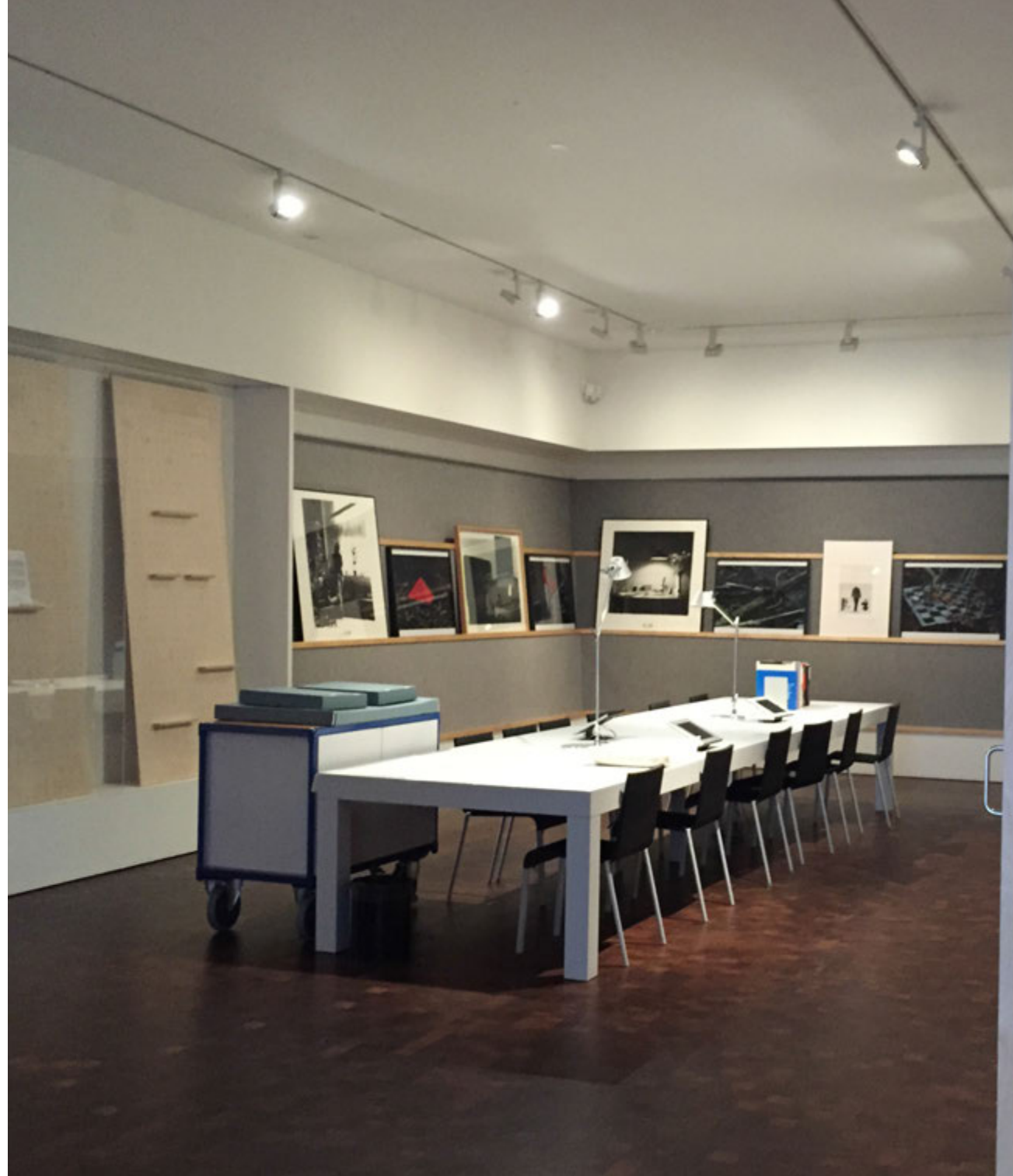# 'TITLE...'

Personalize the museum experience in the DIY-Archive by creating an abstract dialogue between visitors over time.

Student: Fabienne van Leiden
Project: Responsive Enviroments
Semester: M1.2, Non-Graduate School
Year: Semester A - 2015/2016
Coach: Bart Hengeveld & Jun Hu
Client: van Abbemuseum

ABSTRACT

Responsive environments are becoming more and more important in the current society. IT, ubiquitous computing and complex sensors are used to personalize experiences in public spaces. This trend can also be found in cultural institutions. Museums had to recognize that their public was becoming more diverse and therefore the museum experience had to become more personal. The digital development of the last decade proved to be very helpful this, by creating more responsive environments.

But museum visitors also wanted to be involved in the museum policy and participate in exhibitions. This is one of the reasons that the van Abbemuseum opened the Do-It-Yourself-Archive in 2013. In this DIY-Archive visitors can create their own exhibition and go trough the curator experience.

Part of personalizing the museum experience is the ability to translate looking at an art object into some form of meaningful experience. You can develop this by discussing different interpretations related to artworks. This will help you find a way to interpret artworks so it relates to your own context. For this reason van Abbemuseum wanted to focus more on the story of the visitor with the DIY-Archive.

The DIY-archive is not as successful as expected. The threshold to participate is too high and the potential of using the stories of the visitors to personalize and inspire other visitors is not used to its full extend.

In an iterative and user centered design process, (desktop) research and stakeholder values we translated into several concepts. These iterations were tested in the van Abbemuseum and discussed with involved stakeholders and experts. Based on the feedback the iterations were developed further into the Final Concept: 'Title...'

'Title...' allows the visitors to present a title with the self-created exhibitions in the DIY-Archive. In this way 'Title...' creates an abstract dialogue between the visitors over time. The visitors can inspire each other with different ways to relate to artworks.

The aimed effect is not so much in the archive in itself, but in the museum-visit(s) afterwards, by learning different ways to relate to artwork, the start to personalizing museum visits is made.

The threshold of the DIY-Archive is further lowered with an interactive stop-motion, located at the a central point of the van Abbemuseum. This interactive stop motion shows the dynamics of other exhibitions that have been made. This interactive stop-motion also increases the amount of encounters the visitors gets with different interpretations of art exhibitions.

This sytem creates a database that can be used for further implementations to personalize the museum experience even more. Also the database can be used to prepare the museum visitor better for public participation in a museum.

Word count: 438 words

TU/e Technische Universiteit
Eindhoven
University of Technology

VAN
ABBE
MUSEUM
EINDHOVEN

TABLE OF CONTENT

CHAPTER 1 | INTRODUCTION

This project report describes the design process and the final concept of the project Responsive Environments. A project which was executed in collaboration with the van Abbemuseum. This project was a Master Design Project for Industrial Design at Eindhoven University of Technology. The project took 16 weeks and was executed from september 2015 to January 2016.

1.1 | WHY DID I CHOOSE THIS PROJECT

"This project is about designing and researching holistic interactive environments with interactive artifacts that adjust themselves to the rituals and performances of those being part of, and taking part in the environment.

It aims to operate on the cross section of the internet of things and ubiquitous computing" - Project Brief Responsive Environments

In my personal vision I believe the complex problems that come with the current society need a personal solutions, see chapter 6. This personalization also comes back in the project Responsive Environments. Since one of my goals was to get more comfortable in designing for my vision I hoped to learn more about how to create personalized experiences with this project.

In my vision I believe this personalization can be done by engaging the user and allow room for self expression. Internet of things and ubiquitous computing

Img 1: Appeel by Richar The

may not perfectly match with this, since this is often done automatically [1]. For this reason I saw a nice challenge in combining both approaches. For example as has been done in the Appeel project of Richard The [20], see image 1. In this project the environments adapt to those being part of it, because the users actively change it to their values.

Image left: Use of the Final Concept 'Title...'

Other Personal Goals

The design challenges in this project lie in its holism: designing responsive environments that cater for adaptation to highly personal living culture is simply a lot of work to get right. It requires a good understanding of 'what it is you are trying to enable people to do', plus a willingness to design within a 'systems paradigm' rather than a 'product paradigm' – Project Brief Responsive Environments

An other personal goal[1] for this semester was to learn more about design systems and services, to broaden my perspective to more than only product design. This project gave me the room to develop this.

Finally I aimed to develop my design process this semester. I wanted to become more confident with an iterative design process, with clear points of diverging and converging. I aimed to do this by involving a client in my process,

which would force me to become concrete at certain points in the process. Soon after the start of the project I arranged the van Abbemuseum to be my client for this semester.

1.2 | THE VAN ABBEMUSEUM

The van Abbemuseum is a modern-art museum in Eindhoven, which is constantly looking for new ways to improve the museum experience. Therefore I found the van Abbemuseum

Img 2: To gain access to all the relevant parties, I was hired as an intern in the Van Abbemuseum

to fit the (personal) design brief of personalizing the experiences in public spaces.

From my personal past, I learned that everybody experiences an art-museum differently. I personally really like it to visit an art-museum, but others see a visit more as a burden than a nice experience. After several visits with both museum-lovers and haters I discover that it is possible for everybody to gain a nice experience out of a museum visit, but you have to address everybody differently. For this reason my goal for this project became: design something that gives visitors the first step to personalizing the museum experience.
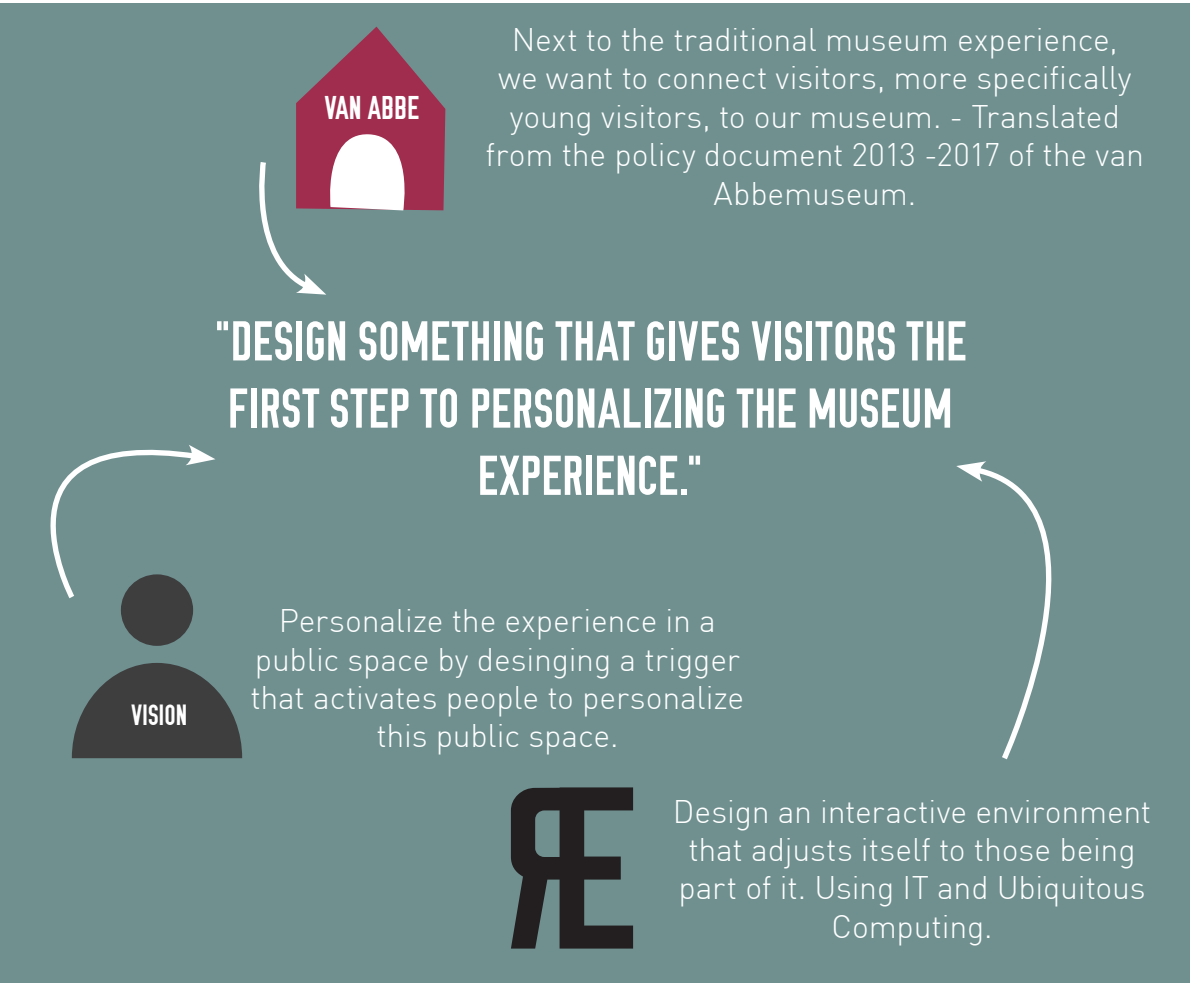
1.3 | STRUCTURE

In this report we will first describe the objective of the design brief. Here we will discuss the literature research, user and stakeholder values and related projects.

This research was used to define the specific design brief on which several iterations have been made.

In chapter 3 these iterations will be discussed, resulting in the final concept 'Title...' which will be explained in chapter 4. In chapter 5 we will discuss the concept and make recommendations for further development. Chapter 6 will be used for a personal reflection on the design process and competence development.

The project is executed by one design student, but 'we' refers to all the involved people in the project, see acknowledgements. When referring to the user of the system we will be talking about the visitor or visitors. The visitors are occasional visitors of the van Abbemuseum of all age groups but specifically focussing on the adult visitor.

1: A summary of my complete PDP can be found in Appendix A.

Image right: Visualisation of how the values of all stakeholders come together in the first project brief.

VAN ABBE

Next to the traditional museum experience, we want to connect visitors, more specifically young visitors, to our museum. - Translated from the policy document 2013 -2017 of the van Abbemuseum.

"DESIGN SOMETHING THAT GIVES VISITORS THE FIRST STEP TO PERSONALIZING THE MUSEUM EXPERIENCE."

VISION

Personalize the experience in a public space by desinging a trigger that activates people to personalize this public space.

Design an interactive environment that adjusts itself to those being part of it. Using IT and Ubiquitous Computing.

CHAPTER 2 | OBJECTIVE

In this chapter we discuss the theory behind the design goal of personalizing the museum experience. We address related system designs and literature connected to this subject. We also introduce the specific question of the client, the van Abbemuseum. We conclude this chapter with the design brief gained from the research combined with the personal vision of the designer. In the next chapter the iterations derived from this design brief will be discussed.

2.1 | RESPONSIVE MUSEUMS

"Technological changes like smartphones, robotics, big data, etc, combined with the social changes that go along with them – changing educational needs, careers paths, social structures – threaten the existence of those institutions that are overly conservative, don't adapt, think this century will be like the last. Museums are not excluded from this trend." - Jasper Visser, 2014 [22]

Due to the changes in society, cultural institution need to change as well. The institutions had to recognize that the public was made of a diverse group of visitors, with different needs and interests [17]. The museum had to become responsive to their audience in order to survive [11]. And the technology development of the last decade servers a lot of opportunities to do so [19].

Several museums have already made attempts to do become more responsive to their audience, see image 1 to 4. But it is still questionable how personalized a this experience is, if you as a visitor, still have to match a pre-set visitor profile.

Img 1: Beacon and RFID [7] technology can be used to push information about the artworks to the visitors smartphone. This was done in the Metropolitan Musuem of Art [19]

Image left: The official archive of the van Abbemuseum

Img 2: P. Marti's project measures the walking pattern of a visitor and match these to one out of four different types of museum visitors. In this way the routing and information given on the audio-tour can be directly adapted [13].
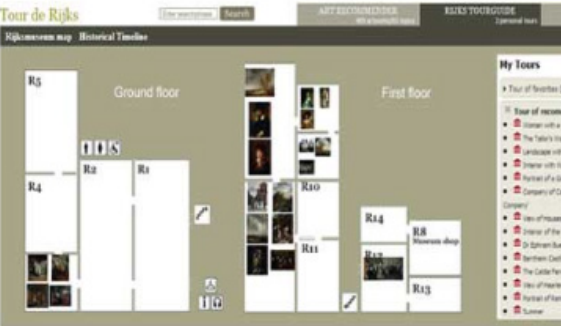
Img 4: In the Brooklyn musuem avatars are used for a more personalized guiding trough the exhibition. [3] The CHESS project also creates a visitor avatar based on a small questionnaire which automatically generates a fitting tour for you.[19]

Img 6: The Cooper Hewitt museum, put digigital enagement central in their museum experience. A pen is used as basic interface, which you can use to interact with digital screens and create a personal database which you can access later at home [6].

Img 8:In the Cleaveland musuem of art they allow visitors to browse differently, for example based on form and color, trough their artworks. Visitors can collect the once they like in personal database. [19]

2.2 | MUSEUM PARTICIPATION

Engagement, digitally or otherwise, is the pinnacle step in the development of a relation between people and institutions. If museums don't activate their audience once every while, they will lose them to competitors who provide the opportunity to participate - Jasper Visser [22]

Personalizing the museum experience, can also be done by activating the audience. In this way the visitors will enjoy the visit more, but also feel more connected to a museum. As is also supported by the research of C. Lang in which she mentions that people are increasingly expecting to participate in an exhibition or to be involved in museum policy. The latter proved to be important in a project in which people could leave behind their opinion about the museum experience [2].

This engagement, or also called museum participation, is already successfully implemented on a large scale in several museums, see image 5 to 8. In these examples we can see two trends that are important in museum participation: Ownership, either leaving a trace as a visitor or take something with you. Also motivating the visitor in discussing their interpretations of the artworks comes back a lot in these project.

2.3 | MUSEUM LEARNING

This discussion is proven to be very important for how people experience the museum visit. J. Idema advises museum visitor to engage themselves in interesting dialouges, to create a more rewarding museum visit [9]. L. Kesner mentions that the way visitors experience the museum is highly dependent of the cultural competence of the museum visitor. This 'cultural competence' is defined as the competence of the visitor

Img 3: CHIP, designed for the Rijksmuseum, personalizes the experience by proposing a tour based on the selection of a few artworks the visitor finds interesting [16].

Img 5: With 'ask' the brooklyn museum wanted to put the discussion central in de museum experience. Offer visitors more information about the artworks, based on their questions. [3]

Img 7: In this project for the Brooklyn museum, visitors could create their own context around an art period by adding google images [3].

Img 9: The toolshop of the van Abbemuseum offers different ways to visit the permanent collection. For example an audio-tour with intepretations of the artworks by childer.

to translate looking at an art object into some form of meaningful experience. [10]

J. Litwak explains that this cultural competence, or as she mentions it the museum learning, can be enhanced by social interaction in the museum. If visitors work trough exhibits together, share their interpretations or knowledge about the artwork together, this will help the visitor to create an own contexts around the artworks, which than results in a more meaningful experience [12].

More specifically we could say that it is important for personalizing the museum experience is to get visitors to talk about the exhibits. Encourage the visitor to discuss, debate and share personal memories connected to the artworks.

An example of doing so is the traces project by R. Stevens et. al. This project allowed people to record 'traces' of their experiences in the museum. Experiences could be descriptions of an artwork, interpretations, questions and responses to these questions. The traces are used to support and extent the interpretations of visitors about the artworks. In this way the visitors can now communicate via there traces, not only in a direct conversation but also over time [18].

Also the van Abbemuseum finds this conversation very important. Following the trend of engaging the museum visitor. Therefore they are also constantly looking for new ways to personalize the museum experience. For example the toolshop, see image 9. For this reason they also designed the DIY-Archive in 2013.

We don't want to present art as a final point, but as a basics for a conversation about who, where and how we are. The museum is a platform where this conversation can happen which are based on earlier contributions by visitors.
- Translated from the van Abbe vision document.

2.4 | THE DIY-ARCHIVE

On the first floor is a "Do-it-yourself Archive" in which visitors can discover the surprising forms of art from this period and create their own presentation. Prints and objects, artists' books, posters, slides, video works, LPs and audio tapes are brought together here in a depot [23].

The DIY-Archive is part of the collection now [23] and contains artworks from 1645 to 1965. This time is known for its activism and this exactly what the van Abbemuseum hopes the visitor will do as well: activate the visitors to create an own exhibition and experience how it is to be a curator. Secondly the story and artworks' interpretations had to be the main focus in this area of the museum.

Problems stakeholder
In theory the DIY-Archive seems to be a very interesting and personalized experience for the visitors, but in practice the DIY-archive is not that successful yet. This is because visitors don't want to participate. Therefore the question from the van Abbemuseum was to research why people don't want participate. The van Abbemuseum also hoped for a design, but this had to fit the vision of the van Abbemuseum. For example that the design should allow for self-exploration. Also the design had to be simple in order to be able to implement on short notice. A second question was find (design) opportunities in which the potential of the DIY-Archive can be used better.

Reserach
The research process consisted out of interviews with the involved stakeholders, such as curator Christiane Berndes, head of volunteers Herman van Rooijen and DIY-responsible Marleen Hartjes.

Img 10 : Visitors that are making an exhibition in the DIY-Archive

Also several volunteers were interviewed and asked for their experiences with the DIY-Archive. The perspective of the volunteer was also experienced while working three shifts as a volunteer in the DIY-Archive. Finally the visitors were interviewed several times asking about their expectations and experiences in the DIY-Archive.The insights gained by this research were summarized in one customer journey, see image 11.
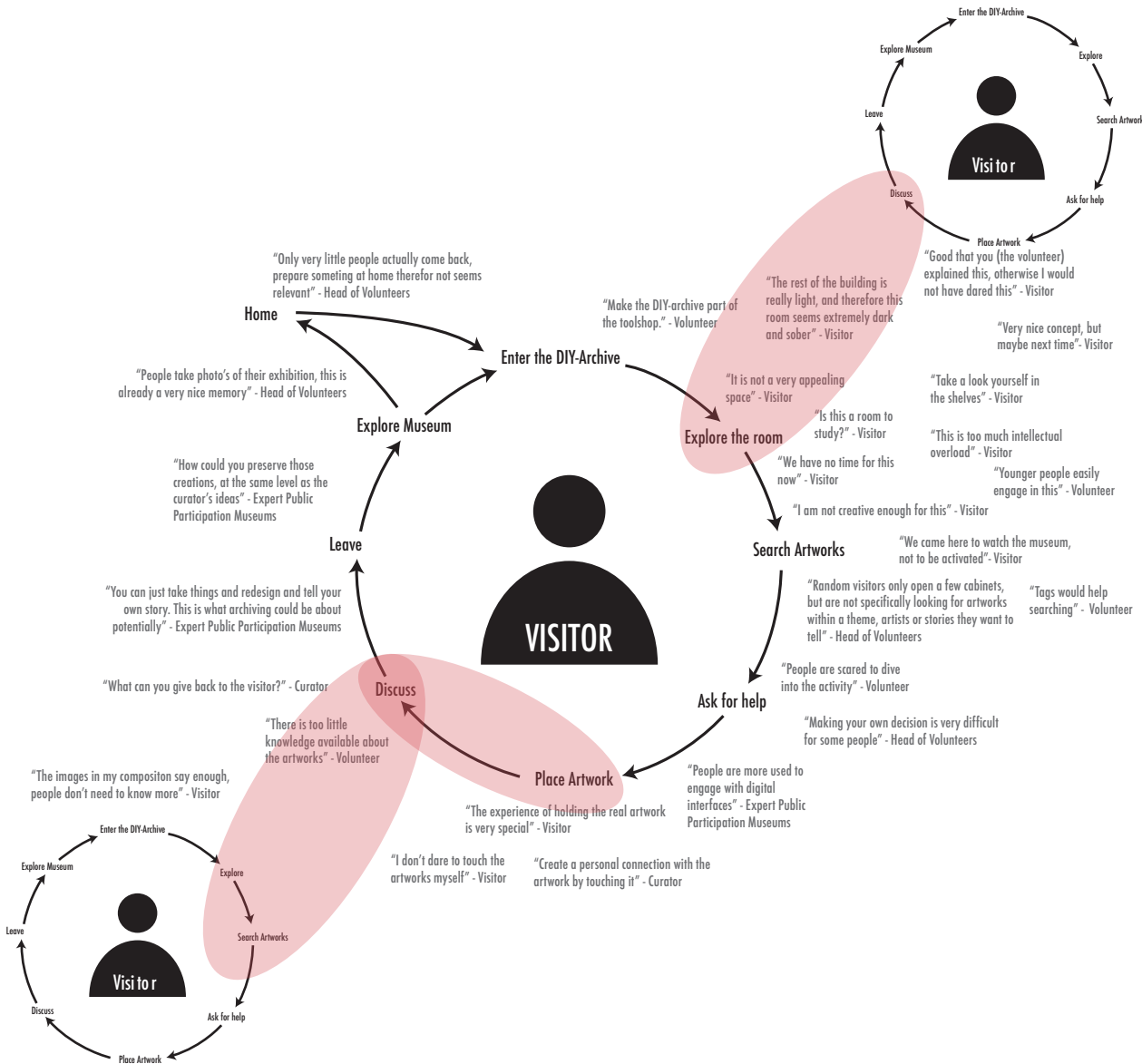
Insights

In this customer journey we clearly see opportunities in lowering the threshold for the visitor to participate in the DIY-Archive. Also it was found that although the DIY-archive gains a lot of stories/contexts connected to exhibitions, they are not used or even stored. This potential of the archive should be enhanced to create valuable context for visitors. This will increase the museum learning and therefore make it a more rewarding experience.

Img 11: The custumer journey of the DIY-Archive visitor. The experience is shown by quotes connected to every step the DIY-Archive visitor goes trough.

2.5 | DESIGN BRIEF

Based on the (desktop) research and the personal design vision of the designer, there are two important improvements that have to be made for the DIY-Archive:

- *Create a dialogue between visitors over time, which enables the visitors to share their stories or interpretations about the exhibition.*
- *Lower the threshold for visitors to participate in the DIY-Archive and gain this personalized experience.*

Core values that are important when designing for this design brief are:

- Context and Story
- Dialogue
- Leave a trace
- Lower threshold
- Simple and Feasible

The design brief together with the core values were used in the iterative process leading to the final concept 'Title...'

Lower the threshold for visitors to participate in the DIY-Archive and gain this personalized experience

Create a dialogue between visitors over time that enable them to share their stories or interpretations about the exhibition.
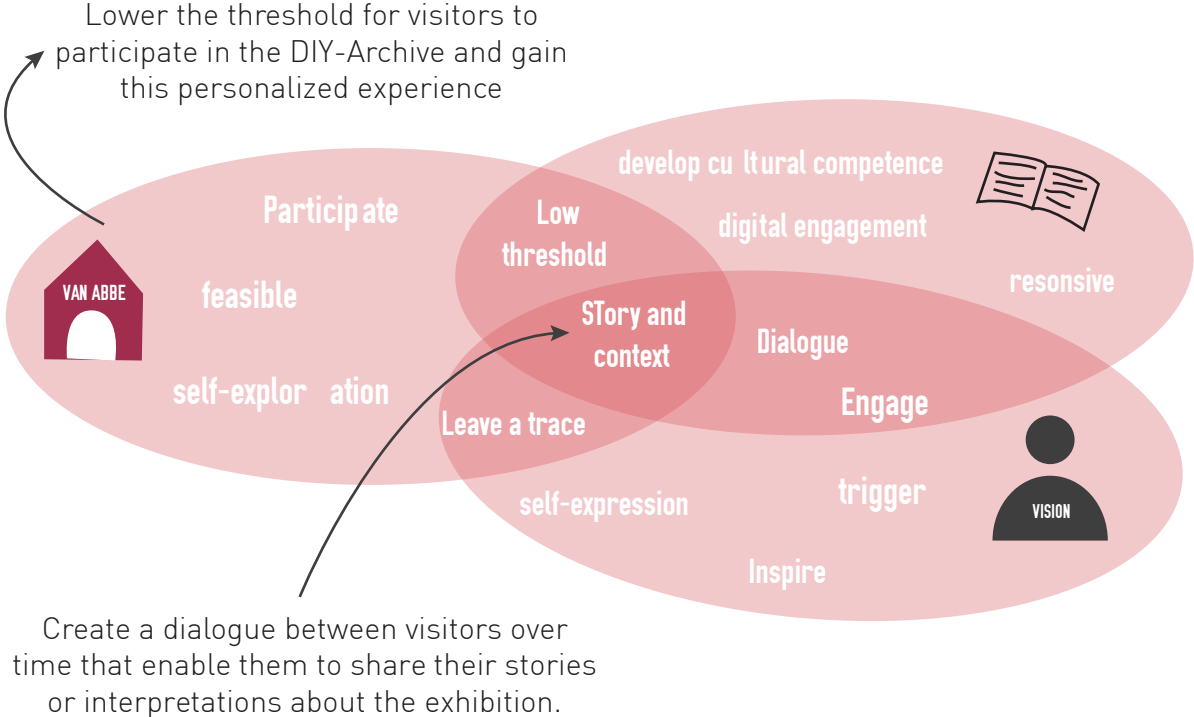
CHAPTER 3 | DESIGN PROCESS

The concept "Title…" is a result from an iterative process with a user centered design approach. The iterations were worked out in a (physical)sketch or scenario. The concepts were tested in the context and/or discussed with the invovlved stakeholders.

3.1 | ITERATION 1

Concept
Inspired by the exhibitions cards from the 'ask' project [3], the first concept were small cards, with the question: "I selected this because…". On these cards visitors could write down their reasoning of selecting the artwork or an exhibition of artworks. The volunteer requests the visitor to write the cards as soon as they are finished with their composition. The cards stay on the exhibition wall as long as the exhibition does not change. This concept was tested for 4 days in the DIY-Archive

Aimed Effect
The cards aimed to enable the visitors who made the exhibition to share their story/context with the visitors who come in next. In this way an abstract dialogue is created between different visitors. By seeing these different perspectives, other visitors can be inspired to look in different ways to art, as was found to contribute to the museum experience in chapter 2.3.

Feedback
Some visitors were not interested in motivating or explaining their reasoning behind the exhibitions. "The images on itself already say enough, I don't want to explain my interpretation to others."
It was questioned by the stakeholders, how these cards could be used in a system, where were the cards going to be stored so the visitors keep on inspiring each other. Was there a possibility to make a digital version of this?
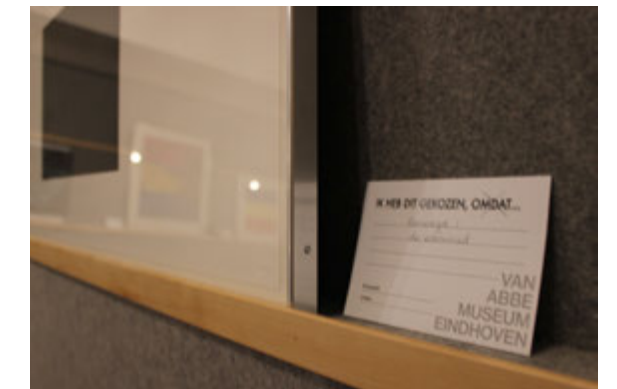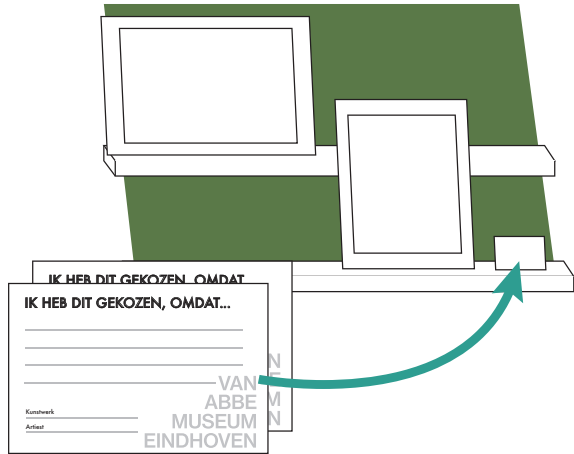
Img 1: Gain a new perspective to look at the artwork.

Img 2: Explain how you believe artworks relate.

Img 4: Visual that explains the concept for the volunteers in the DIY-Archive.

Img 5: A life projection of what happens in the DIY-Archive

Img 6: Traces of previous exhibitions.

Img 3: Relate the exhibition to your own story, such as your hobby. In this case Photography.

3.2 | ITERATION 2

Concept
This system saves the expositions made by the visitors into a database automatically. This database is used in a projection at the entrance of the museum. On this projection traces of the last 5 exhibitions are shown in which the oldest has the highest transparency and the newest is projected on the foreground. This concept was discussed with the involved stakeholders.

Aimed Effect
At first this concept gives the maker of the exhibition a little more exposure than it gets now. By showing it outside the DIY-archive, visitors get the feeling of actually contributing something to the museum, leaving their trace [18].

What clearly came forward in the user-research, see chapter 2.4, was the threshold of the DIY-archive. Visitors did not expect they would be activated in the museum and therefore did not participate.

Therefore the projection also functions as a first explanation of the DIY-archive. By showing the dynamics earlier in the museum, the expectation pattern changes and the visitors need less explanation when entering the archive.

Feedback
The curator warned that too much exposure could scare back people to start making an exhibition. Also the location of such a projection should be considered really well.
Head of the volunteers, Herman van Rooijen informed me that often pictures are already taken by the visitors. So maybe this was already enough exposure.

3.3 | ITERATION 3

Concept
Bringing the qualities of Iteration 1 & 2 together this system shows the context around an artwork created by the visitors in an interactive projection. This context consists out of other artworks used in exhibitions together with this artwork, but also news articles, titles, own drawings, etc. The interactive projection is placed in the DIY-archive. This concept was worked out in a movie scenario.

Aimed Effect
Even if the visitors do not interact with the projection the visitors experience different ways of how an artwork can be interpreted. This was also important with the exhibition cards, and aims for the same effect. But this projection is easier to access and allows for more media than only text, which the stakeholders find very interesting. ¨Themes of exhibitions could be anything, it would really increase the potential of the archive if the visitor could learn this in the archive¨ - Christiana Berndes
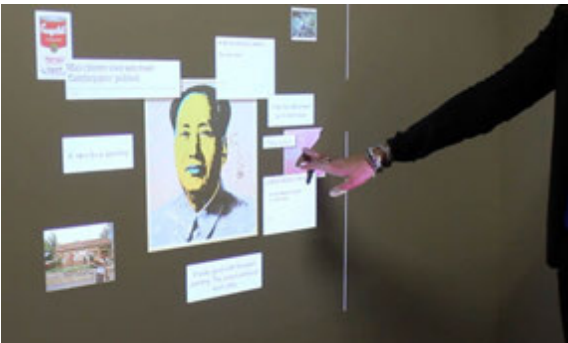
Feedback
If you place the projection in the DIY-Archive it should be guarded that there are not too much experiences available in the DIY-Archive. Although showing the contexts was valued it should not take away the attention of the curating activities in the DIY-Archive. So again the location of any interaction should be considered well, since it could influence other museum experiences.
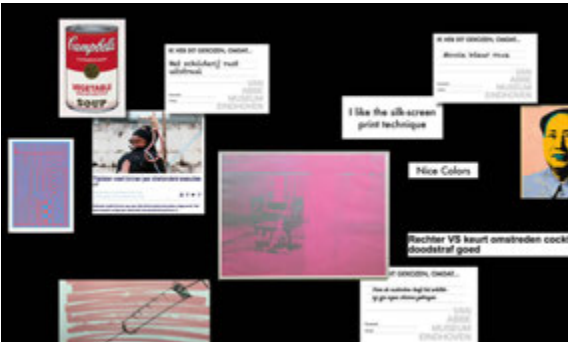
Img 7: The context around the artwork, opinions, news articles, drawings etc.

Img 8: Interaction with the system.

3.4 | PRE-FINAL CONCEPT

The different iterations and their feedback were brought together in the final concept, which had all the core values defined in the design brief. This resulted in a concept in which the discussion between visitors (in time) remained (it 1), but the presentation of context or story simplified, namely only a title. This title was placed on a more prominent location in the DIY-Archive, as it. 3 had.

The concept of creating a database remained (it. 2&3), but now both the exhibition and the title were stored together. Opening up opportunities to use this database to lower the threshold to participate in the DIY-archive. This database was used for an interactive stop-motion projection in an area in the museum visitors encountered before entering the DIY-archive.

Img 9: Result of first user test.

Img 11: The title causes different ways to look at the compostion.

Img 10: Fellow students trying out the 'Title...' concept

Img 12: Thnk about a suitable title.

CHAPTER 4 | FINAL CONCEPT

4.1 | WHY, HOW, WHAT

Why
The DIY-Archive is part of the permanent exhibition of the van Abbemuseum. In this archive you can browse cabinets with artworks. You can handle the artworks and create your own composition with it: really have a curator experience.

The DIY-Archive was created to engage the visitor and create a personalized experience by making your own exhibition. But the DIY-Archive was not as successful as expected. The threshold to participate was too high and the potential of using the stories of the visitors to personalize and inspire other visitors was not used to its full extend.

How
In order to personalize the experience more we see the opportunity to create a dialogue between visitors of the DIY-Archive over time. If we enable visitors to share their stories or interpretations about their exhibitions, other visitors can use this to find new ways of relating art to their own context, see chapter 2.3.

What
'Title...' allows the visitors to present a title with their self created exhibition in the DIY-Archive. The title can be used to share their personal story, interpretation, reasoning, opinion etc. about the exhibition they made or are encountered with. After the visitor finishes his/her exhibition the title can be added via a screen interface, which is then directly projected on the exhibition wall, see image on the left page.

The aimed effect of the concept is to create a reflective dialogue between visitors of the DIY-Archive, for both the visitor who makes the exhibition as for the visitor who comes in next and tries to understand what the story/context was that is described with the title. Titles could range from a simple exhibition based on a favorite color named 'lovely blue', to a deep story about how the artworks relate to the current privacy issues in society.

This difference of interpretations allows visitors to open up to different contexts in which to can relate to artworks.

Image left:The projection of the final concept in the DIY-Archive

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The aimed effect is not so much in the archive in itself, but in the museum-visit(s) afterwards, by learning different ways to relate to artwork, the start to personalizing museum visits have been made.

A more specific description of the scenario and the aimed effects can be found in the scenario on the right.

ENTER THE DIY-ARCHIVE

Action
Visitors enter the DIY-Archive and see an exposition with at title. The title is projected so it really stands out in the dark room.

Aimed Effect
The visitors become curious and want to explore the archive better.

Improvement
Before the volunteers had to motivate the visitors to explore the room, now the motivation comes from the visitors themselves.

EXPLORE THE ROOM

Action
The visitors ask the volunteer about the specific function of the room. The volunteer explains the functions and tells the story about the previous exhibition

Aimed Effect
The visitors more quickly understand the functionality and have a discussion with the volunteer about the theme of the exposition.

Improvement
The task of the volunteer isn't only to explain, but also directly start a discussion, even if the visitors don't decide to make an exposition.

SEARCH ARTWORKS

Action
The title serves as a starting point for the visitors, but soon they find artworks which they like better for their exhibition.

Aimed Effect
The title of the previous exhibition gives the visitors a clear starting point.

Improvement
To lower the threshold to start making an exhibition a theme can help, as was experienced by the van Abbemuseum in group-workshops.

PLACE ARTWORKS

DISCUSS

Action
The volunteer asks the visitors to give a title to their exhibition as soon as it is finished.

Aimed Effect
A reflection moment for the visitor(s), in which they have to discuss this and exchange different perspectives on the artworks.

Improvement
The title will be the inspiration and starting point for the next visitors.

LEAVE

Action
The title is added and directly the projection changes with the exposition. The volunteer requests the visitors to add the exposition to the database as well.

Aimed Effect
The visitors feel as if they contributed to the museum with their exhibition.

Improvement
The exhibitions and its titles are now stored in a database and can be used for other implementations later.

EXPLORE MUSEUM

Action
The visitors leave the DIY-Archive, to conintue the museum vistit

Aimed Effect
Visitors continue the discussion about their title and other titles they have seen. They use this to try to interpret and maybe value other artworks differently

Improvement
There is not a higher change that the experience in the museum becomes more personalized.

HOME

4.2 | IMPLEMENTATION

The concept was designed in such a way that it is relatively easy to implement the system in the van Abbemuseum. The webcam and beamer will be attached on the ceiling of the DIY-archive. The screen interface can be installed on the iPads that are already in the DIY-Archive.

In the first implementation of the concept the exhibitions are only photographed. If successful, the system will store the specific artworks in an exhibition by using image recognition. In this way the titles can be connected to specific artworks and this knowledge can be implemented for museum research, see recommendations.

If the archive is rebuild in 2017, the title can be shown on a screen embedded in the exhibition wall. This also reduces the risk of to much light exposure from the beamer on vulnerable artworks. If

the database has grown sufficiently the screen interface probably needs a bigger interface, this could be build into the table of the DIY-Archive.

4.3 | EXTEND THE EXPERIENCE OF THE DIY-ARCHIVE

One of the biggest challenges that the van Abbemuseum has now, is getting people to actually to participate in the DIY-Archive.

As mentioned in chapter 2.4, the problem is that the amount of participation in the DIY-Archive does not fit the expectation pattern of the visitor. If we want people to actually participate they have to be informed about this earlier in their visit.

The database 'Title...' creates, opens up a lot of opportunities to do so. Therefore we designed an interactive stop-motion, designed to add the DIY-Archive activity to the expectation pattern of the visitors,

see image 1. Other ideas about using the database will be discussed in chapter 6, recommendations.

4.4 | INTERACTIVE STOP MOTION

Concept
At a central point in the van Abbemuseum a stop-motion of exhibitions made in the DIY-Archive is show, see image 1. The stop-motion plays relatively fast, showing the dynamics of the DIY-Archive even to people who are quickly passing the stop motion.

If people decide to look into the interactive stop-motion more closely, the stop-motion will slow down and also show the titles of the different exhibitions that have been made.

The interactive stop-motion shows the last 25 exhibitions that have been made, based on the succes of the DIY-Archive this amount could be adapted.

Aimed Effect
At first we hope that visitors will unconsciously add an active and changing exhibition to their expectation pattern for the rest of the museum visit. As soon as they enter the archive, the images will be recognized and the connection will be directly made that there is something going on in this room. Although the volunteer maybe still needs to explain all the details, the visitor does not 'hear' it for the first time.

Secondly the projection already shares different contexts earlier in the museum visit, actually extending the aimed effects of the concept of 'title...'

Finally the stop-motion serves as an extra reward of participating the archive. The sense of ownership of your exhibition is enhanced by showing it to more people for a longer period of time. Visitors now actually feel as if they contributed to something, which has proven to be important by K. Coffee [5].
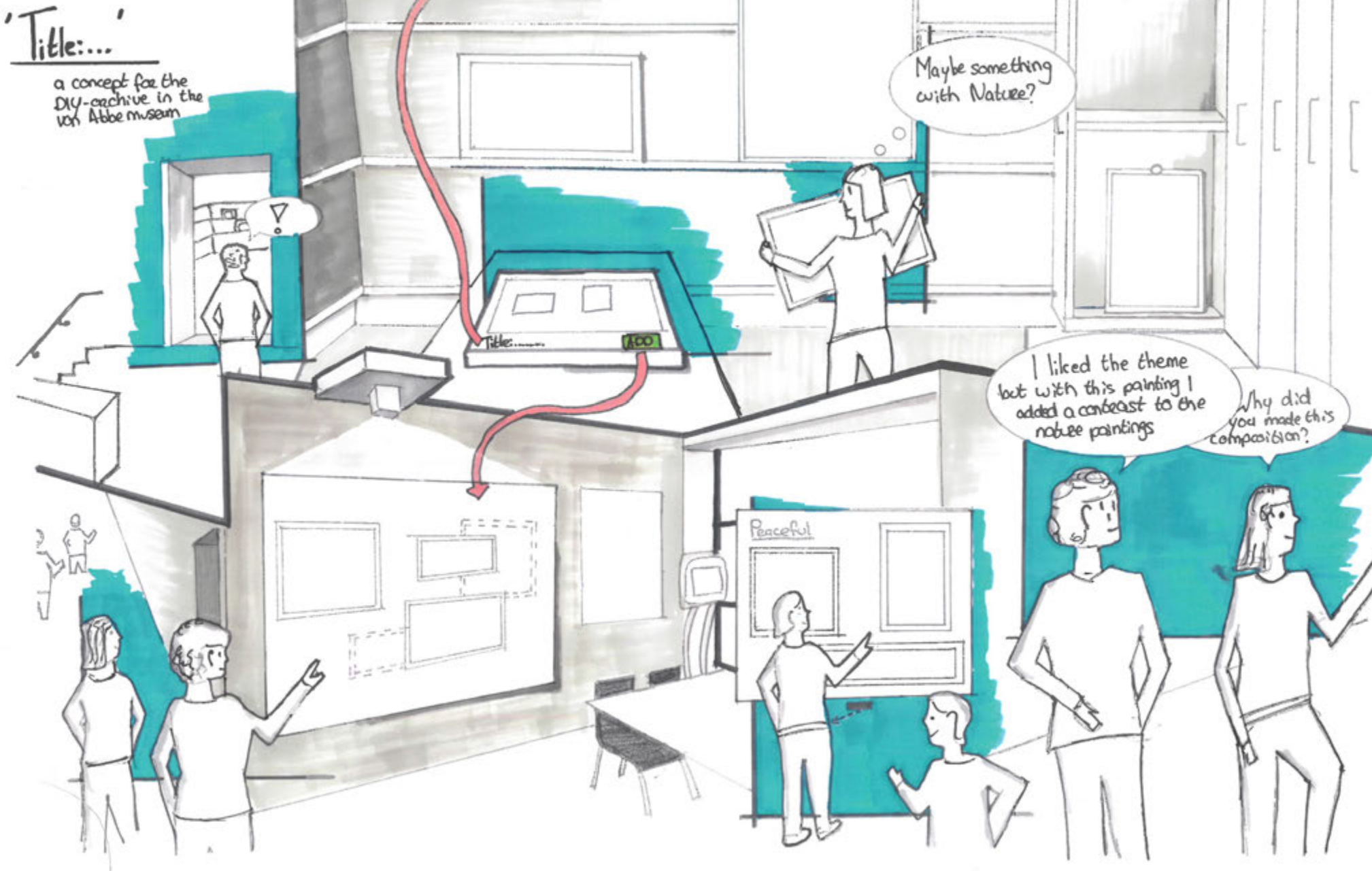

Img 2: Before continueing the museum visit, check out the interactive stop-motion

Img 1: Location of the Interactive stop-motion.

Img 3: If the visitors come closer to the projection the, see the titles connectes to the exhibition.

4.5 | CONCLUSION

To conclude 'Title...' and the interactive stop-motion form a system that personalize the museum visit. More specifically it creates an opportunity for the visitor to discuss and find a way of interpreting artworks that relate to their context. And the system lowers the threshold to actually participate in the DIY-Archive. For this reason we could say that the system successfully matches the design brief.

Next to this the design also matches the personal vision of the student designer. We aimed to personalize the experience in a public space, by inspiring the user with a trigger. All these values are implemented in the final concept.

Finally the concept also matches the question of the van Abbemuseum. They hoped for a concept that aimed for more participation in the DIY-Archive, with explaining it to obviously. Next to this the system is relatively feasible, and could therefore be implemented in the van Abbemuseum in a relatively short period of time.

Image left: The final storyboard of the 'Title...' Concept and the Interative stop-motion combined in one system.

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CHAPTER 5 | DISCUSSION

5.1 | HOW RESPONSIVE IS THIS ENVIRONMENT?

As mentioned in the introduction, my personal vision on personalization of environments was slightly different than the design brief. During the project it was learned that every responsive environment needs input. The input of this system is not delivered by an autonomous sensor, but by active input of the visitor.

Also the output is not a direct change of environment, based on the people who are in it. Since the activities in the DIY-Archive were already contributing to personalizing the experience, the actual personalization of this concept happens on a more abstract level. With this system

I hope to extend the personalization outside the Archive and the Museum. This also matches my personal vision, since I aim to design a trigger to inspire the user.

5.2 | WHAT COULD BE IMPROVED

The final concept is not officially tested, so it is not sure that the system will increase participation in the DIY-Archive and create a more personal experience for the museum visitor. Although almost all assumptions are based on (literature) research, only a long-term test including a questionnaire over time could indicate the actual effect on the museum experience.

As mentioned in chapter 2.3 it is important to see many different context to increase the museum experience. With the this concept, in the most optimal scenario, the visitor could encounter a few different contexts in the DIY-Archive and on the interactive stop-motion. To increase the effect of the system the different titles should play a bigger role in the system. In a next iteration this could be implemented for example in the navigation of artworks.

Image left: Final Demo Day Presentation

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5.3 | RECOMMENDATIONS

As we can see in 'Ask by the Brooklyn museum' [3] and the experience designed by the Cooper Hewitt Museum [6], the systems that are already designed for personalizing the museum experience are not restricted to one area of the museum. The systems even go beyond the walls of the museum. We believe the van Abbemuseum need to do this as well eventually, to prepare their visitors on participation. The database 'Title...' can be used for this.

We believe 'I went to the MoMa and...' [8] does a great job in using the opportunities such a database can serve, see image 1&2. Not only is the database used as a trigger at the entrance of the museum. But the database is also used for advertisement and the visitors can revisit their opinion online, seeing even more reactions to the artworks.

Seeing these different perspectives before and after the museum visit wil also contribute to the main goal of 'Title...' to offer people new contexts for artworks, which they can relate to their own.

A final advise for the database would be to use it for visitor research and as a supporting tool in curating exhibitions or improving the museum experience. R. Stevens et. al confirm this in their research [18]. they believe a traces system could be used for comparative research on visitor interpretations of artworks.

Img 1: Input to the system: describe your experience in the museum.

Img 2: The input is used for advertisement of the MoMa.

Img 3: Navigating the artworks becomes a completely new experience in the Cooper Hewitt Museum [6].

CHAPTER 6 | REFLECTION

In this section I reflect on my personal development this semester. I gained experience through my project but also through my electives and extra curricular. Therefore there will be references to these activities as well.

VISION

I believe that the complex issues we encounter in todays society need to be tackled with personal solutions. I believe this can be done by inspiring people with my designs. My designs do not give a solution to the user, but it inspires people to have them want to change their behavior. This semester I learned more about how to design for this purpose.

How

By organizing and visiting the mini-symposia, see image 1, I discovered that the theory of transformative qualities of Caroline Hummels et. al describes the process very well regarding the way I try to achieve my design aims. Therefore I decided to learn more about this matter. I learned that by creating open-designs you leave room for more personalization of the product. Up until know I did this in the form of self-expression, but open design can also mean that it can be implemented in different ways in everyday life.

Secondly I learned that in order to engage people properly you have to design for physical involvement, stimulate the senses, allow for freedom and allow for

Img 1: In 5 mini-symposia, 28 reseracher shared their visions and projects in Industrial Design. Miguel Bruns asked me to support the organization of these mini-symposia of my analytical and structured skills.

growth.
During the elective 'Designing rituals' I learned to implement this knowledge, by designing a morning ritual around coffee. In this ritual all form and interaction decisions had to be based on the initial values and qualities we had determined, see image 2.

What
I learned that I design triggers to create a reflective dialogue. This dialogue is either personal or with others, as I did for example in this project. I prefer tangible interaction in my design, because this engages the user and makes the experience more personal.

To become more concrete on this part I need to specify my context. I feel most comfortable in designing for private or small community interactions. Creating my FMP brief will help me to make this context even more specific.

Expertise
My expertise lies in Social Science, more specifically the user-centered design process with a big interest in cultural values and how to implement these. Secondly my expertise can be found in Ideation and Creativity, this means I am able to translate my research into clear design directions and concepts. The

actual realization of these products is where the boundary of my expertise is challanged.

DESIGN PROCESS

This semester I experienced the value of an iterative process. For example: in the final weeks of the project I was so busy analyzing and refining the concept values, that I got in an analysis loop. Forcing myself to converge and select one concept, by setting a strict client deadline, made me to move on in the process.

I learned that although I design for the value and experience which I want to convey to the user, it is important not to forget about the form and interaction, since these aspects also contribute to the experience of the final design. I experienced for example during the elective "Designing rituals', that by making and acting out our ideas, our

Img 2: Make ceramic cups in a specific form to enhance the values in a coffee ritual.

vision on the effect we aimed for in our ritual, became clearer.

Diverge
In the elective 'AYIR' and my project, I learned that when you design for wicked problems it is important that you at first take time to gain a good insight in what the involved clients want and what their

relations are. Service design tools can help in this.

With scrap model sessions and no-post-it brainstorms (f.e. the Embodied Ideation Toolkit of Dorothe Smit) I learned to think beyond the interactions and forms that I already know. This is also a point where I believe my final concept could gain some more depth in interaction and form. As I did for example in the Designing Rituals Elective, in which we completely re-designed the interactions and shapes relating to a coffee ritual. In my FMP I want to consciously develop more skills to do so and also reserve more time in my process to explore the interaction and form for my concept.

Converge
During the elective 'AYIR' I learned that wicked problems can be better understood with service design tools. I used the experience I gained from these service design tools to create a customer

journey for the DIY-Archive, see page 16. This gave me a clear overview of the problem(s) and made it easier for me to communicate, my design directions and improvements.

Client meetings forced me to converge in the proces, as they expected me to be concrete and clear in my concepts and communication.

System design
Both during the elective 'AYIR' and my project I learned more about system and service design. I learned that by designing a system you can create more meaningful designs for the end-user and have effect on a bigger group of stakeholders, clients and users.

Secondly I have learned that by designing the system and service around a product the implementation becomes more realistic, because it fits better into an already existing system such as the van

Abbemuseum.

COMMUNICATION

At the end of the project I had trouble to clearly communicate my actual design, since a systems does not have as clear boundaries as a product has. I learned it is important to clearly frame the basics of the system and its values. I tried to this with a scenario, see chapter 5. Only after I did this could communicate the connected concepts or opportunities and their values, see chapter 5.2.

Why, how, what
This communication was developed more specifically during the elective 'AYIR'. I learned that it is important to start my story with why, then explain the how and afterwards what. In which it is important to constantly make links between the research and the outcomes of my design process.

CONCLUSION

To conclude, this semester contributed to me being more confident about being an independent designer. I specified my vision better and developed my knowledge and skills required for this vision and the related design process. Thought I should apply this during my next project in order to become more confident about making my own proces and design decisions.

Word count: 1032 words

FINAL NOTE

This is not part of my official reflection, but an addition I find important to mention.

This semester, more than any other semester, I learned how important it is to balance the time I spend on my design life with my personal life. If we as students can't mangage to balance our passion with our personal life, we probably won't learn it at all.

I consciously decided to spend less hours in evenings and weekends on my study and I took the time to process personal problems. More concretelyI learned to outscourse tasks (as I have to do in the EduCie) and prioritizing my ambitions better with group scrum meetings.

Future
Next semester I start my Final Master Project. I arrange Pilemonne Jaasma as my graduation coach. I believe our design visions have a lot in common, but we also have enough differences to keep challenging each other and test my ideas with.
I aim to maintain the iterative process and in my planning I want to leave more room to develop the interaction and form of the concept. Furthermore I want to learn more about the theory of transformative qualities and specifically define what my connection is to this theory (and therefore also what my differences are).

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APPENDIX A

SUMMARY PDP GOALS

My main goal for my master was to become more confident as an independent designer. With my master I wanted to become more confident in who I am, what I aim for and how I do this. The short-term goals for this semester were set to contribute on my long-term goals.

Vision

- Become more concrete in what I actually design.
- Use this knowledge to prepare for my FMP. Select a context and matching graduation coach.
- Gain expertise in designing for my vision. Learn more about how designs can inspire people, and transfer values via an experience.
- Explore fields outside my comfort zone.

Design Process

- Have a vision related process to gain more confidence in making design decisions for my vision.
- Create a clear iterative design process, with clear points of diverging and converging to maintain the balance between research and translating the outcomes to a concrete concept.

Communication

- Learn more about storytelling and how this contributes to explaining the (long-term) experience of the design
- Quality control in this communication for my future portfolio.