on the wall in front of elevators and escalators on every floor, which are the spots that people have to pass as they travel between floors. The gigantic signs are colourful and greatly contrast with the main white colour of the building, making them stand out even from afar. Furthermore, the directories of all sections, services and facilities are given in details in alphabetical order with good word choices. Because of the visually restless environment of the library, the simpler the sentences or wording of the signs, the easier it is for users to understand.



Figure 21 : One of the directory signs on the ground floor of The Hague Public Library

<http://www.keadunant.com/wp-content/uploads/2012/09/>

⁵¹Vereniging van Openbare Bibliotheken, *Werken Aan een Aieuwe Bibliotheek* (Leidschendam: Biblion, cop., 2007). p. 116.

⁵²More information on this matter are given in details on page 16

⁵³M. Kleinenberg, 'Almere Library and the Retail Concept',

<<http://elsfutursdelabibliotecapublica.wordpress.com/documentacio/almere-kleinenberg>> (7 July 2014).

⁵⁴P. Abrahamsen, 'Graphic Design in Libraries', in F. Rolf and M. Dewe (eds.), *Library Interior Layout and Design* (The Hague: International Federation of Library Associations and Institutions, 1982), pp. 94-105.

Readability is another crucial criterium of a good sign. It is determined by many factors, such as the typography, size and surface material. Certainly, some font types are more readable than others, but it also depends on the situation. To understand this, first it is necessary to know that fonts can be roughly divided into two groups which are fonts with serifs⁵⁵ and those without serifs, or sanserifs. Serif fonts have their origins in the incised letters of classical Roman texts, while sanserif fonts are derived from earlier Greek and pre-Roman Italic alphabets, which served as sources of inspiration for twentieth-century modernist type designers. For this reason, nowadays the sanserifs are perceived to be more modern than the serifs. In addition, despite their decorative element, serif fonts can be tiring to the human eye because of their horizontal continuity and the strong contrasts between bold stems⁵⁶ and fine hairlines⁵⁷ in some fonts. These limitations of serif fonts have resulted in the extensive use of sanserif fonts in sign systems in the modern world, as can, for example be seen in the London Underground. However, it is important to note that the environment of a library is different from other situations in which the readability of signs is usually studied. As Abrahamsen puts it, 'Libraries form a humanistic milieu and are descendants of the same cultural cycle that rediscovered the Roman script. Therefore the Roman typefaces enter into a special relationship with the library.'⁵⁸ Unlike on a busy street or in a passing car, users in a library who move at normal walking speed have longer exposure time to signs, so the readability of serif fonts is less of an issue. Furthermore, serif fonts retain their readability regardless of the type size, while the sanserifs can be difficult to read in small sizes. In short, it is not possible to choose one perfect font for library signs because there are various kinds of signs and they require different designs. Choosing a typography that harmonizes with the environment seems to be the best practice in this matter.

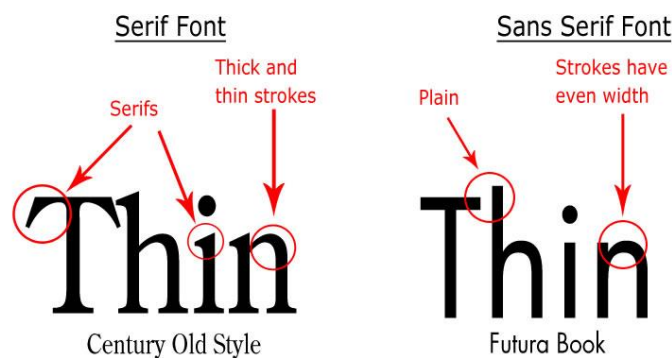


Figure 22 :Differences between serif font and sans serif font

<http://www.gngcreative.com/newsletters/nl9>

⁵⁵The foot of a letter.

⁵⁶The heavy strokes.

⁵⁷The fine strokes that bind bold stems together.

⁵⁸Abrahamsen, 'Graphic Design in Libraries', p. 102.

All three libraries that were selected as case studies use both serif and sanserif fonts for different purposes. All three have a variety of signs in different sizes and physical presentations, but signs with the same function are designed consistently. In some cases, pictogrammes and colour-coding are used to simplify the information, such as the use of the colour red (which is associated with danger) for signs indicating emergency exists. At DOK, colours are used as a part of the signing system to minimize physical signs. To help users make a sense of where they are in the library, the core part of the library is painted in bright orange on every floor. All service desks are in light yellow, so it is easy to distinguish them from the surrounding environment. Each area is defined by different meaningful colours that match the area's function. For example, the poetry and romance room is painted in red, the submarine themed young children room is in blue, and brown is used for the music and film area.



Figure 23 : The use of colours at DOK

<https://www.flickr.com/photos/dokdelft>

3.8 Furnishing

3.8.1 Seating and Tables

As was already briefly mentioned in the checklist result⁵⁹, all three libraries have several types of seating for people of different ages and needs. The ratio of relaxing chairs and tasking chairs in each library is related to the users' motivation for coming to the libraries.⁶⁰ In DOK and Almere Public Library, the relation between the two kinds of chairs is more or less equal, while in The Hague Public Library there are noticeably more tasking chairs (with accompanying tables for working or concentrated reading) than relaxing chairs. This is

⁵⁹ See page 23

⁶⁰ See page 36

strongly connected to the different reasons for coming to the libraries, as most of the respondents in the first two libraries indicate that they come to the library for reading books, while the majority of The Hague Public Library's respondents use the library for individual work. Within the limitations of this study, it is difficult say whether the ratio of two different types of chairs steers the way in which how people use the library, or the other way around. Marian Koren, director of FOBID Netherlands Library Forum, is of the opinion that it may well be that there is a two-way relationship between these two factors. Libraries decide how they want to present themselves through design and furnishing, but at the same time users also decide for themselves how they want to use the libraries. It is therefore a compromise between libraries and their users which drive libraries to improve and adjust. It is understandable that citizens of such a big city as The Hague prefer to use the library for their active individual work, while people in smaller cities like Almere and Delft prefer to go to a library for its passive reading materials. In short, although in general modern libraries tend to provide a variety of seating choices, the actual result varies between libraries depending on the context of the communities they serve.



Figure 24 : The study area of The Hague Public Library

<http://www.bibliotheekdenhaag.nl/Doen/Studeren-en-werken-met-de-computer.htm>

3.8.2 Shelves

Some aspects of shelves such as their physical appearance and their placement in modern libraries were already discussed in the research findings section of this thesis.⁶¹ Nevertheless, it is worth pointing out how shelves in libraries nowadays are designed to enhance their use and solve certain problems of the past. Many libraries now use custom made shelves for several reasons. This can be done to make the shelves fit in with the overall concept of the library, but also to facilitate users when they browse through materials. For example, book shelves at DOK may look normal at a first glance, but actually they have been given much consideration. The shelves have several permanent partitions which give the eyes a rest

⁶¹ See page 24

among the stacks of books. DOK also has a policy not to completely fill the shelves with books, but to leave empty spaces, which looks more inviting to users. Furthermore, although it is hardly noticeable, the shelves are slightly tilted backwards in order to use the weight of the books to keep them from falling to the sides. In addition, it is quite common for libraries nowadays to mainly use black, white, or grey colours for shelves in order not to distract users too much. Clearly, libraries pay more attention to such small details to improve the users' experience.

3.8.3 Service Desks

Though questions about service desks and library staff were not part of the survey, a number of respondents proactively shared their opinions on the topic during the interviews.

Respondents from DOK and Almere Public Library mentioned that library staff is really friendly and helpful. At Almere Public Library, three people said that when they asked the staff for help in finding the books or for information, the staff always walked with them through the shelves. Even though they could not always find the desired materials, the fact that the staff was willing to help left a positive impression. Two respondents at The Hague Public Library, who lost their way in shelving area, said that they found it difficult to find the book they wanted, but did not feel comfortable to ask the staff at the counter nearby because the staff appeared to be busy with the documents that were piled up behind the counter.

When asked if a small service desk that is open on both sides instead of the huge half circle counter would have made them feel more comfortable in asking for help, they agreed and added that they would feel most comfortable to approach staff members in the shelving area, not behind the counter. Fortunately, the library is already aware of this problem and plans to change the counter accordingly in the next renovation.

These examples show that there is a trend in modern libraries to separate the activities of front and back office. In the old days, it was quite common to see librarians working with piles of books and documents behind the counters. That situation is now replaced by the provisions of welcoming librarians sitting behind a small, open counter where conversation is encouraged. Now that most technical library work is centralised at the NBD Biblion and the activities that were done at the counter are moved to the back office, workstations (other than a computer for checking the online catalogue) are no longer necessary at the counters. As libraries have begun regarding their users as customers, more attention is paid to improving customer service. Consequently, the separation of front and back office work is necessary for improving the efficiency and quality of both user services and other, more specialized library work that can be done 'behind the scene'. Without a workstation, service counters can be

smaller, cleaner and more inviting. They are designed to encourage users to approach librarians by making the counter clearly visible and identifiable through the use of colours and clear signs, while also focusing on openness and accessibility and allowing librarians to get out from behind the counter to help users.

3.9 Other Facilities

Clearly, new library buildings are better equipped with facilities than traditional libraries. Refreshment facilities such as cafés, coffee corners or vending machines have become common in libraries and restrictions on food and drinks have been toned down to make people feel more at home. Similarly, machines intended for public use, such as photocopiers and printers prevent users from having to leave the library, making their library experience more continuous. This act of turning a library into a one-stop service place is part of the attempt to make people spend more time at the library and attract new groups of users. At the same time, most libraries do not neglect people with special needs. Many library facilities and services are specifically designed to support disabled people and to ensure equal opportunities for everyone to use the library.

Conclusion

This study was conducted with the aim of predicting how libraries in the Netherlands will look like in the future in terms of function and design by studying a selection of three modern Dutch libraries which were created following a library reformation from 1998. After analyzing relevant secondary sources and conducting a small-scale research, a number of trends can be observed.

The building of a library, its interior, furnishing and decoration and the function of the library are closely related. This connection dates back to the time when the concept of a public library as we know it today had not yet formed. As society changed, reading rooms and other social libraries moved away from being private and privileged establishments to institutions aimed at serving the public. This resulted in the first wave of change in public library design and was followed by other improvement as time passed. In the Netherlands, public libraries were introduced in the beginning of the twentieth century and have been efficiently developed by various organisations who contributed to the improvement with their specialities. After the existence of public libraries were threatened by the change in media using and information seeking behaviours, libraries have been trying to gain back their place as the centre of knowledge by adopting new ideas and reconsidering themselves. This has led to a crucial reformation of Dutch public libraries, starting with a strategy introduced in 1998 which greatly emphasised the transformation of public libraries during 2001-2007. The results of that attempt were examined in this study.

From conducting user surveys and observations in three case studies: the DOK Library Concept Centre, the The Hague Public Library and the Almere Public Library, some trends and characteristics are shared among the libraries. Overall, the three selected libraries have similar patterns of users' gender and age, but show slight differences in membership, visiting frequency, and travelling time. The main reasons people come to the libraries are to read books, newspapers and magazines in the library, borrow books and perform individual work. Most of the responders are satisfied with the overall physical design of the library and agree that they are suitable for their needs. The responders' opinions on what they like and dislike about the library designs vary greatly depending on individual, but those who have similar profiles tend to suggest the same things.

However, it should be taken into consideration that the number of respondents from each library is only fifteen people, which is very small compared to the number of people using the libraries. Therefore the conclusions arrived at from the information gathered might

not be able to fully and precisely represent the whole, yet they can be a good starting point to get basic ideas of library's users. This is partly because the user survey was mainly designed to focus on responders' opinions more than their profiles. For that reason, the data was gathered by having an indebted conversation with the responders to encourage them to speak their minds, hence the number of people that can be interviewed in a limited time is also limited.

On the other hand, data gathered from observation and the check-list and studying related literature provides detailed information on the architectural design of the library, covering the topics of site selection, exterior, interior, section planning, materials handling and storage, and telecommunications, electrical and other equipment. In general, modern Dutch public libraries are located in the center of the community they serve with good accessibility. Stand-alone libraries are not common as now libraries tend to share the building with other institutions, shops or residential areas. The exterior of the buildings is interesting and noticeable to passerbys because of the design and big signs. On the inside, space design was planned according to user studies to make them practical and suits users' need. Overall, libraries hve been adopting retail concepts from non-library models such as bookstores and department stores to promote the use of materials and services in the library. This can be clearly seen in the change in shelving and displaying which became more inviting and attractive than it was before. Usually, circulation and information desks and the lobby are clearly visible from the entrance and have good traffic flow. General books are arranged according to each library's policy and placed close to the entrance area. Children and young adults sections are grouped together and situated in areas that are secluded from others to prevent noises from disturbing other users. Multimedia and technical books are separated and usually placed on the upper floors due to the lower frequency of use and it is common to see magazine and newspaper services located close to the library café. The libraries have facilities that are suitable for people of different ages, including disabled people. Some facilities such as printers, copy machines and vending machines are added in order to make the library a one-stop-service, which attracts people to stay longer. Obviously, more attention has been paid to furnishing and interior design with considerations on their functionality and flexibility. Lighting became one of the main priorities in library design which greatly affects other aspects, so in many cases lighting design was included in the plan since the starting phase and was performed by specialists. The libraries have good signage systems because of their readability and format consistency. In addition, libraries nowadays empower themselves with advanced technologies to keep themselves up-to-date with users' media preferences.

This information can give a general idea of how Dutch public libraries will look like in the future, as well as their functionality and how people use them. Public libraries are slowly gaining their place back as important institutions who provide knowledge, a learning environment, and connections to other people in the community. Of course, further research is required in order to see a clearer picture and more detailed information. To achieve that, there is a need for cooperation and permission to conduct research from more public libraries. It would be ideal if organisations in charge of the libraries could conduct a big scale study to evaluate the result of the libraries reformation that took place in the last decade. Up to this point, Dutch public libraries have been heading in the right direction. If things progress as they have over the last decade, there should be a bright future for the public libraries.

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Appendix

1. A Check-list form

Checklist of user-related consideration with respect to the architectural design of the library

Name of the library:

Date:

1. Site selection			
1.1 Location			
- Is the location of the library good?	Yes	No	N/A
- Is the location situated close to the target communities?	Yes	No	N/A
- Would library use increase if another site was selected?	Yes	No	N/A
- Is the location in an area that is frequently visited by members of the community for their daily activities?	Yes	No	N/A
1.2 Accessibility			
- Is the library easily accessible?	Yes	No	N/A
- Can the library be reached via public transport?	Yes	No	N/A
- Is bicycle access encouraged?	Yes	No	N/A
- Is the library conveniently accessible to private vehicle?	Yes	No	N/A
- Does the entrance to the library provide adequate space and ease of accessibility to accommodate all arriving individuals and groups at all times?	Yes	No	N/A

1.3 Size			
- Does the library provide adequate space for current needs?	Yes	No	N/A
- Are there room for future expansion and/or remodeling?	Yes	No	N/A
1.4 Environmental Issues			
- Does the site have adequate drainage?	Yes	No	N/A
- Do neighboring facilities pose possible environmental/nuisance problems?	Yes	No	N/A
2.Exterior			
2.1 Landscaping			
- Does the landscape design enhance the overall design of the building?	Yes	No	N/A
- Is the landscaping visually satisfying and inviting?	Yes	No	N/A
2.2 Building Exterior			
- Is the building aesthetically pleasing during the day and night?	Yes	No	N/A
- Will sunlight, glare, and excessive ultraviolet rays be controlled architecturally?	Yes	No	N/A
- Are all exterior architectural features and surfaces constructed of easily maintained materials?	Yes	No	N/A
- Are walkway surfaces stable and firm?	Yes	No	N/A
- Are walkway surfaces slip-resistant?	Yes	No	N/A
2.3 Roof			
- Is the roof peaked?	Yes	No	N/A
- Are draining systems on the roof adequate to carry off water from heavy downpours or melted snow?	Yes	No	N/A

2.4 Signature			
- Is there a large, exterior, well-lit sign identifying the library?	Yes	No	N/A
- Is the exterior sign clearly visible from passing cars during the day and night?	Yes	No	N/A
- Are the library's hours of service prominently displayed?	Yes	No	N/A
2.5 Book Returns			
- Is there an after-hours book return?	Yes	No	N/A
- Is the book-return area well lighted and secure?	Yes	No	N/A
- Is the book return part of the building and accessible from the inside?	Yes	No	N/A
3. Interior			
3.1 Entrance			
- Are the various areas within the interior identified by signs, lighting, color, and furnishings? Do the areas listed below stand out when one enters the building :			
o Circulation?	Yes	No	N/A
o Reference/information?	Yes	No	N/A
o Catalog?	Yes	No	N/A
o Books/audiovisual?	Yes	No	N/A
o Children / adults / young adults?	Yes	No	N/A
- Is there space near the entrance for:			
o Public bulletin boards?	Yes	No	N/A
o Display cases?	Yes	No	N/A

○ Pamphlet racks?	Yes	No	N/A
○ Announcements of library events?	Yes	No	N/A
○ Lobby seating?	Yes	No	N/A
- Does there appear to be good traffic flow throughout the interior?	Yes	No	N/A
3.2 Circulation Desk Facilities			
- Is the circulation area located near the library's entrance?	Yes	No	N/A
- Is the circulation area clearly visible and identifiable from the library's entrance?	Yes	No	N/A
- Are queuing provisions made for a smooth traffic flow for entering and leaving the building without obstacles created by checkout lines during peak periods?	Yes	No	N/A
- Is the circulation desk the appropriate height for adults, children, and disabled customers?	Yes	No	N/A
- Is the monitor screen visible to the customers?	Yes	No	N/A
3.3 Reference Facilities			
- Is the reference desk clearly identified and conveniently located?	Yes	No	N/A
- Is the reference desk the appropriate height for adults, children, and disabled patrons?	Yes	No	N/A
- Is the reference area arranged in such a manner that librarians are visibly approachable?	Yes	No	N/A
- Can reference librarian easily get out from behind the desk to help customers?	Yes	No	N/A

- Is there a terminal on the reference desk that can perform circulation functions as well as database searching functions?	Yes	No	N/A
3.4 Children's Facilities			
- Is the physical and psychological environment pleasant and inviting to children?	Yes	No	N/A
- Is the children's area arranged in such a manner that adults are not reluctant to use it?	Yes	No	N/A
- Are shelving and furniture scaled for children?	Yes	No	N/A
- Are there rest rooms scaled for children in the children's area?	Yes	No	N/A
- Are there some imaginative pieces of furniture for visual surprise?	Yes	No	N/A
- Are cheerful colors, interesting geometric shapes, and graphic sketches used in the children's area?	Yes	No	N/A
- Have sharp corners and edges been eliminated from furniture and equipment?	Yes	No	N/A
- Is there comfortable adult seating for use while adults are sharing books with children?	Yes	No	N/A
- Is there sufficient space for crafts activities?	Yes	No	N/A
- Is the children's area acoustically designed to avoid interfering with other library functions?	Yes	No	N/A
3.5 Young Adult Facilities			
- Is the young adult section separate from other areas in the library?	Yes	No	N/A
- Is the space closer to the adults section than to the children's section?	Yes	No	N/A

- Is the space slightly secluded, giving the appearance of privacy, while still allowing some supervision?	Yes	No	N/A
- Do the materials in the area appeal to the intended audience?	Yes	No	N/A
- Does the space allow a variety of comfortable seating options?	Yes	No	N/A
3.6 Multimedia Facilities			
- Are there enough mediums for customer's need?	Yes	No	N/A
- Is there sufficient acoustical treatment to prevent external noise sources from interfering with listening to media?	Yes	No	N/A
3.7 Special Collections / Rare books / Archives			
- Is there a desk strategically located to allow an attendant a clear view of the reader?	Yes	No	N/A
- Is the reading room arranged to ensure staff observance of those who exiting the room?	Yes	No	N/A
- Are reading tables arranged in open positions, allowing maximum supervision from staff areas?	Yes	No	N/A
3.8 Meeting and Seminar Rooms			
- Is the meeting-room entry close to the main entrance?	Yes	No	N/A
- Is there an assembly area adequate in size for handling the arrival and departure of large groups that may be attending meetings?	Yes	No	N/A
- Can the meeting-room area be closed off from the remainder of the library?	Yes	No	N/A
- Does the room provide flexibility to accommodate a variety of programming activities, from children's story hours to film showings to	Yes	No	N/A

art exhibitions?			
- Are there special lighting fixtures located in the ceiling above the speaker and controlled by dimmer switches to provide glare-free and appropriate lighting?	Yes	No	N/A
- Is the lighting controllable in intensity, allowing full darkening of the room for visual presentations?	Yes	No	N/A
- Are window covering provided to darken the room and block out light for visual presentations?	Yes	No	N/A
3.9 Convenience Facilities			
- Are restrooms located close to the lobby or building entrance?	Yes	No	N/A
- Does every floor have restrooms for both men and women?	Yes	No	N/A
- Are restrooms easily identified?	Yes	No	N/A
- Is space allocated for public access to the following?			
o Photocopiers	Yes	No	N/A
o Personal computers	Yes	No	N/A
o Computer printers	Yes	No	N/A
- Are signs available identifying these machines?	Yes	No	N/A
- Are vending machines available for public use?	Yes	No	N/A
- Are clocks strategically located and visible in every major public area?	Yes	No	N/A
3.10 Displays			
- Are the display furnishing and shelving appropriate for merchandising the library's products and services?	Yes	No	N/A

- Can library materials be arranged in a attractive, appealing way to promote library products?	Yes	No	N/A
- Are display cases located in high-traffic areas to make these areas more visually interesting?	Yes	No	N/A
3.11 Public Art			
- Are there any public art? (Public art refers to works of art in any media that have been planned and executed with the specific intention of being sited or staged in or around the library. It is usually permanent or long-term art, and not a temporary exhibit.)	Yes	No	N/A
3.12 Interior Signage			
- Is there consistency in signage throughout the building? Signs that serve the same function throughout the building should have the same shape, size, layout, type size, and placement.	Yes	No	N/A
- Are the signs of good design? Typeface, size, spacing of letters, contrast, use of symbols, and color should all be considered.	Yes	No	N/A
- Are signs sequentially positioned to facilitate self-service?	Yes	No	N/A
- Are the signs well lit, easy to read, and positioned for a clear view?	Yes	No	N/A
- Is the text of the sign clearly and accurately written in order to communicate the intended message effectively and positively?	Yes	No	N/A
- Is there a directory identifying major library services and their locations?	Yes	No	N/A
- Are there signs to provide critical information about regulations, warnings, procedures, instructions, and hours?	Yes	No	N/A
4. Interior Design and Finishes			
4.1 Service Desks			

- What types of service desk are there?			
o Control or security desk	Yes	No	N/A
o Directional or information desk	Yes	No	N/A
o Circulation or charge desk	Yes	No	N/A
o Children's desk	Yes	No	N/A
o Young adult desk	Yes	No	N/A
o Media center desk	Yes	No	N/A
o Call, reserve, or delivery desk	Yes	No	N/A
o Reference desk	Yes	No	N/A
o Reference or bibliographic consultation center	Yes	No	N/A
- Is the desk located in a visible location so that it is obvious to people who need the services provided at the desk?	Yes	No	N/A
- Is the desk and surrounding work space designed to be ergonomically correct for staff and customer?	Yes	No	N/A
- Have customer self-service feature been factored into the desk, such as self-checkout, electronic registration, etc.?	Yes	No	N/A
- Can conversation at the desk be conducted with a sense of privacy?	Yes	No	N/A
- How has noise from the service desk from conversations, equipment, phones, etc., been addressed so that nearby spaces are not disrupted?	Yes	No	N/A
- Have openness and accessibility been maintained while protecting staff from potentially aggressive customers?	Yes	No	N/A

4.2 Seating			
- Is there variety in the types of seating?	Yes	No	N/A
- Is lounge seating modular or heavy enough to discourage casual rearrangement by customers, unless the library desires rearrangement?	Yes	No	N/A
- Is seating appropriate for different ages?	Yes	No	N/A
- Are people (especially senior citizen) able to get in and out of chairs easily?	Yes	No	N/A
- Does the seating take personal space into consideration to avoid psychological feeling of crowding?	Yes	No	N/A
- If the chair has arms, will the arms fit comfortably under work surface?	Yes	No	N/A
- Is furniture constructed for user safety?	Yes	No	N/A
4.3 Tables			
- Are the tables appropriate for the task intended?	Yes	No	N/A
- Are the tables durable and strong?	Yes	No	N/A
- Is the work surface material appropriate for the use anticipated?	Yes	No	N/A
- Is there a mixture of circular tables (for socializing) and rectangular tables (better for work and concentration) on the floor?	Yes	No	N/A
- Are there enough carrels for individual studying?	Yes	No	N/A
4.4 Lighting			
- Is the intensity of the general lighting sufficient for reading?	Yes	No	N/A
- Is the task lighting adequate for carrels, workstations, separate desks,	Yes	No	N/A

lounge furniture, and shelving areas?			
-			
- In addition to general and task lighting, do certain areas of the library have special lighting?	Yes	No	N/A
-			
- Are the lights used to highlight display cases and exhibits non-glaring?	Yes	No	N/A
-			
- Is lighting adequate at the lower shelf areas in book stacks?	Yes	No	N/A
-			
4.5 Windows			
- Are some of the windows placed close to the ceiling to allow a higher intensity of light?	Yes	No	N/A
-			
- Are some of the windows placed at eye level, especially in reading areas and in areas occupied by the staff for positive psychological effect?	Yes	No	N/A
-			
- Can windows be shaded on demand to prevent light from interfering with reading and other activities?	Yes	No	N/A
-			
- Are books stored away from direct sunlight to protect the bindings from fading and to prevent paper deterioration?	Yes	No	N/A
-			
- Are a limited number of windows operable to allow for maintenance and emergency situations?	Yes	No	N/A
-			
4.6 Flooring			
- Are special floor-covering materials or systems used at the entry and places of heavy traffic to prevent dirt, mud, slush, and water from being tracked onto the carpet?	Yes	No	N/A
-			
- Does the carpet colour conceal soiling and resist fading?	Yes	No	N/A
-			
- Does flooring minimize noise and enhance building acoustics?	Yes	No	N/A
-			
- Is ceramic tile or a similar material used on the restroom floors for its	Yes	No	N/A

sanitary appearance and ease of maintenance?			
4.7 Walls			
- Are the wall finishes, coverings, and surfaces appropriate for the room's function?	Yes	No	N/A
- Is matte, or dull, finish used where reflectivity is a concern?	Yes	No	N/A
- To add interest, are there special wall treatments such as stenciling, textures materials such as a woven fabric, or wood paneling?	Yes	No	N/A
4.8 Color			
- Have colors that may quickly become outdated been avoided?	Yes	No	N/A
- Has particular attention been given to the psychological effects of color on both users and staffs?	Yes	No	N/A
- Has color been considered with respect to the function of the area?	Yes	No	N/A
- Do book stacks on different floors or areas utilize different colors for easy identification?	Yes	No	N/A
5. Materials Handling and storage			
5.1 Conventional Stationary Stacks and Shelving			
- Has sufficient shelving been planned to meet the current and future needs of the library?	Yes	No	N/A
- Are book stacks arranged sequentially in parallel ranges so that users can easily locate materials?	Yes	No	N/A
- If book stacks are not arranged sequentially in parallel rangers, are variations clearly indicated?	Yes	No	N/A
- Are there labels on both ends of ranges?	Yes	No	N/A

- Are there attempts to break the monotony of shelving by creative arrangement of seating or height and/or type of shelving?	Yes	No	N/A
- Have length of shelving and width of aisles been determined on the basis of traffic patterns and user accessibility?	Yes	No	N/A
- Are the shelving height and depth adequate for users?	Yes	No	N/A
- Are the shelving units			
o Sturdy and well built?	Yes	No	N/A
o Able to bear prescribed loads without sagging, bending, leaning, swaying, or collapsing?	Yes	No	N/A
o Smoothly finished with no burrs or sharp edges?	Yes	No	N/A
o Standardized in design and color?	Yes	No	N/A
- Are there special features such as the following?			
o Pullout shelves	Yes	No	N/A
o Built-in lighting	Yes	No	N/A
o Electrical access	Yes	No	N/A
o Shelf dividers	Yes	No	N/A
o Movable book supports of adequate size	Yes	No	N/A
o Range-label holders	Yes	No	N/A
o Shelf-label holders	Yes	No	N/A
o Current periodical shelves	Yes	No	N/A

○ Wide-lip newspaper shelves	Yes	No	N/A
○ Atlas and dictionary stands	Yes	No	N/A
- Does periodical shelving have sloping shelves that tilt and allow for storage on a flat shelf beneath?	Yes	No	N/A
- Are there shelf/table units for reference and index materials?	Yes	No	N/A
6. Telecommunications, electrical, and other equipment			
6.1 Electrical Power			
- Is there sufficient power distribution throughout the entire facility?	Yes	No	N/A
- Are cords and cables protected and out of sight?	Yes	No	N/A
- Are public workstations/carrels provided with power and data ports?	Yes	No	N/A
- Is there a fee for using the library's power?	Yes	No	N/A
- Is there a fee for using the library's wifi?	Yes	No	N/A
6.2 Workstation Equipment			
- Are there online public access catalogues (OPAC stations)?	Yes	No	N/A
- Are there Internet terminals?	Yes	No	N/A

2. A user survey form

Library Architecture Satisfaction Survey

1. Profile

Type : Member User Age: _____
Gender : Male Female Visiting frequency: _____

2. Library use

Purpose of coming to the library

<input type="checkbox"/> Read books	<input type="checkbox"/> Join events
<input type="checkbox"/> Read newspaper /magazine	<input type="checkbox"/> Meet other people
<input type="checkbox"/> Borrow books	<input type="checkbox"/> Do individual work
<input type="checkbox"/> Borrow multimedia	<input type="checkbox"/> Find resources for work or study
<input type="checkbox"/> Play games	<input type="checkbox"/> Ask librarians for help
<input type="checkbox"/> Use the computer	<input type="checkbox"/> Other _____

3. Opinions on the library building

- Are you satisfied with the overall physical design of this library?
 Very satisfied Somewhat satisfied Neutral Somewhat dissatisfied Very dissatisfied
- Do you think that the design of this library suits your needs?
 Very suitable Somewhat suitable Neutral Somewhat unsuitable Very unsuitable

• What do you like about the architecture?

• What do you not like about the architecture?

• Do you have any suggestion(s) for improving the physical design of this library?
