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DESIGNING LIBRARIES IN 21ST CENTURY

LESSONS FOR THE UK

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2016



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EXECUTIVE SUMMARY

Public libraries around the world face an uncertain future. Their customers can now access information online, at a click of a button, leading to declining visitor numbers, and throwing into question the value of the public library as a physical space.

How can library professionals, designers and architects work together to gain a better understanding of how buildings shape people? How can they ensure that the public library is as relevant tomorrow as it is today?

Yet, public libraries are evolving to become places for 'connection not the collection'. They are being reimagined as places where people can be together, a natural point in the city to gather, and exchange information. As the architects for the new Aarhus DOKK1 explains, the library is 'a place where the life of the city unfolds'. Design is an important way of bringing about this change, and architects and interior designers will play a key role in the transformation of public libraries from a warehouse for books into a gathering space for people.

This report provides an overview of how design is being used as a tool to enhance the experience of customers and change the behaviour of staff in public libraries in twelve locations across five countries in two international contexts. It suggests that the most 'successful' designs are those that are the simplest – open plan with good visibility across the floorplate and excellent connectivity - allowing staff and customers greater freedom to change the form and function of the public library over time. Yet, the simplest designs are not always the easiest to achieve, since open plan floors are often noisy, and flexibility involves careful planning.

Offering in-depth feedback on the design of public libraries in the Netherlands, Finland, Denmark, USA and Canada, this report provides critical insight into the key challenges and opportunities for library and architecture professionals today. Sharing the views of staff and customers on the current and future design of public libraries in these countries, it provides 'data' on how people interact with library services and spaces, and also responds to the call from architects and interior designers for more information on the relationship between people and buildings.

INTRODUCTION

MY RESEARCH

'I can tell you about the changes that have happened in the last 20 years. When we first started we were a subject based library. Each floor had two subjects. This was pre-internet. We had big service desks on each side of the floor. We had several staff at those desks just to deal with the number of enquiries. Around 12-15 years ago we combined those service desks per floor. So there was one desk.

In 2013 we launched a service where we got rid of all the desks, and introduced roaming. The staff have a small station with a tablet and mobile phone. She will roam the floor, answering questions from patrons, wherever they are in the building. This reduces the number of staff on the floor at any one time... which is a result of a decline in requests over the years. No one calls to ask about the answer to a cross-word puzzle any more'.

Collection Services Manager
Vancouver Central Library

In September 2015 and March 2016, I visited 34 public libraries in 12 locations in four countries.

Aim

I set out to gather knowledge about the vision for public libraries in North America and Europe. I established how this vision is being realised by architects and interior designers in the construction of new library buildings, extensions, and refurbishment projects, and critically evaluated the success of their designs by consulting with staff and customers. I also observed how buildings are being used in practice.

Methodology

Interviews: I spoke with library staff about the current and future vision for the library. This

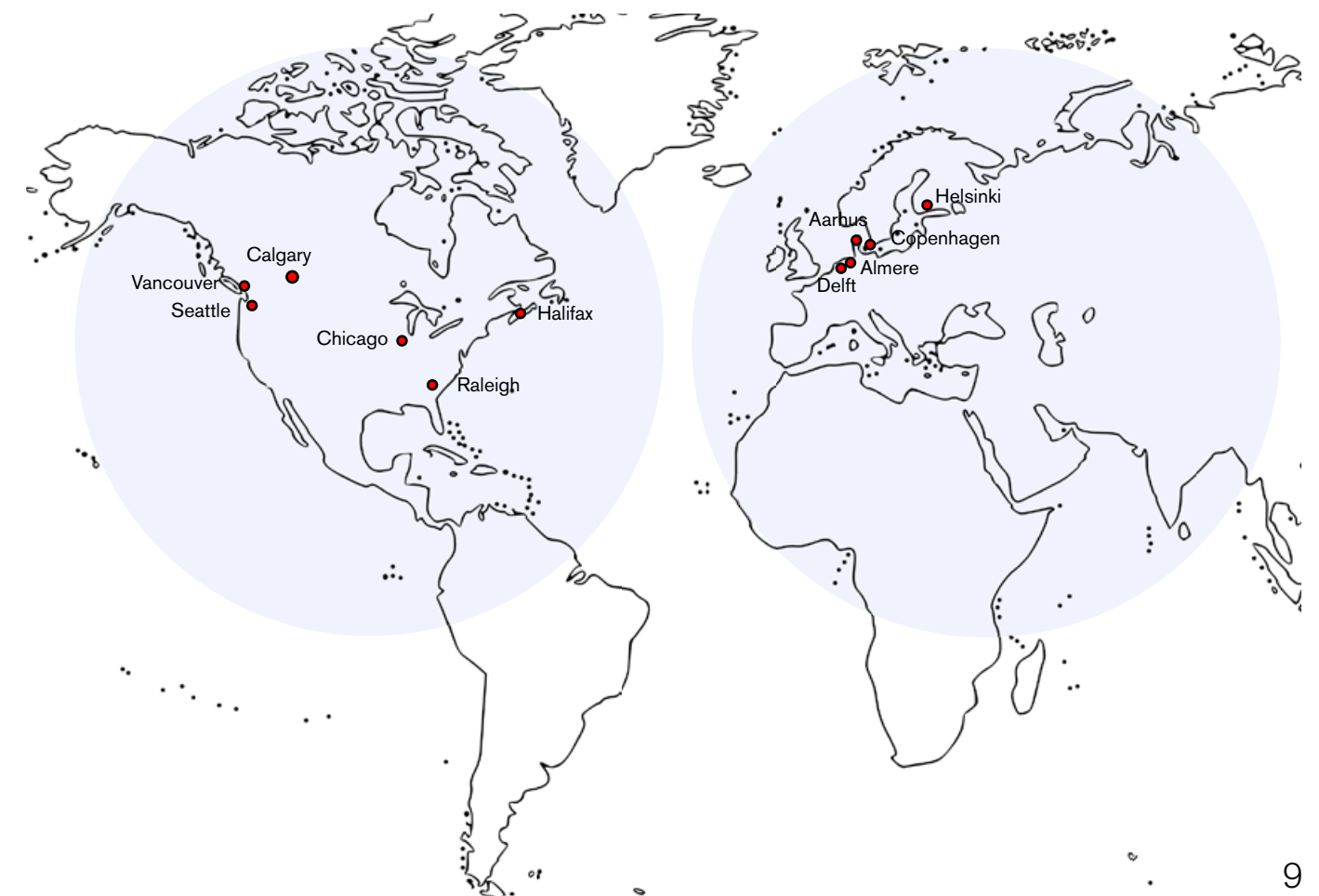
included inquiring about current and future services, spaces, and programme of activities.

Tours: I walked in the footsteps of staff and patrons who showed me around the library. They described the services and spaces in their own terms.

Observations: I observed how people engaged with the library services and spaces to understand what did and did not 'work' (or function) in terms of the layout, lighting, and aesthetics.

I split my research into two phases: phase one (Denmark, Finland, Netherlands); phase two (USA and Canada).

I visited public and university libraries in the following towns and cities:





Vancouver



Chicago



Aarhus



Halifax



Seattle



Helsinki



Calgary



Almere



Copenhagen



Seattle



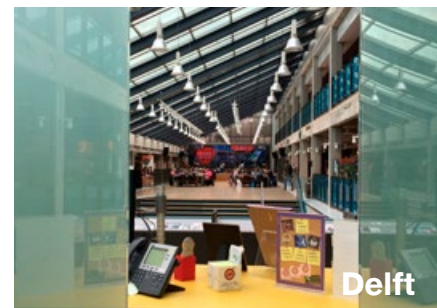
Calgary



Almere



Espoo



Delft



Espoo



Espoo



Helsinki



Seattle

My research methodology echoed that of staff in public libraries who were themselves collecting 'data' on how customers use and engage with public libraries.

Whilst the manager of a branch library in Seattle reported that she has collected robust data on how people use the library (including wifi access, programme attendance, and so forth), talking to people is the best way to find out how to improve the service. She explained that the Seattle Public Library 'community librarian' had just launched a new initiative called 'community listening'. Every single librarian is expected to have at least two conversations a week with individuals and organisations over an eight week period to establish a nuanced picture of who uses the library, and what they do in the library when they visit it.

During the six weeks in Europe and North America, I spent a great deal of time talking to people, not only on my visits to public libraries, but also in taxis, in cafes and restaurants, and in my 'bed and breakfast'. People were intrigued by my interest in public libraries; they always had their own story to tell about their neighbourhood library.

As a result, this report consists of formal feedback from library staff and customers as well as general input from the folk I met outside the library.

I put their stories to work in three main ways:

Part One (Inspiring Libraries) outlines the main functions of the public libraries that I visited, and describes how people engage with them today, and how they might do so in the future.

Part Two (Designing Libraries) focuses on key design characteristics of contemporary public libraries in relation to urban, architectural, and interior design.

Part Three (Evolving Libraries) explores some high level design challenges and opportunities for staff and visitors through reference to Seattle Public Library. It describes how staff are 're-imaging' the spaces in the central and branch library buildings to create a better experience for the user.



HUMAN-CENTRED DESIGN

Librarians sometimes use government data to anticipate the needs of their patrons. The City of Chicago now provides access to its data via a portal to encourage innovation and development across its community. The site hosts over 200 datasets about government departments, services, facilities, and performance. But, the data does not always help librarians work out why people use the public library. What does the data actually mean? It's important to supplement the data with feedback from the users through design-thinking methods.

Staff at Chicago Public Library (CPL) have been using what is known as 'human-centred design' to work through new initiatives with their patrons, and implement these initiatives on a case-by-case basis.

They worked with IDEO, funded by the Gates Foundation, to devise what has become known as the 'library tool kit'. The library tool-kit provides staff with a methodology for working with patrons to identify opportunities for the development of services and spaces. For example, staff used the human-centred design approach to understand how games can be introduced to engage adult audiences in its public libraries. As one librarian explained:

"Our project is seeking to understand how game literacy can be leveraged into other educational processes while understanding that adults continue to learn through play, much like children and teens have long been encouraged to do".

Once a year, CPL holds a mini conference called 'International Games Day', featuring board games and video games. It has a special interest in inviting local developers to introduce its games to an audience, as well as to provide expertise on how they might be able to design a game. It has local indie game developers involved as well to make the day more interesting to adults. The event is designed for adults so the vast majority of the

participants are millennials. However, the event did appeal to people of all ages, which suggests that the new 'games' service would resonate with its patrons.

'Human-centred design is a way of getting everyone involved – from the clerk to the commissioner – which spreads the feeling of ownership of the public library's services and spaces', explained the Director of Engagement and Special Projects. Everyone becomes the owner of a new initiative – and they can see it grow and develop.

INSIGHTS
FROM THE FIELD

PART ONE

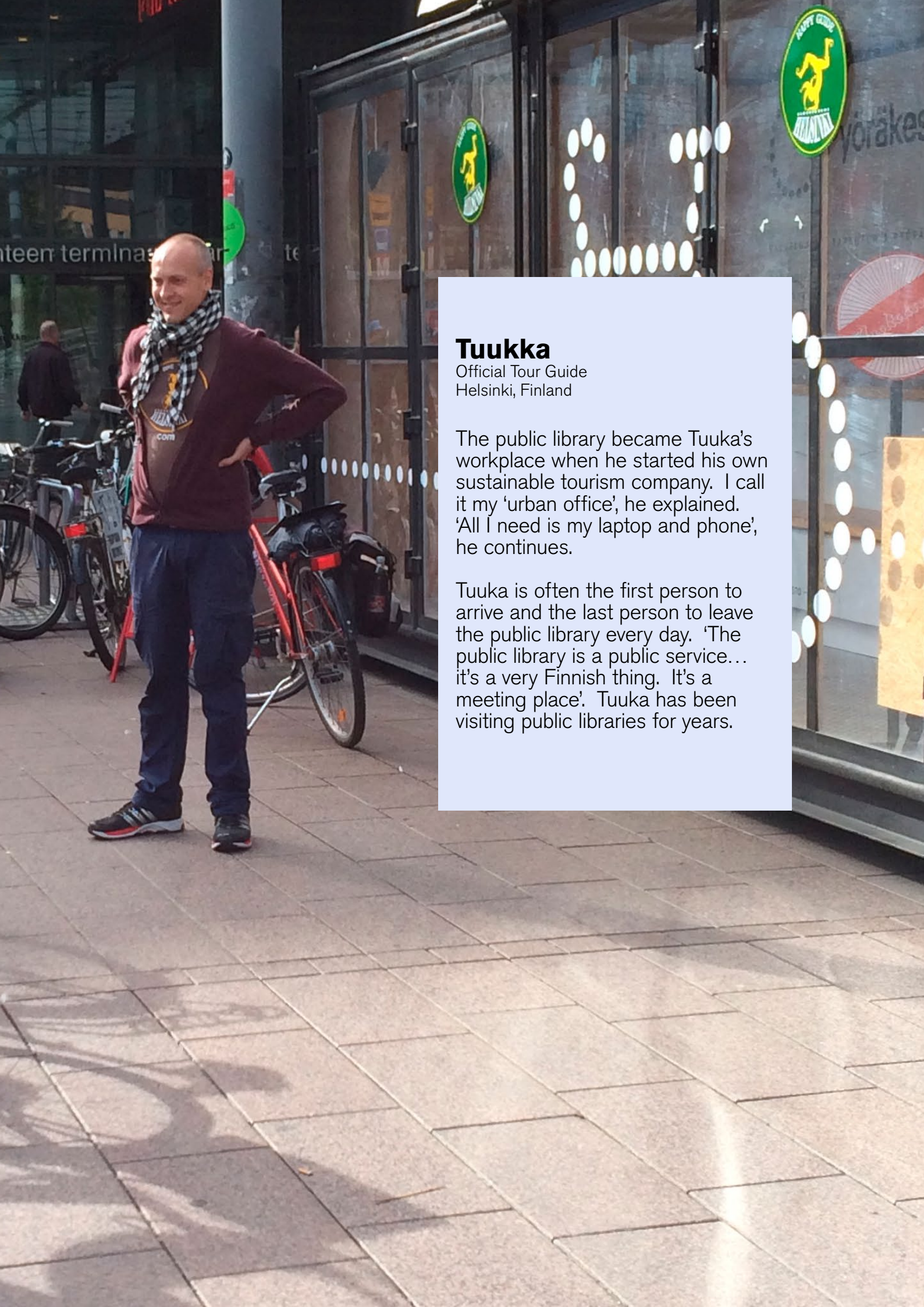
INSPIRING LIBRARIES



FUNCTION

OF PUBLIC LIBRARIES

Public libraries provide people with the opportunity to pursue a wide range of interests and activities. This section explores what I consider to be the main reasons why people use public libraries – which can be summarised as meeting, learning, and reading.



Tuukka

Official Tour Guide
Helsinki, Finland

The public library became Tuuka's workplace when he started his own sustainable tourism company. I call it my 'urban office', he explained. 'All I need is my laptop and phone', he continues.

Tuuka is often the first person to arrive and the last person to leave the public library every day. 'The public library is a public service... it's a very Finnish thing. It's a meeting place'. Tuuka has been visiting public libraries for years.

A PLACE TO MEET

Today, people can access information online, at a click of a button, which has led to declining visitor numbers, and might even throw into question the value of the library as a physical space. Nevertheless, new technology makes people more 'mobile', and people are seeking new spaces in which to work and play. Individuals are attracted to the public library as a neutral 'free' space to carry out their business, do their studies, or to hang out with friends.

This is how the library has reinvented itself. 'It's the third space. People have home, they have work, and they need something in the middle', explains the Adult Services Manager at Halifax Central Library. 'We noticed that people want space to do their own thing, but they also like sitting with other people. It's what draws people to coffee shops... People love watching other people,' she explained. The school children I spoke to in Sello Library in Espoo liked being in the midst of the activity, but they also wanted private or secluded areas where they could duck out of view.

In Chicago, school children from the surrounding schools in Albany Park now drop into the library after school to do their homework. 'We get about 50 teens a day, sometimes all at the same time, so it's busy in here,' explains the children's librarian. Students like to be with other students, so the public library provides them with the opportunity to work in an informal environment where they are 'accepted', she continues. 'It's a safe, comfortable place to study,' explained one librarian. A university student at the Technical University in Delft said that she preferred to use her branch library because the environment was relaxed in comparison with her university library. She used it three or four hours a day at the weekends.

For those who want to conduct their business in the library – such as entrepreneurs and freelancers – the public library now offers all they

need to do so. 'We like to think of ourselves as an urban office... Our copier machine is our most popular machine here!' explains the Branch Manager at Library 10 in Helsinki. 'By trying to help people do business in libraries', he has included Library 10 in the city economy. Individuals visiting Library 10 can borrow 'bookable soundproof walls' so that they can transform a simple table into an enclosed meeting space. One of the branch libraries in Almere in the Netherlands has turned its lobby into a co-working space to accommodate the growing need for this kind of facility in the city. A librarian working in one of the branches of Seattle Public Library reiterated, 'We don't want to compete in the collaborating working market, but we do want to fulfill a basic need for people ... Our public libraries could be more hospitable.'

Public libraries have become global destinations, hosting festivals, conferences, and events – attracting people from around the world. They are places where individuals meet new friends to explore ideas and share interests across social and intellectual boundaries. In September 2015, I attended Next Library, an international conference for library professionals, which was hosted by Aarhus DOKK1, a new building that opened to the public earlier that year. The conference attracted over 200 delegates, who mingled with library patrons in the new building, testing its physical capacity.

MAKING SPACE FOR MEETING

'Branch libraries need to adapt to the local environment,' explained my guide who was showing me around a branch library in Aaby (outside Aarhus in Denmark), which has a population of around 25,000 people. When designing Aaby library, staff 'aspired to turn the library into a community centre'. They tried to make it open to everyone, turn it into a place where people can meet as a community, and accommodate multiple needs in the same place.

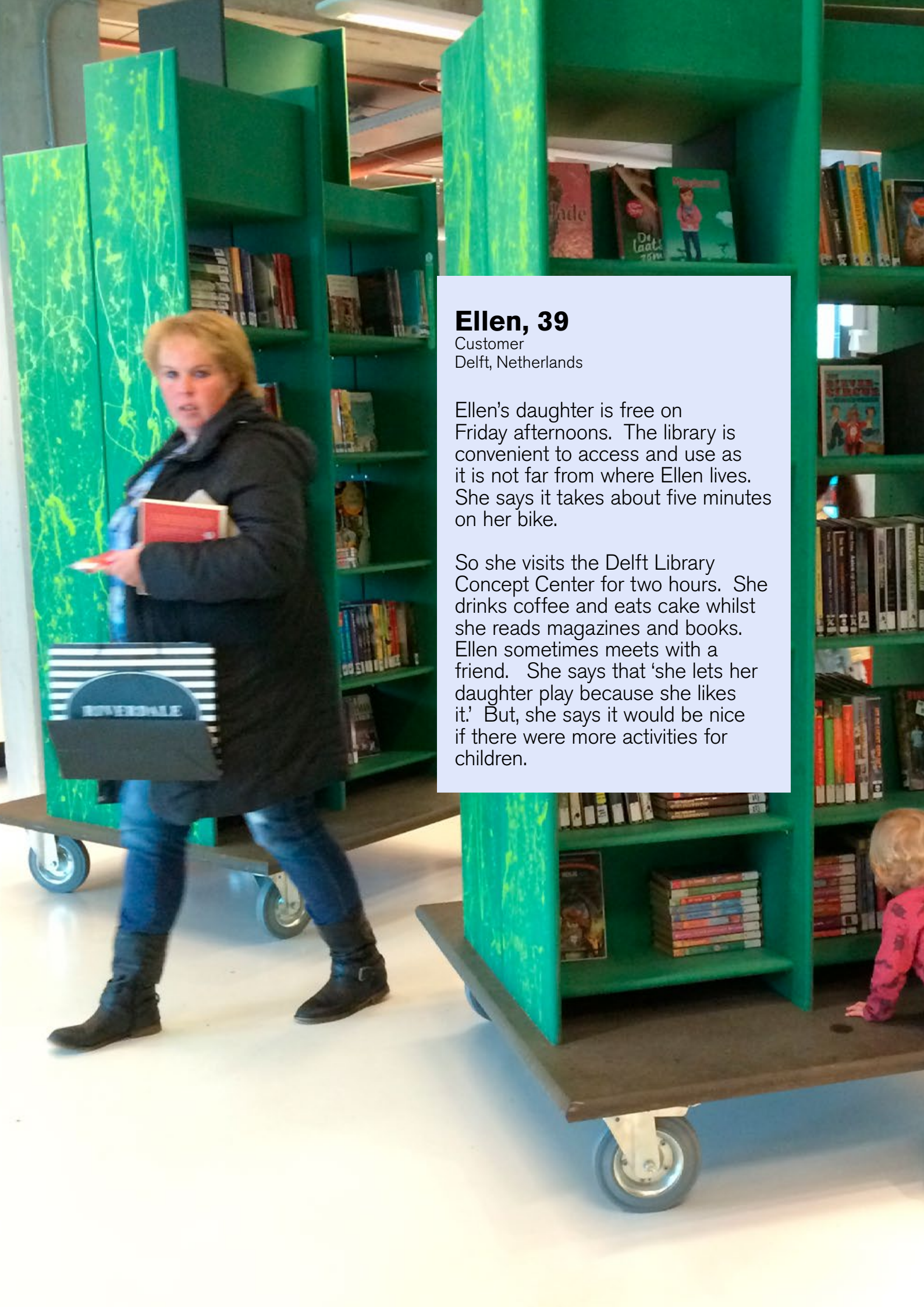
Yet, it is not always easy to accommodate a wide range of interests in a small branch library. Staff complain that they cannot find a seat for everyone at peak times. Where public libraries lack space, they have the option of reducing the collection and the number of open stacks on the floor. This is a difficult decision for staff to make since the original function of the public library was to provide everyone with access to print books when they were a rarity. But, 'the printing material has "exploded" over the last fifty years,' explained the regional manager for a small branch in Seattle. Is it time to remove the books to make way for people?

In the future, public libraries might opt for a 'BookBot' like the one at North Carolina State University James B. Hunt Jr. Library.

North Carolina State University James B. Hunt Jr. Library

BookBot is a robotic book delivery system which can store up to two million items in a climate-controlled environment and deliver any of them within five minutes of a click in the online catalogue. The BookBot requires 1/9 the space of conventional shelving. The student operating the machine stated, 'It's a pretty cool machine. There are about 20 of these systems in libraries across the USA. A lot of these BookBot machines are used for Amazon... and airports. They can contain a lot of things in a small space.'





Ellen, 39

Customer
Delft, Netherlands

Ellen's daughter is free on Friday afternoons. The library is convenient to access and use as it is not far from where Ellen lives. She says it takes about five minutes on her bike.

So she visits the Delft Library Concept Center for two hours. She drinks coffee and eats cake whilst she reads magazines and books. Ellen sometimes meets with a friend. She says that 'she lets her daughter play because she likes it.' But, she says it would be nice if there were more activities for children.

A PLACE TO LEARN

Increasingly, public libraries are supporting early literacy through 'play'. Devon Hamilton, a Play Consultant, working with Calgary Public Library, explains that play is important. 'We are beginning to realise that children's lives have been over-programmed' – so they do not have the chance for spontaneous and 'free' play.

Delft Library Concept Center in the Netherlands is a place for experimental learning through play. There are three artists who create new art objects with which the children can play. One of these is a glass box with material inside to touch with rubber gloves – called 'The Incubator'. As the Services Manager explains, 'We create an environment with art objects that challenges kids to explore things themselves.' The Center's philosophy for using art for learning is very simple – 'children can teach themselves', states the Services Manager. So, teachers are encouraged to 'take a backseat', which is hard for them!

Public libraries are committed to promoting early learning literacy. They take activities associated with early learning literacy to individuals living at a distance from the library building (often in rural areas). It is a big challenge for Calgary Public Library to take its services to the community, explains its CEO. 'In the past, we'd say that is not our job, the day carers will take care of this. I see many examples where we are saying, our role is to educate and support agencies in the communities who are doing this work, so we've identified partnerships where we can make a difference. We've decided we share responsibility in this area'.

Public libraries take their services to patrons in outlying areas using mobile or pop-up libraries. For example, Delft Library Concept Center uses vindplaats (a finding place) which are 'book shelves on wheels' that it lends to nearby schools.

For teenagers, public libraries organise classes to help them improve their digital skills. Chicago Public Library's YouMedia was a joint project between Chicago Public Library and the McCarther

Foundation. It provides teenagers with access to a 3D printer cabinet, vinyl printer, DSLR camera, 10 MacBooks, an iMac, and DJ console. 'YouMedia is not just a teen room... It's a place for making stuff. It's very user-driven,' explains the Children's Librarian in one of the Chicago Public Library branches. 'A makerspace is a buzzword right now... It was originally a club where people would go after work. But, the idea has been manipulated for the general public, so it's become a space where people use technologies that they do not have access to elsewhere.'

YouMedia is so popular with teenagers at Chicago Public Library that adults wanted a similar space. Staff installed a new MakerLab on the 3rd floor of the Harold Washington Center. 'For us, makerspaces are for digital skills, creativity, and possibly a career, but we also want a place to connect people to other places in the community,' explains the Adult Services Manager.

For adults, public libraries continue to offer basic education services. Vancouver Public Library partners with a community college. It provides space for individuals from the community college to tutor adults. 'Vancouver has a large community of New Canadians... so we support them in terms of English as a Second Language Services,' explains the Circulation Services Manager. The third floor of the central library has been renovated, and it now features an 'Inspiration Lab', which consists of six sound booths for recording stories. This is a place where adults can create, access, and share knowledge through a wide range of mediums – including audio and video. The Circulation Services Manager hopes that people will be tempted to record their immigration stories.

MAKING SPACE

FOR LEARNING

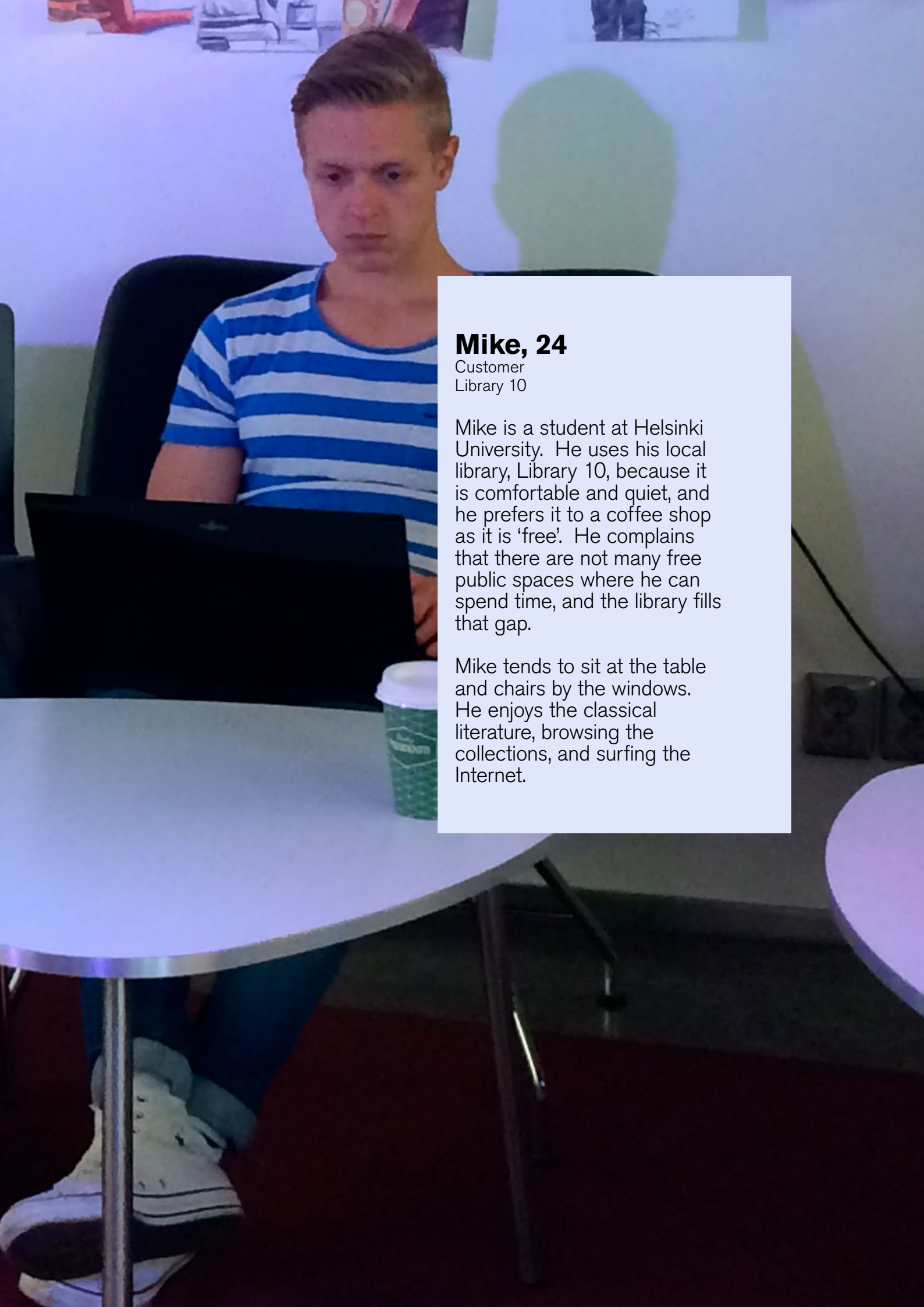
In Finland, 'we think children, and families, and immigrants are really important here so we dedicate over half the library space to them,' says the Services Manager of a small branch library in Espoo. But, providing so much space for children and families in one library, on a single floorplate, generates a lot of noise for others, she states. Staff need to find a choice of settings that cater for those who want to play and work collaboratively and read quietly.

Vanvancouver Central Library

In Vancouver, there has been feedback about the sound coming from the central library children's area because it is open, explains the Circulation Services Manager. 'Part of the architectural beauty of the central library – designed by Moshe Safdie and DA Architects, and completed in 1995 - is that it's open. But, there has been feedback about the sound in the library. Sound travels!' The public library is noisier than it was 20 years ago. 'We welcome that... But, there is some tension between this new space and the old space for traditional reading and research.'

She explains there is a need for a quiet space, which she calls a 'traditional space', so that the rest of the library can become noisier. The two top floors of Vancouver Central Library are being renovated, again, by Moshe Safdie, to create a new 'super quiet' reading room on level eight.





Mike, 24

Customer
Library 10

Mike is a student at Helsinki University. He uses his local library, Library 10, because it is comfortable and quiet, and he prefers it to a coffee shop as it is 'free'. He complains that there are not many free public spaces where he can spend time, and the library fills that gap.

Mike tends to sit at the table and chairs by the windows. He enjoys the classical literature, browsing the collections, and surfing the Internet.

A PLACE TO READ

'If we respond to the community, then we will remain relevant to them. If we are relevant to them then the public library service is going to survive. What does it mean to be relevant?' asked a Branch Manager in Seattle.

While public libraries were initially designed to provide everyone with access to printed books, at a time when print books were expensive to purchase, their role has evolved over the years. As print books have become cheaper, public libraries have been filling up with them, and they are now said to be 'overrun' with books. Today, librarians are of the opinion that it would be better to remove the open stacks to enable patrons to be more 'active'.

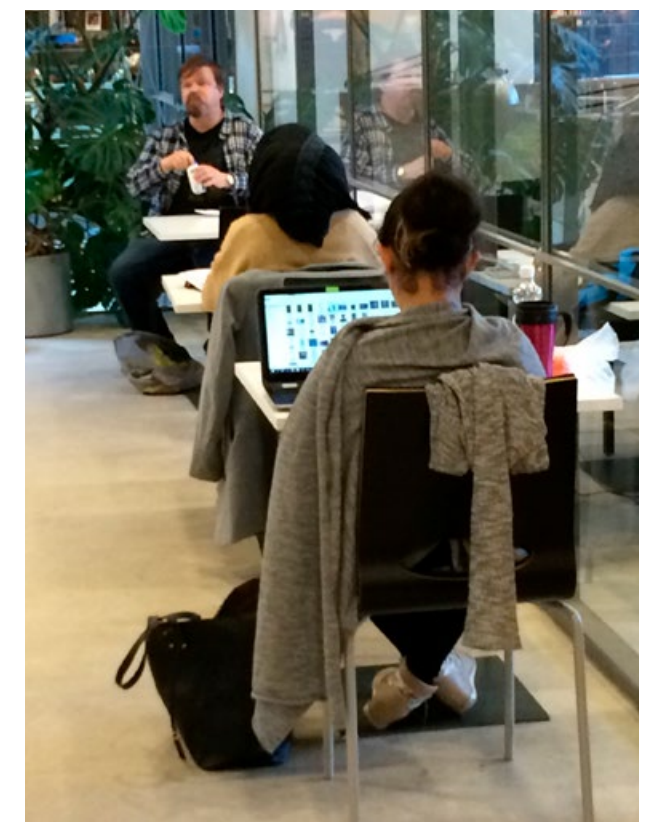
The public libraries I visited on my tour around Europe and North America have begun to vigorously 'weed' their collection. At Albany Park, a small branch library in Chicago, staff are reducing the collection by 10-20%. 'We want a "robust" collection,' explained the Assistant Commissioner for Neighbourhood Services. 'We don't have to have shelving in libraries for growth.' She has reduced the collection by up to 30% in other branches.

Staff argue that weeding is a way of making more popular items visible to patrons. But, it has come as a surprise to patrons who still consider the public library as a place to browse books. When you take out nearly a third of a collection, the shelves look empty. 'So we removed the shelves,' said the Deputy Chief Executive Officer of Calgary Public Library. The result is that there are fewer books on the shelves and fewer open stacks on the floor.

Public libraries have provided access to material online, lending tablets and e-magazines and e-books. As the Director of Services at Seattle Public Library explained, 'We've had a growth of e-books, but this is plateauing... We could spend 50% more and only get 10% more use. There

was a period when we saw 60% increase in e-books, and this year it was 20%, but there was no more uptake.' He argues that e-lending is unlikely to take off until vendors reduce the charges for e-material and public libraries see a return on their investment.

As the Director of Engagement and Special Projects at Chicago Public Library explained, 'digital access is increasing, but circulation of books is not decreasing, it's actually increasing. The pressure to keep the book is enormous – people who are "hard core" users still want bestsellers, and they want them now.' Patrons want to borrow the latest publication by their favourite author. They also want to be able to read the book online; they not only expect the library collection to be up-to-date, but they expect the library to make it available in physical and digital form.



MAKING SPACE FOR READING

Given people visit the public library to be more 'active', staff are trying to create more space for them. In larger libraries, they are providing a choice of settings for people to engage in a range of pursuits. However, it is not easy to do so in smaller libraries – and staff have to compromise.

Library Concept Center Delft, Netherlands

Budget cuts have forced the Marketing Manager at Delft Library Concept Center to consider focusing on developing services for children instead of adults. He will dedicate more resources (time, equipment, space) to children's services (increased from 30% to 70%). When I visited in September 2015, staff were prototyping new activities for children in the teen area, and were planning to reduce the size of the adult collection on both floors.

While there has been a decline in book lending for adults by 6%, people still visit Delft's Library Concept Center to borrow physical books – and they will for the next few years. So, the Marketing Manager has decided to make physical book lending more attractive to them. 'We will make an arrangement with Hague or Rotterdam to make sure that adults have access to more physical books.' Members of Delft's Library Concept Center will have access to all the books on the Hague or Rotterdam catalogue. They will be able to order a book online from public libraries in Hague or Rotterdam, and collect it from Delft's Library Concept Center the following day (for a small fee).



PART TWO

DESIGNING LIBRARIES



PRINCIPLES

FOR LIBRARY DESIGN

Drawing on case studies, this section critically explores the design principles shaping contemporary libraries, and feedback from staff and patrons on their features. These include: accessibility and inclusion – the library must be convenient to access and use; visibility and connectivity – the library must be a place for people to freely interact; flexibility and adaptability – the library must be modifiable to reflect people's changing interests.



ACCESSIBILITY AND INCLUSIVITY

The libraries I visited in Denmark, Finland, and the Netherlands all benefited from their location.

Whether they are in a main square, shopping centre, or medical centre – they are designed to be close to other services.

Almere Stad in the Netherlands sits on the main square – drawing visitors from all over the town to the square where there are shops, cafes and restaurants. The new library, designed by Concrete Architectural Associates, completed in 2010, is designed to shift the flow of people from the old town to the new town. The flooring in the entrance is similar to the material in the main square – to create a seamless connection between the two spaces. What happens in the main square influences what happens in the library. Wednesday is market day, which brings more visitors into the building.

In Espoo – a city with no definitive centre or business district – the regional shopping centres are the areas of most activity. Staff say that a library is a desirable service, and it is beneficial to be located somewhere people are passing by. The library in Sello is the second library in Espoo to be situated in a shopping centre. It is the largest library in the area. Since its opening in 2003, staff say that it has been the most frequented library in all of the cities of Vantaa, Espoo, Kauniainen and Helsinki – the Helsinki metropolitan area.

Another branch library in Matinkylä in Espoo, Library Apple, is going to become part of Iso Omena service centre that includes a health centre, maternity and child health clinic, mental health and substance abuse clinic. The library will take up roughly half of the floor space in the new service centre – although it is not restricted to this area alone as staff anticipate that the service centre will operate as an integrated facility. As an example, a family with an appointment for a vaccination at the child health clinic can wait for their appointment in the library. Likewise, senior citizens can begin their day at the shopping centre, take care of some administration related to their pension, take part in an exercise class, and borrow a book to take home from the

library.

Schmidt Hammer Lassen envisaged Aarhus DOKK1, completed in 2015, as a covered urban square. 'A place where people meet, a natural point in the city to meet, exchange information, be together. A place where the life of the city unfolds,' explains one of its architects. The library will become a transport hub for people coming into the city, and spreading throughout the city. The ground floor is a buzzing 'urban room' accessible to everyone who comes by foot, cycle, light rail or vehicles - with state of the art parking facilities underneath. It marks the development of the waterfront into a bustling part of Aarhus.

An 'accessible' public library is:

- located near a transport hub for easy access to and from the city
- located on a main city or town square
- located near a shopping mall for convenience
- co-located with other services – such as health facility and citizens advice bureau
- offers some kind of 'outreach' service



Public libraries are
co-located with other
services for convenience.

ACTIVE LEARNING CENTER

Espoo, Helsinki



Project: Branch Library
Location: Espoo, Finland
Completed: 2015
End Use: Public Library
Architect: Esa Ruskeepää Architects

Opinmäki opened in August 2015. It houses a public library, an international school, a Finnish-language comprehensive school, early education premises, a sports hall as well as premises for the adult education centre and Youth Department.

The library is the first Active Learning Centre (AKKU) in Opinmäki, Suurpelto. Its operations are based on the Paja concept which emphasises 'learning by doing'. The small public library is equipped with the latest technology, such as 3D printers, smart sewing machine, a vinyl cutter, and LEGO robots.

It is the first self-service facility in the region. Students can use the services with their library card from Monday to Sunday, 7 am to 10 pm. They hang out in the public library before and

CHALLENGES

Children have been put off visiting the small library in Opinmäki during the day as, when I visited, librarians said that the school teachers regarded the library as a 'distraction'. As the assistant librarian explained, 'The idea is that the students come to use the library to take books out... But the library is not as integrated with the school as it could be'.

My guess is that the librarians and teachers offer a different style of learning and education; teachers in school might be teaching according to the typical class-room style. The small branch library in Opinmäki takes a different approach to learning, where the students are encouraged to learn through play. In my opinion, it seemed that co-locating the library with the school was not a way of making either more accessible, rather the two institutions needed to be more culturally integrated.



VISIBILITY AND CONNECTIVITY

Calgary is getting a new central library, designed by Snohetta, which will be completed in 2018. It replaces the existing central library that is regarded as no longer 'fit for purpose'. The new library is designed to be as open as possible. As the Deputy Chief Executive Officer explained, 'People will enter the library via the gentle ramping... and enter into the vestibule. It is important that they can see all of the floors; they cannot see what is on the floors, but they can at least see through them. We expect light to come through this building'.

Customers are likely to spend a significant amount of time in the building. So they need to know how it functions. If customers can see what is on the fourth floor, they are more likely to be able to figure out where to go for themselves. The openness of the building helps customers who use it to navigate, so that they feel like the 'place was built for me'. 'They feel like they belong here,' she says. The signage will be there to nudge them in the right direction. 'If we have to explain in great detail how the building works [with signs] then we have probably failed', she continues.

Inside the public library itself, architects and interior designers will make it more 'welcoming' by focusing on what librarians call the 'patron path'. This is the way that patrons orientate themselves when they enter the library. 'Don't block it... don't put a load of information in the first few metres of the vestibule because they won't read it,' says the Chief Executive Officer of Calgary Public Library.

Many of his suggestions for the new library come from thinking about retail. In retail, 'merchandise' is displayed to attract customers into the building. So, for example, his suggestion would be to put the 'hold' books at the back of the building, where the bread and eggs would sit in a shop, so that people have to walk through it in order to get to them. The idea, of course, is that anyone entering the library to pick up a 'hold' might be tempted to browse all the other books on the shelves on the way.

in the Netherlands is laid out like a department store to provide visitors with a smooth customer experience. The collection – or merchandise – is organised into 'shops' to reflect customers' interests. It is arranged as customers like to see it, face outwards, to catch their attention as they are browsing. The library shelving is curved to reflect customers' shopping habits. There is seating amongst the open stacks so that customers can sit down to read.

In Calgary, staff are illuminating the book spines so that patrons can see them, but also to make the books more attractive. The strip lighting draws your eye to the title on the shelf. Elsewhere, the library workers have replaced ineffective lamps in the high ceilings with LED lights that drop into the space adding a permanent glow over the reading areas. Patrons have yet to get used to some of these light fittings as they are unexpectedly bright – albeit very effective.

A public library that promotes 'visibility' has:

- an atrium providing customers with a good view of all floors
- a generous reception area (or landing area) with clear circulation routes
- a simple furniture layout for ease of navigation
- good display techniques – e.g. lighting
- few visual obstructions – e.g. low shelving

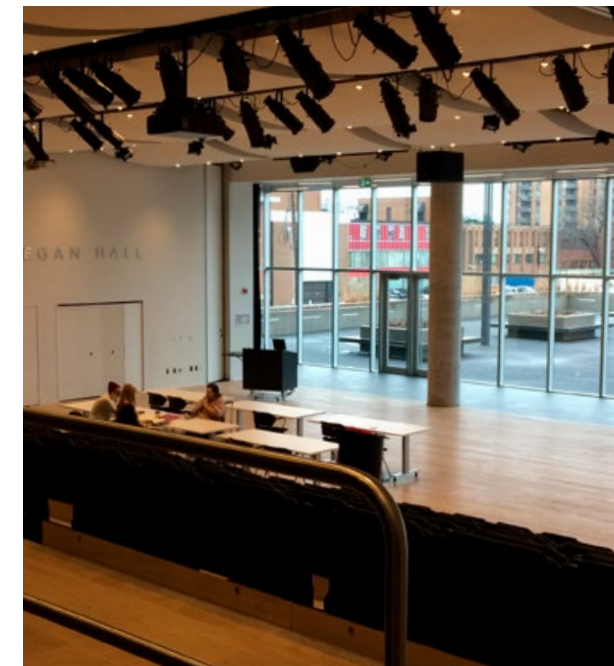
Completed in 2012, de nieuwe bibliotheek in Almere



These are **open plan** spaces
with some zoning to
encourage interaction.

HALIFAX CENTRAL LIBRARY

Nova Scotia, Canada



Completed in 2014, the new central library has a 300-seat performance space, two cafés, gaming stations, music studios, dedicated space for adult literacy classes, a First Nations reading circle, and board-rooms for local entrepreneurs.

The 300 seat performance space was designed to be like an 'outdoor' area; it has seats that retract into wooden steps so that the space can be used for events, dance, performances, exhibitions, and a wide range of library programmes. It splits into a 200 and 100 seat arrangement. It has 'green rooms' on either side, providing people with a second way into the auditorium, as well as activity space and changing facilities.

The new central library hosts a varied programme of events. Local universities hold lectures there - which are open to the public and are included in the public library programme.

Project: New Central Library
Location: Halifax, Nova Scotia
Completed: 2014
End Use: Public Library
Architect: Schmidt Hammer Lassen
Client: Halifax Regional Municipality
GIA: 15,000 m²

CHALLENGES

Open plan designs are often noisy; Halifax Central Library has a large atrium, which means noise travels throughout the space. 'If you want to be quiet then you use spaces further away from the atrium; if you want to be noisy then you use spaces closer to the atrium,' advises the lead architect from Fowler Bauld and Mitchell. He worked with an acoustic engineer to install rubber flooring on the bridges and stairs to get rid of the 'footfall' sound. In the ceiling is a linear metal beam that is highly acoustically absorbent, so any sound that goes about that space is immediately deadened.



FLEXIBILITY

AND ADAPTABILITY

Public libraries should be designed so that they are physically adaptable over decades. The new library in Halifax, designed by Schmidt Hammer Lassen, completed in 2014, does not have any walls. It only has columns, explains the lead architect from Fowler Bauld and Mitchell, so there are no walls that have to be knocked down in the future.

At the same time, the spaces in the new central library were designed for all ages. In other words, while each of the spaces has been clearly defined in such a way that it is usable and efficient, they can be used by anyone who wants to use them. As the Youth Services Manager explained, 'We are looking at a more dynamic audience – we are looking for the spaces to be used by all ages, teens and adults.' This means that when the teens are in school, the spaces will be used by adults as well. The adult spaces have yet to be used as fluidly as the teen spaces.

The furniture is also mobile so that staff and visitors can pull the equipment out and push it away. Even the soft seating on the second floor is arranged so that people can sit on it any way they want to. It has been interesting to see how the customers move the furniture around, explained one librarian. 'There is furniture that you think that visitors would not move ... but they do!'

The most flexible spaces are those that are more neutrally decorated, suggests a regional manager in Seattle. 'I suggest it is better to stick to the simplest things. For example, a table that is going to be taken over by a high school study groups at 4pm needs to be a comfortable reading space for a guy looking at the stock prices in the morning, so the "reversible lane" approach.'

Even staff are flexible in the way they deliver the public library programmes. Service delivery has become quite impromptu, explains the Deputy Chief Executive Officer of Calgary Public Library. 'Instead of saying we have story-time every day at 10.30am, whether people like it or not, we are encouraging

staff to think more flexibly about their hours of work, and the way they work... We want to encourage responsiveness at an individual level.'

In Library 10 in Helsinki in Finland, customers can organise more events. At least 90% of the events held in the public library are organised by the customers, explains the manager. 'We are moving from individual library use to collective use. People collaborate together. They want to share the space and atmosphere with other people.'

Main features of a 'flexible' public library:

- an adaptable structure – e.g. columns or demountable walls
- an adaptable furniture layout – e.g. zoning
- a neutral décor – e.g. not gender and age specific
- amenable staff – e.g. responsive and pro-active



Mobile furniture enables
customers to **interact**
more easily.

TAYLOR FAMILY DIGITAL LIBRARY

Calgary, Canada



Calgary University's Taylor Family Digital Library, designed by Kaisan Architecture, was completed in 2011. It houses a number of facilities and services - the university library; the university press, an art gallery, and the archives and special collections.

It was built to be 'future proof' with a raised floors for cabling. The library has 29 collaborative workrooms with large wall-mounted flat screens; these sit between four and eight people. There are six larger practice rooms - for presentations, hosting a seminar, or even chatting on skype. The practice rooms have ceiling-mounted cameras allow students to playback their presentations to review their performance. Students book rooms via touch-screens located on every floor.

Project: Taylor Family Digital Library
Location: Alberta, Canada
Completed: 2011
End Use: University
Architect: Kaisan Architects
GIA: 24,000m²

CHALLENGES

The furniture in the Taylor Family Digital Library is not fixed to the ground so the students move chairs and tables around the building. 'Even if the tables have separations on them... they want to sit together. They want physical closeness', explains Associate University Librarian. 'When our 4th floor was originally designed, we had bar seating, but it meant that students were very loud ... even though it was a quiet study floor', she continues. So, to reduce the noise, she replaced some of the mobile furniture with carrels for individual study.

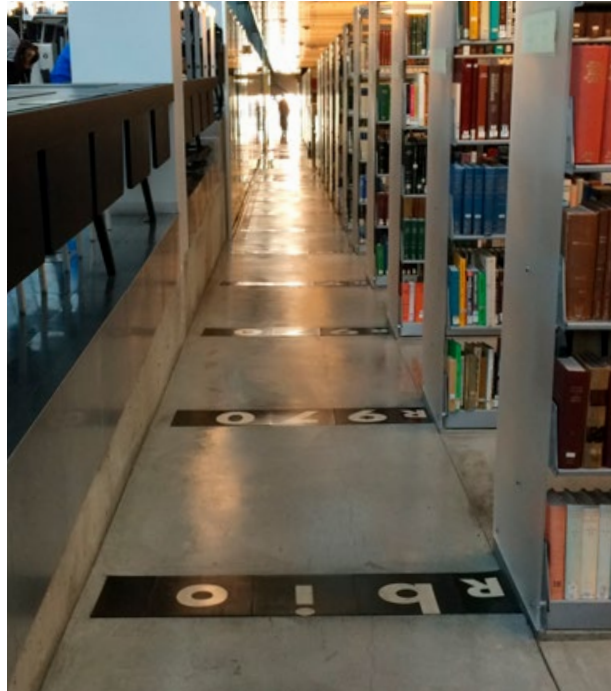
As contemporary public libraries are open plan, and their furniture is more mobile, staff will have to spend more time considering how to utilise the space effectively. The layout of the furniture is not static, but it is constantly being moved around the public library. This leaves the public library looking 'messy'. It also makes it difficult for staff to predict how the library will be used and by whom at different times of the day. Staff and customers will have to plan how to effectively use the space.

PART THREE

EVOLVING LIBRARIES

SEATTLE LIBRARY

Washington, USA
2004



Project: Central Library
Location: Seattle, Washington
Completed: 2004
End Use: Public Library
Architect: OMA + LMN
GIA: 33,700 m2

In 2016, Seattle Public Library is going through some 're-imagining' in light of the key design criteria described in part two. While the central and branch libraries in Seattle were originally designed to be 'flexible', people's approach to flexibility has changed since they were built. Staff now complain that the buildings are not flexible enough to sustain the current habits and needs of their patrons.

As part of this 'reimagining' initiative, Seattle Public Library has been reconfiguring the interiors of a number of its buildings - initially focusing on branch libraries in communities that most rely on the library services. It will eventually modify its magnificent central library, designed by OMA + LMN, which, despite being an architectural masterpiece, does not support the needs of its patrons today.

OMA designed the central library, completed in 2004, as a civic space at a time when public libraries were perceived to be under threat from digitisation. However, today staff complain that the building does not suit their needs or those of their customers. They say that it 'feels like a warehouse'. They even suggest that the books should be removed from the building altogether. 'We would have more space in the building for people,' proposes a Regional Manager. It is hugely inefficient to have the central



library as a collection repository as it is difficult to get material in and out of the building.

Staff also complain that the central library cannot be easily adapted, which makes it a very inflexible space. The open bookstacks in the 'spiral' on floors six to nine are 'glued' into position on the concrete floors which means they cannot be rolled around, pushed away, turned sideways in response to how patrons want to use the building today.

As part of the re-imagining, the children's library will be reconfigured so it is more collaborative. 'There is a lot of space that could be used in here,' explained the Director of Programmes and Services. 'We need better sightlines, and we need to reduce the size of the furniture to children's scale, and maybe we could make the shelving portable or mobile.' At the moment, the children's space is very brash, with little space for children to engage in 'child-like' activities.

Smaller buildings throughout the Seattle Public Library system are also being redesigned. The branch library in Capitol Hill, a cosmopolitan neighbourhood, is going to have its carpet replaced, and entrance reconfigured to increase visibility throughout the space. As the Regional Manager

based at Capitol Hill explained:

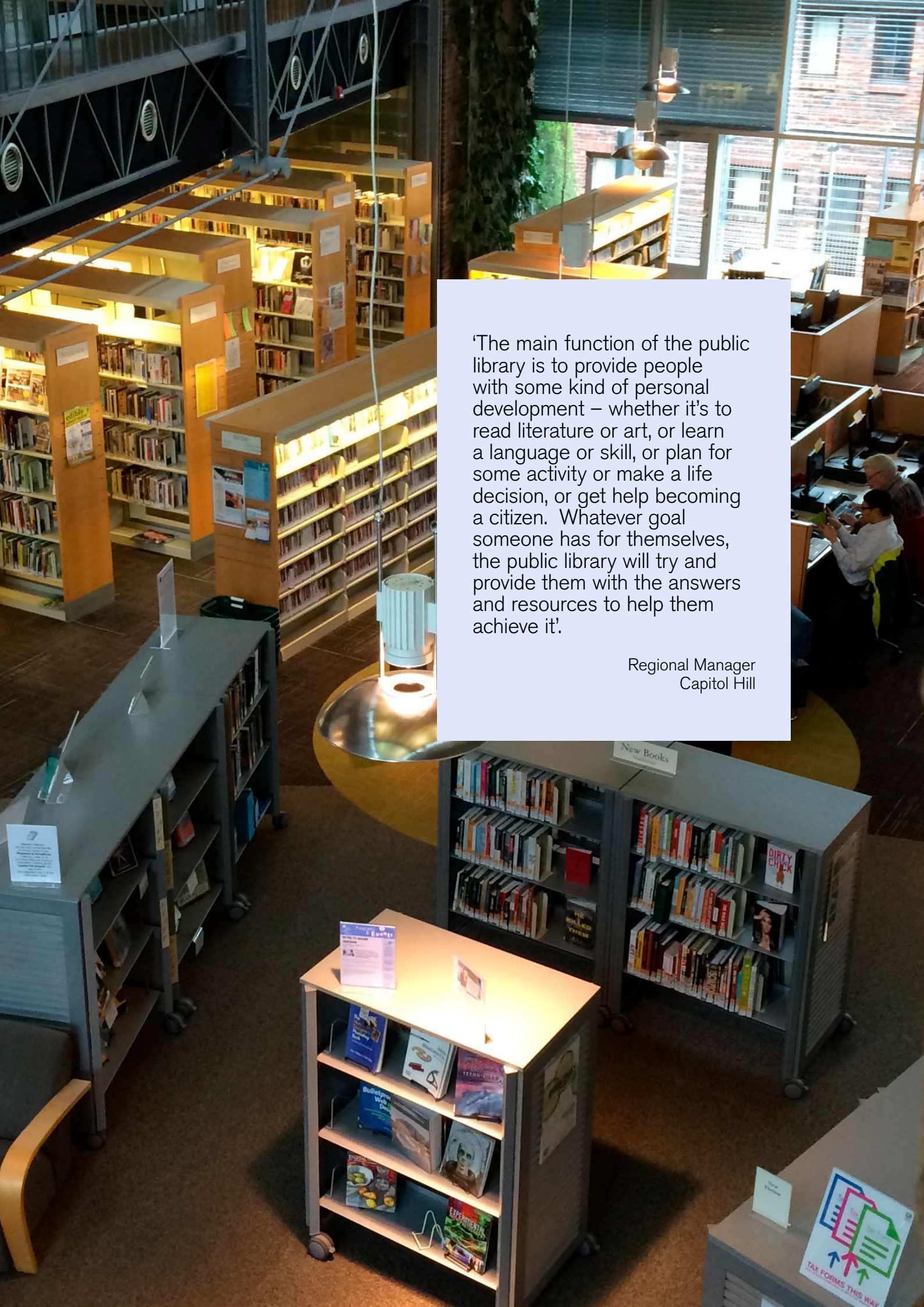
'We eliminated the separate desks; we consolidated the services on those two separate desks ... the librarian and the library associate can now support each other. It's much more flexible now. We moved all of the fixed shelves in this one area; we replaced them with shelves which were a lot smaller and lower, which immediately opened things up so that the staff could see the patrons and so that the staff were visible to the patrons.'

How does Seattle Public Library decide where to focus its attention? In Northeast branch library, the community librarian is doing 'community conversations', so he can focus on responding to the needs of people in the neighbourhood. 'But we've launched a more formal engagement process,' says the regional manager, 'called "community listening". It covers a whole range of things. We're doing two conversations a week with individuals over eight weeks to establish a more nuanced picture of who uses the library. We need more space, and we need more attention to the languages collection, to reflect the people who come here. We need come up with a plan for a flexible building so we can use the library in the way that people want to use it.'



CONCLUSIONS

AND RECOMMENDATIONS



'The main function of the public library is to provide people with some kind of personal development – whether it's to read literature or art, or learn a language or skill, or plan for some activity or make a life decision, or get help becoming a citizen. Whatever goal someone has for themselves, the public library will try and provide them with the answers and resources to help them achieve it'.

Regional Manager
Capitol Hill

LESSONS FOR THE UK

People visit the public library for a wide range of reasons to pursue a wide range of interests – from reading to retro-gaming, from board-games to business meetings. Public libraries do not just attract individuals, but also groups and organisations: schools, higher education institutions, charities and businesses all want to hold events in the public library. These groups and organisations need resources – such as meeting spaces, learning facilities, and intellectual support - that public libraries can and do offer them.

Customers will visit the public library, and anticipate that they can browse the open stacks, select a book or magazine from the shelf, and then find a quiet room in which to read it. They also want to curate their own experience, make the most of the open plan layout, mobile furniture, and neutral décor, and also the collaborative approach of staff, to access, create, and share knowledge in their own unique way.

Architects and interior designers support their needs by providing them with a wider choice of settings than they did five or ten years ago. The open plan arrangement enables customers to easily navigate their way around the space, and engage and communicate with each other. The layout of the furniture can facilitate greater collaboration between staff and customers in the front of house areas. The design of the desks can encourage shy staff to spend more time on the floor interacting with their customers.

What are they doing?

- atriums with generous circulation so that that patrons can see what is going on across all floors
- open plan layout that facilitates flexible programming, multi-generational events, and varied activities
- generous circulation for 'spill over' from function rooms e.g. larger events
- demountable walls so the spaces can be reconfigured over time

- shrinking back of house areas so that staff participate with patrons on the floor
- single contact point information and circulation desks
- mobile furniture so that patrons can move it around
- low book shelves so that patrons can see over them

Staff in larger buildings have sufficient capacity to include enclosed meeting rooms, quiet reading areas, and study booths for people who use the library to study, work, and read. Staff in smaller buildings struggle to provide these types of enclosed spaces, resorting to other techniques to accommodate everyone, such as timetabling. An area used by adults during the day will become a teen space after school. Alternatively, staff might try furniture solutions, such as high backed chairs that provide people with some degree of privacy.

What is clear is that there is no design 'formula' - every library must support the discrete needs of the community that it serves. In an area where there is a higher number of teens, libraries must respond to their need for spaces to 'hang out' after school. In an area where there is a higher number of retired adults, libraries must respond to their need to have a quiet space in which to read, or provide adult learning classes, or offer digital literacy workshops. Where there is a mixture of individuals and interests in a single community, then the staff can only do their best to accommodate everyone.

Staff need 'data' in order to understand the needs in every single community. This report has demonstrated that it is important that library professionals, and architects and designers involved in redesigning libraries, collect as much data as they can on how people are engaging with the current service and space. This will involve collecting quantitative data – the number of people in the building at a fixed time - as well as qualitative data - such as how people feel about being in the building.



This report contributes to this growing need for data; it provides feedback from staff and customers on the spaces within contemporary public libraries. The feedback that I obtained from staff and customers was largely positive.

But, whilst public libraries are designed to be accessible, visible, and flexible, this brings new challenges for staff who are trying to accommodate everyone. Indeed, libraries that are designed to be more 'open' with furniture that is designed to be more 'flexible' can often be noisy, and require careful planning. With this in mind, this report makes the following design recommendations:

Keep it real

The library professionals who were most able to adapt to the changing needs of their patrons were those who routinely collected data on how their customers engaged with library services – including their spaces. This data enabled them to invest in services their patrons most needed – and also to lobby state funders or private investors for more financial support in relation to specific issues.

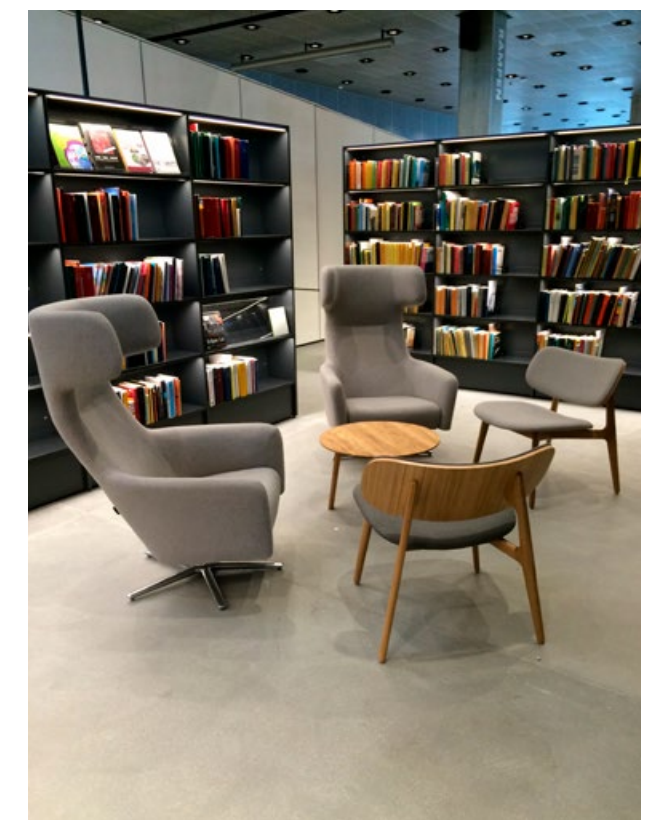
Keep it interesting

Once armed with data, librarians and designers should be brave in making changes to the library in response to the changing pattern of use, or people's changing interests. Even the smallest adjustments can make a difference, such as adding LED stripping to the open stacks to illuminate the books, or changing the layout to create a more welcoming entrance. These small changes will not only ensure the library continues to be relevant, but also make patrons proud.

Keep it simple

As mentioned above, the changes to the library do not have to be huge in order to make an impact. In fact, the most 'successful' spaces I visited were the branch libraries with a simple open plan layout, mobile furniture, and neutral décor. There is now more (flexible) furniture available on the market, which makes it easier for library staff to create a

wider range of settings in the library – from collaborative to quiet spaces.



DISSEMINATION

PLANS AND ACTIVITIES

PLANS AND ACTIVITIES

The aim of my project is to connect individuals who share an interest in the role of design and architecture in the transformation of public libraries.

My findings will be disseminated amongst members of the library community with whom I have engaged, architects and interior designers, as well as other stakeholders – such as policy-makers, think-tanks, and researchers.

This short report is one of a number of outputs from my tour. Other dissemination activities include:

Website

www.inspiringlibraries.com

This is a detailed account of my experiences on the tour – with access to all my photos on Instagram.

Longer Report

This consists a fuller description of the case-studies as well as building analytics for architects and interior designers. It is available on request.

Workshops

RSA: On completing my research, I organised a workshop funded and hosted by the Royal Society for the encouragement of the Arts, Manufacturing and Commerce for stakeholders to meet and share ideas about the future library.

UK Government: More recently, I have been invited by the Libraries Taskforce to share my thoughts on designing libraries for the 21st century at a series of workshops for library professionals in four cities in the UK.

Further research

I have collaborated with Goldsmiths and Royal Holloway on a bid for funding to research people's experiences of 'pop-up' libraries in the UK.

Other

I will present my research at relevant industry and academic conferences.



15.2 Ilse Sand: Elsk dig selv

15.2 Elaine St. James: Tænk enkelt

15.2 Elaine St. James: Tænk enkelt

15.2 Cammilla Rysgaard: Din guide til positivt selvværd

15.2 Cammilla Rysgaard: Din guide til positivt selvværd

15.2 Miguel Ruiz: Kærlighedens kunst

15.2 Miguel Ruiz: De fire leveregler

15.2 Gretchen Rubin: Proekt stjast'e

15.2 Dorothy Rowe: I harmoni med dig selv