

I have to change to stay the same....

Creative Learning Environment for Future Libraries

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I would like to thank my colleague Joyce Sternheim for her help with this paper . Her thoughts and vision have been vital to my writing. She is in every respect the co-author of this paper which forms the basis of my presentation.

My contribution concerns the future of the library and the way in which every library can find a way to adapt. Due to the rise of new information technologies, the function of the public library is changing rapidly. Many libraries in the Netherlands are struggling to tackle this shift in function within the information society of today.

My experience specifically concerns public libraries: I have worked in public libraries all my working life and my society - the *Ministry of Imagination* - specializes in concepts for the public library and its design. The Ministry is not a real ministry by the way or public authority or NGO. It is a small firm, consisting of an architect, a cultural programmer and two librarians. Together we think about and work on the future of libraries. This has been an interesting journey of discovery and it continues to fascinate us!

Nobody really knows what the library of the future will look like. I do know one thing for sure though: the library of the future has its roots in the past. At the same time, the public library will have to change and adapt to our modern times.

It is only possible to develop a new approach and a strategy that is truly aimed at the future if you grasp the essence of public library work. What is essential and what needs to change? This means enquiring into the 'soul' of library work, the original values and qualities that remain timeless. You cannot develop a vision for the future without a thorough understanding of its origins, its *raison d'être*. The library needs to reinvent itself and break new ground but must all the while be conscious of standing in a long and venerable tradition. If you do not know where you are coming from, you are bound to get lost on the way to the future.

As the Dutch painter Willem de Kooning stated: "I have to change to stay the same". De Kooning was born in Rotterdam but he left for the United States as a stowaway in the ship, only 22 years of age. He became world-famous for his paintings.

Chapter 1: Change.

Libraries operate in a drastically new context. The rise of information technology is having an enormous impact, but that is not all that's going on. The behavior of users is changing, the diversity in society is increasing and trends are emerging in rapid succession.

There is a growing realization that great changes in our society demand radically different approaches to library work. The needs and questions emerging from society today really are different to those one or two decades back. Our current answers are not all wrong, but they are by no means good enough. We need to start looking for new answers, without lapsing into trends and fads or quick wins. Apart from the ongoing programs, we need more initiatives to shake up the library world as a whole. This means that instead of working to improve and modernize our service concepts, we should aim for real change and innovation!

Recognizing certain patterns in societal changes gives direction to our thought, which makes us better equipped to formulate new policy aimed at the future. We looked at changes that surpass short-term trends and hypes and discovered a few basic patterns. These patterns proved particularly relevant to our work.

- From scarcity to overabundance:

Digitalization, and particularly the internet, have caused one of the most disruptive changes in the library world: the shift from scarcity to abundance. The public library originated in a time of scarcity, a time in which access to information and knowledge was reserved for a small proportion of society.

Today libraries no longer have a monopoly on the provision of access to information. Information is virtually everywhere and people are bombarded with it all day long. Part of it is useful and important and part of it is nothing but meaningless trivia.

Having access to this information glut does not necessarily mean people have become more knowledgeable, let alone wiser. It seems the opposite is true: the lack of context and interpretation makes it more difficult for people to understand what is going on in the world, what really matters and why things happen the way they do. As a result hasty opinions are being formed, based on insufficient information or superficial impressions.

Libraries should be sincerely worried about this. After all, their aim is to support people in becoming well-informed citizens, able to play an active role in society. In this world of abundance, merely providing and improving access to information won't suffice. It doesn't automatically lead to better understanding or to knowledge development. In other words: access to information alone does not automatically make us responsible and well informed citizens.

- From consumption to co-creation:

Another major change that effects libraries is the shift from consumption to co-creation. In the old days libraries decided what was good for the people and ensured that everyone could use the services they provided. Users were considered 'consumers' whose principal goal was to borrow books. At least this was and – I'm afraid still is – the case in most public libraries in the Netherlands.

Information technology has radically altered the relation between consumers and producers of information. Not only has the internet become the most important source of information, it is also the place where people manifest their identity, maintain contacts, hold discussions and deploy initiatives. Online social networks form part of daily life, and countless people all over the world keep their own blogs and add their own content to these.

To remain relevant, libraries need to tap into the collective insight of people (wisdom of the crowd?) and allow their activities and knowledge to become part of the library.

- From standardization to differentiation

The library has always been a relatively closed system with a set of fixed rules, run by professionals only. This also applies to schools, museums and health facilities. It was a world in which 'one size fits all', without room for detours or exceptions. Modern technology, however, allows for more deviation from the norm and even complete differentiation from the norm. This makes personalization of a service or product possible which is a very important shift in approaching the consumer. Personalization may seem abstract but just take a look at your smartphone. The smartphone is a highly standardized product. You could easily say that every telephone is more or less the same. But the use of applications makes every smartphone completely different from the next. Or another example: these days if you buy a new car, you can order it via the car configurator exactly customized to your wishes.

Within the context of the public library, this means we have to start thinking about a library in which we can help people to make their own personalized version of the library. Different personalized versions of the library in which different ways of searching, different sorts of catalogs, a variety of collections and even different forms of ordering can co-exist next to one another.

The library is no longer a building or a collection of books or an organization with people. Instead, the library is a set of activities: the selecting, the ordering, the making available and the reading. It is not where I am; it is what I do. It is when I am engaged in selecting, ordering, keeping, or making available that I am 'something library'. If, for instance, I maintain

thousands of pictures, songs, books and files on a PC I am a librarian and need tools to support me.

The traditional pillars of the library make way for new paradigms, which we could perhaps summarize under the header: 'from passive organization to active use'. A form of innovation agenda then unfolds almost as a matter of course, our task being to make it from the left-hand column into the right-hand column:

From	Towards
Scarcity	Overabundance
Consumption	co-creation
Standardisation	Differentiation

Chapter 2: Directions for a new strategy

The paradigm shifts mentioned above clearly indicate that a radically different approach to library work is needed. The changes provide us with directions that can help us design a fundamentally new strategy for public libraries.

This radically different approach also affects the role of the library in terms of how it approaches ways of learning. Up till now the library has always focused on individual aspects of learning. The library remains a source for personal development, only in the 21st century a new dimension needs to be added. The library can be a place for collective learning as well and for this new approach we have to strike out on new pathways.

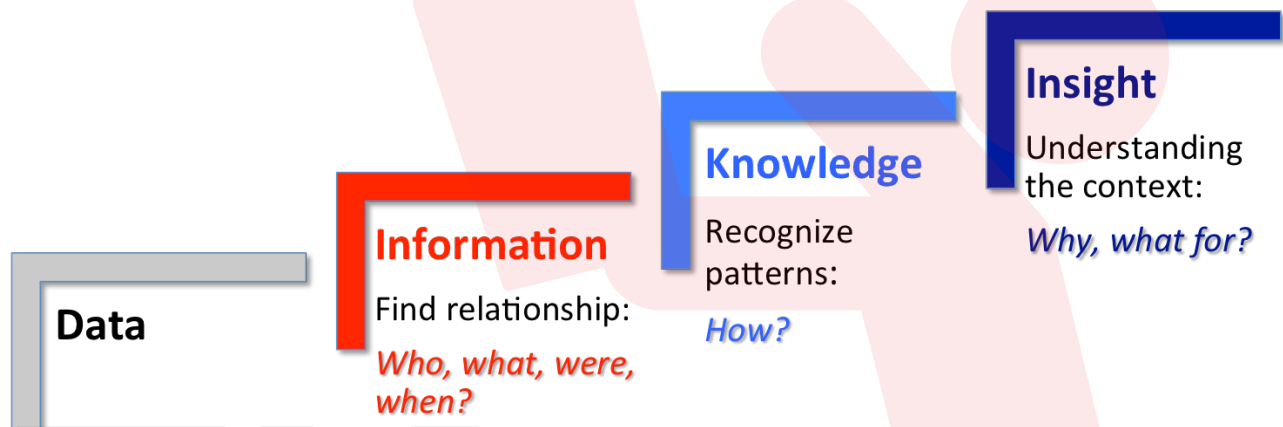
2.1 The road towards wisdom

Libraries have always focused on the access to knowledge and information. Learning has always conventionally been defined as the acquisition of new knowledge and skills. But does knowledge and information in the year 2017 still mean the same as twenty years ago? I think these terms will mean something completely different in the future.

Also, the use of artificial intelligence is becoming a reality. One of the most appealing and shocking examples of this is Watson, IBM's supercomputer; it won the most difficult quiz in the world - Jeopardy - against the two best players ever. Watson played against Brad Rutter and Ken Jennings, the two greatest players in the history of the quiz game and Watson won easily. This proves that the skill of gaining and possessing extensive and specialized knowledge no longer exclusively belongs to humans. This fact has a huge impact on the role of the library.

The library should promote wisdom and insight and not just the acquisition of knowledge. In response to the information overload and the need for deeper interpretation, libraries will have to take a more active role in the application of knowledge and the development of deep understanding.

To illustrate this process we often use the following diagram, based on the long-standing data-information-knowledge-insight model.



This model is an often used method, with roots in knowledge management, to explain the ways we move from data to information, knowledge (K) and insight with a component of actions and decisions. Simply put, it's a model to look at various ways of extracting insights and value from all sorts of data. As is the case with all models, DIKW has its limits. The model looks quite linear and expresses a logical consequence of steps and stages with information being a contextualized 'progression' of data as it get more meaning.

Obviously, in reality things are a lot more complex but this diagram illustrates the transition in which the library finds itself. But the diagram also has an impact on the way we approach learning processes in general.

2.2 The road towards a creative community

Libraries realize their function in society by supporting basic skills, such as reading and writing, digital skills, finding work, handling one's finances and living a healthy life. This is a necessary and important function but because of the library's focus on personal development, this doesn't mean engaged and empathetic citizens who devote themselves to the local community, will just present themselves to the library. This only happens when people feel they are a member of a community and are willing to take part in issues of local importance. The individual is always rooted in a community and in this context Brian Eno, world-famous musician, composer and producer, has an interesting vision. He makes a distinction between the genius and the environment in which the genius operates. He suggests using the word 'Scenius' to convey the extreme creativity that

groups, places and "scenes" can generate. His actual definition is: "Scenius stands for the intelligence and the intuition of a whole cultural scene":

"I was an art student and, like all art students, I was encouraged to believe that there were a few great figures like Picasso and Kandinsky, Rembrandt and Giotto and so on who sort-of appeared out of nowhere and produced artistic revolution. As I looked at art more and more, I discovered that that wasn't really a true picture. What really happened was that there was sometimes very fertile scenes involving lots and lots of people – some of them artists, some of them collectors, some of them curators, thinkers, theorists, people who were fashionable and knew what the hip things were – all sorts of people who created a kind of ecology of talent. And out of that ecology arose some wonderful work. The period that I was particularly interested in, 'round about the Russian revolution, shows this extremely well. So I thought that originally those few individuals who'd survived in history – in the sort-of "Great Man" theory of history – they were called "geniuses". But what I thought was interesting was the fact that they all came out of a scene that was very fertile and very intelligent. So I came up with this word "scenius" – and scenius is the intelligence of a whole... operation or group of people. And I think that's a more useful way to think about culture, actually. I think that – let's forget the idea of "genius" for a little while, let's think about the whole ecology of ideas that give rise to good new thoughts and good new work.

Libraries should take on a coordinating and inspiring role in enhancing collective learning and the collective intelligence of the community. Capacity building can no longer be seen in isolation. Exchanging thoughts and ideas are essential components of the learning process, but instead of just 'consuming' this information, people need to be engaged in real dialogue.

2.3 The road towards creative involvement

A key strategy for the library should be to establish a new relationship with users. They can no longer be looked upon just as consumers, but as editors and producers of information, knowledge and stories in whatever form. To facilitate participation and co-creation, libraries need to adapt their processes and provide users with the tools and facilities to contribute to the collection of the library.

Reflection helps to provide deeper understanding, so this is definitely something the library should organise. For example by showing situations from different perspectives and by asking probing questions that challenge people's assumptions about a particular subject. Asking questions rather than just answering them. It may seem an unnatural thing for librarians to do, but it opens up a wealth of opportunities to actively involve the public and initiate conversations.

My American colleague and friend Laurie Putnam makes the following statement:

"Today we need people who can help us understand complexities. We need critical thinkers, people who can see alternatives and appreciate different viewpoints. We need people who will

validate their sources and ask about relevance. We need well-posed questions more than simple answers, because the answers aren't simple anymore. Librarians can help make the world safe for questions. Our challenge, now, is to keep demonstrating our relevance, as visibly, profoundly, and convincingly as we can.

What inspiration can we offer our next generation of librarians? Simply this: that the things we do, the values we represent, and the skills we offer are critical in today's complex world. Wherever we work, we create places where people can tap into existing knowledge and find facts. But more importantly, we create environments where people are encouraged to ask questions and to question answers, places where people are invited to explore alternatives and find understanding, to seek answers that may lead to new questions and fresh ideas. Our world needs libraries and librarians, now more than ever."

This leads to a new definition of the term collection. It's not just an accumulation of resources, selected by the library, but it also contains the knowledge and expertise of users and the conversations that are initiated when they share these with each other.

Chapter 3: Reinventing the library

The library has always been a place to learn, to reflect, to discover the workings of the world and to gain new perspectives. Our rapidly changing society calls for a library that reflects today's needs for development and innovation; of people and of the community they are part of. It means the library has to be transformed from a static depot of information into a dynamic and active social setting.

How can this be done? First of all, it's obvious that traditional library processes such as collection development, cataloguing and providing access, can no longer be the main focus of the library. Access to information is still of vital importance of course, because it enables people to acquire knowledge. But current library processes do not actively support people's abilities to interpret and share this knowledge. Just adding some co-creation elements won't do either. We have to reinvent library work, trying things that have not been done before. And that will irrevocably change the arrangement of library space as well.

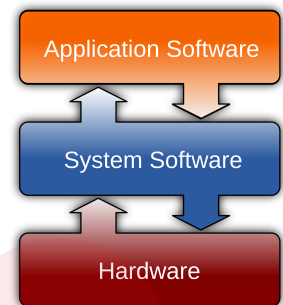
3.1 A new configuration

For quite some time now, we have been researching the future of public libraries, resulting in the development of a new work process, as well as matching criteria for the layout of library space. We call it: the new configuration system of the library.

We imagined the library as an outdated computer system that no longer meets the new system requirements. Knowing that a simple update wouldn't get us out of trouble, we started to look for a complete new configuration.

The new configuration we designed, consists of three components:

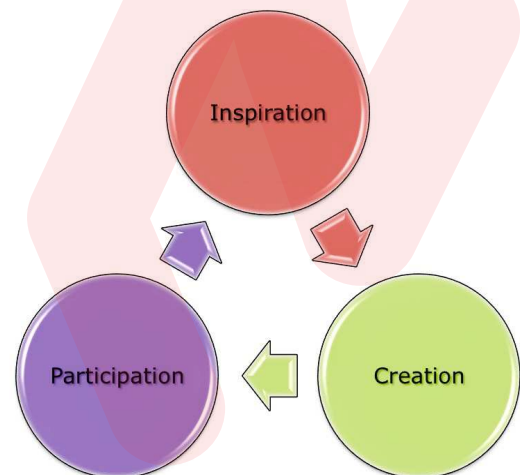
- a new 'operating system', referring to the new work processes of the library.
- new 'applications', referring to new work forms that help unlock knowledge and expertise that is already available in the community.
- new 'hardware', referring to a different layout of the building.



3.2 A new operating system

The new operating system revolves around the processes of inspiration, creation and participation. Together they form a circular process that continuously leads to the creation of new knowledge and insights.

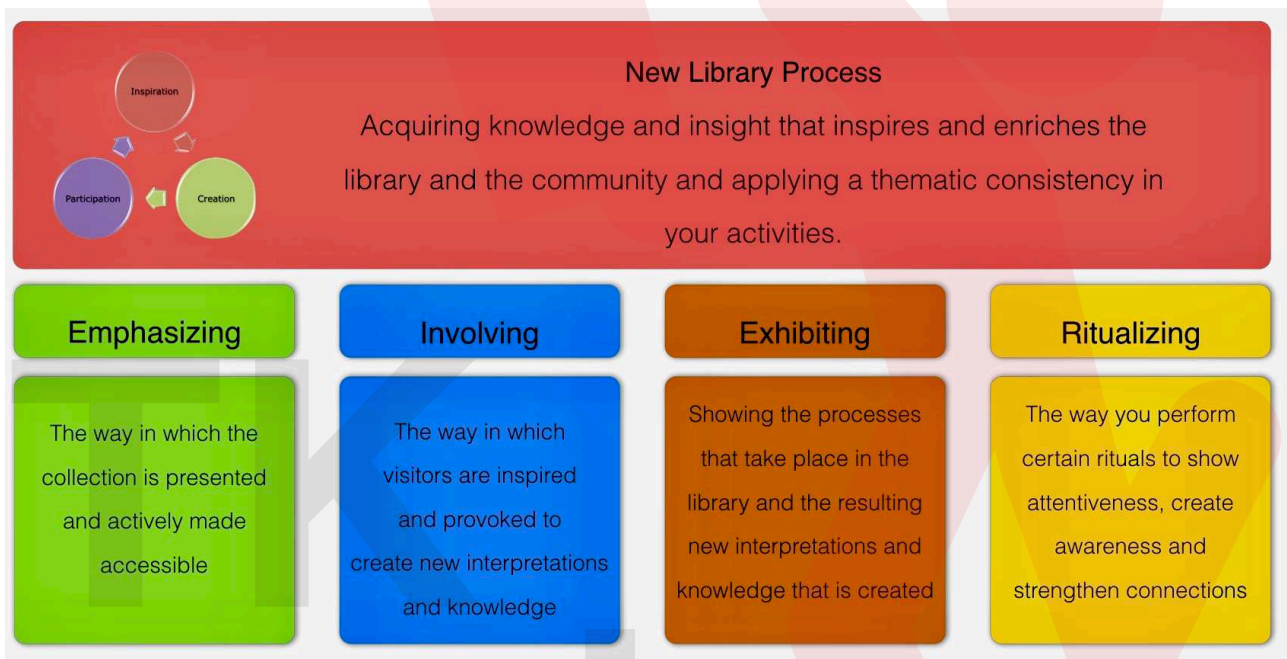
It all starts with triggering people's curiosity and interest. One way to do this is by designing new and exciting ways to present the library collection. The library collection is, after all, a whole universe of interpretations, opinions and ideas about knowledge and culture. The collection is the raw material you use to learn something and gain a new insight. This is the reason it is so important to invite people to actively work with it. What new insights and meanings would they like to add to the collection? In this phase of the process it is all about co-creation which can take on all kinds of different forms. People can add new insights or associations. Once people have been absorbed in the collection in different ways, making new connections in the collection, they should be able to share these new insights, perspectives, and associations. In the next phase it is all about participation, sharing the knowledge and experience that has been gathered together. We come full-circle as the results of this exchange become part of the collection, making it possible to inspire people again in other ways. Adding this to the collection, could mean adding actual materials but it could also mean adding new tags to the catalogue or ordering the collection differently. In this way the library is creating a collective form of intelligence. The exchange could for example also result in a new question for the next co-creation session of people, delving further into the collection.



The new library process is thus a cyclic process in which each step creates valuable input for the following step.

3.3 New applications

To actually start working with this operating system, a set of new work forms is needed. In line with our 'computer metaphor', we call them applications. Together the applications form a kind of directive for all activities that take place in the library. Binding factor in the different work forms is agenda setting. By this we mean: addressing a specific theme or question that is of importance to the local community. Thoroughly investigating a theme or question during a longer period of time will increase the coherence of the library's activities. Such a range of cohesive activities will attract more attention and is likely to have a bigger impact on people and on the community.



- **Emphasizing:** in the traditional arrangement of the library, sources relating to the same subject are placed in proximity to each other. To inspire, tempt and provoke visitors, the library should strive for more 'disruptive' arrangements. Unusual and surprising presentations of collection items will stimulate conversation and interaction. This way new meanings and different contexts will emerge for other people to explore and supplement.
- **Involving:** a library that inspires and provokes visitors to react and interact with the collection and each other, must also supply them with the means and opportunity to express their opinions and share their own knowledge, stories and experiences. It means the library has to design various ways for visitors to express thoughts and ideas or even add physical creations.
- **Exhibiting:** this is about recording and showing the results of the continuous interaction that takes place in the library. For example: if a library has been addressing a specific theme or question, the resulting new perspectives, associations and interpretations should become a visible part of the collection.

- Ritualizing: awareness of the processes of inspiration, creation and sharing that take place in the library can be enhanced by performing certain rituals. This includes traditional rituals like reading to children every Wednesday, but it could also be something new, like reciting a poem every morning or organizing a weekly unpacking party: inviting visitors to attend the opening of the boxes with new library books and material and discussing the content together.

3.4 New hardware

The new operating system will clearly have implications for the layout of library space. In the past the space was primarily defined by the amount and arrangement of bookcases. Library buildings have been designed based on paradigms from the 19th and 20th century with the typology of covered bookcases and the arrangement of an old-fashioned catalogue cabinet. Library architecture from now on should be based on a process that focuses on the interaction between visitor and collection. Now the new processes of inspiration, creation and sharing determine the arrangement of the space. The design of the library building must always be adapted to the users and the context of the surrounding community. In that way, the library becomes a place for social interaction and shared experiences, a place that is loved by the community.

Chapter 4: Best practice

4.1 Chocolate factory

So far, this may all seem quite theoretical. But there is indeed a place where this theory has been brought into practice. That place is Gouda, a Dutch town with a population of 71.000, famous for its cheese and syrup waffles, but also for its beautiful historic buildings. Here the Ministry of Imagination has realized the first library that is completely based on the new processes of inspiration, creation and participation. It is called the Chocolate Factory.



The Chocolate Factory is a building, dating from the 1970s, formerly housed a chocolate factory. The library moved 2 years ago into the building alone and three other parties were invited to come along: the Mid-Holland Regional Archive, The Gouda Print Workshop and Restaurant Kruim. In itself, this joint relocation was not remarkable. With increasing frequency, cultural institutions in The Netherlands have come together under the same roof. What made it special is that the parties really wanted to work together. They all agreed there were to be no walls between them. The aim was to create a communal space where all functions would be integrated – instantly visible and accessible to all visitors.

We wanted to preserve the idea of a factory in more ways than one. Throughout the building, industrial-style materials have been used, books are being displayed on stacks of wooden pallets and sea containers serve as silent study cubicles. But “factory” also serves as a metaphor. We wanted it to be a place of production, a place where people would be editors and producers of information, knowledge and stories, using the collection as the raw material to work with.

How did this work out in the layout of the building? We regarded the library collection and archive as the starting point of the inspiration process. We see them as raw material used for the production of knowledge. Just like in a real factory, we decided upon a compact storage of this raw material. In most libraries, 70 to 80 per cent of space is taken up by bookcases, leaving limited room for other amenities and activities. In the Chocolate Factory, it is only 30 per cent. Contrary to what you might think, this is not accomplished by moving materials to other storage facilities. Instead, we used freestanding, double-sided book stacks to store the collection in the adult department. Here, the book stacks have a more than average height of 2.30 meters. Small step stools are placed in front of the stacks to help people reach the top shelves. To fully utilize the available space, we increased the number of volumes on each bookshelf. Also, the collection area is strictly reserved for book stacks and not intersected by chairs or other furniture. By combining all these measures, we created more room for a variety of workshops and social spaces, in other words, the much-needed space for creation and participation:

- Youth workshop

Next to the children’s collection you can find the Youth Workshop for children from 8 to 12 years of age. Its design is based on Gardner’s notion of multiple intelligences. To make sure all the children derive pleasure from reading and learning, the Youth Workshop has been set up in such a way that there is something to learn, read or discover for every child. There are tables to work on, surrounded by cupboards full of materials: tools, games, magnifying glasses, materials for arts and crafts and lots more besides. The children’s creations can be displayed on a big presentation wall close to the Youth Workshop.

- Media workshop

Reading is not the only way to learn and absorb new information. Digital media makes it possible to creatively link text, images and sound, thereby producing new ways to tell stories and convey information. And it goes without saying that these also form a part of the collection of the library. That is why a fully equipped Media Workshop is set up on the first floor. Here, people can learn to make their own multi-media productions, either individually or with others. There is also room for professionals who enjoy sharing their knowledge and networks with young people, artists or film makers.

- Print workshop

Gouda has a rich history as a town of printing. The art of book printing is something to treasure and preserve for future generations, but the book printer's craft is threatened with extinction. To avoid this, the Gouda Print Workshop Foundation provides a place for printers and typesetters who are still masters of their craft.

- Social spaces

Beside the workplaces, there are lots of other social spaces where you can meet people, enjoy conversations and learn something new. There is a large wooden staircase, which also serves as a grandstand. Here, you can enjoy passionate stories, animated arguments and debates or the joyful sound of choirs. There are rooms for courses and lectures, quiet places for study, and of course, there is the restaurant that provides ample seating possibilities and a large communal table.

On 28th February 2014, the Chocolate Factory was opened by Her Royal Highness Princess Laurentien of The Netherlands (UNESCO Special Envoy on Literacy for Development). The Princess was so impressed she paid another (secret) visit to the Chocolate Factory in May, accompanied by representatives of the Bill and Melinda Gates Foundation.

The Chocolate Factory has won the 2015/2016 award for best library in the Netherlands. According to the jury, the Chocolate Factory really gives a new definition of the library and of librarianship.

The Chocolate Factory soon turned out to be a hotspot in Gouda. The restaurant has become a popular meeting place, the course rooms are used intensively and visitor numbers are still increasing. And there is also an increase in membership numbers.

4.2 Korenbeurs Schiedam

Another example is De Korenbeurs (Wheat Exchange) in Schiedam, a beautiful classicist building, designed by the Italian-Dutch architect Jan Guidici in 1792. After being leased to companies for many years, it has now become the home of the Public Library, making this listed building freely accessible to all citizens and visitors of Schiedam again. It's a library with a special feature: a wonderful indoor garden where people can read, relax, enjoy conversations and 'grow their brains'. The library is green in more ways than one. Especially for De Korenbeurs, cardboard bookcases and displays were designed that are not only cost-efficient but also reduce CO2 in the atmosphere.

Like many other cities struggling with increasing store vacancy, Schiedam has much to gain from a lively public space in the historic town centre. Apart from that, the town centre lacks green spaces.

With its rectangular courtyard and surrounding gallery, De Korenbeurs strongly resembles a cloister. Since most cloisters have gardens, this soon led to the idea of an indoor garden. In a philosophical way, the garden emphasizes the function of the library as a place of growth. But it's also a place for contemplation, reading, listening to music or engaging in conversation. Like Cicero once said: "If you have a garden in a library, you have everything you need".

The courtyard is transformed into a luscious garden with large trees and plants, placed in specially constructed raised beds. On grass-covered sun beds visitors can listen to streaming music running from two iPads. There's a large reading table under a custom designed chandelier, made up of gin glasses. It refers to the history of the building as a marketplace for cereals for the local gin industry.



The adventure of the library of the future has only just started. There is still a lot to learn, and it is clear that we can only find out what works and what does not by experimentation. We are in a state of permanent beta, continuously changing and evolving – exactly as Willem de Kooning imagined. But what is clear is that experiments with new operating systems for the library are an essential activity in developing our libraries for the twenty-first century.

Bangkok, 2nd of February 2017