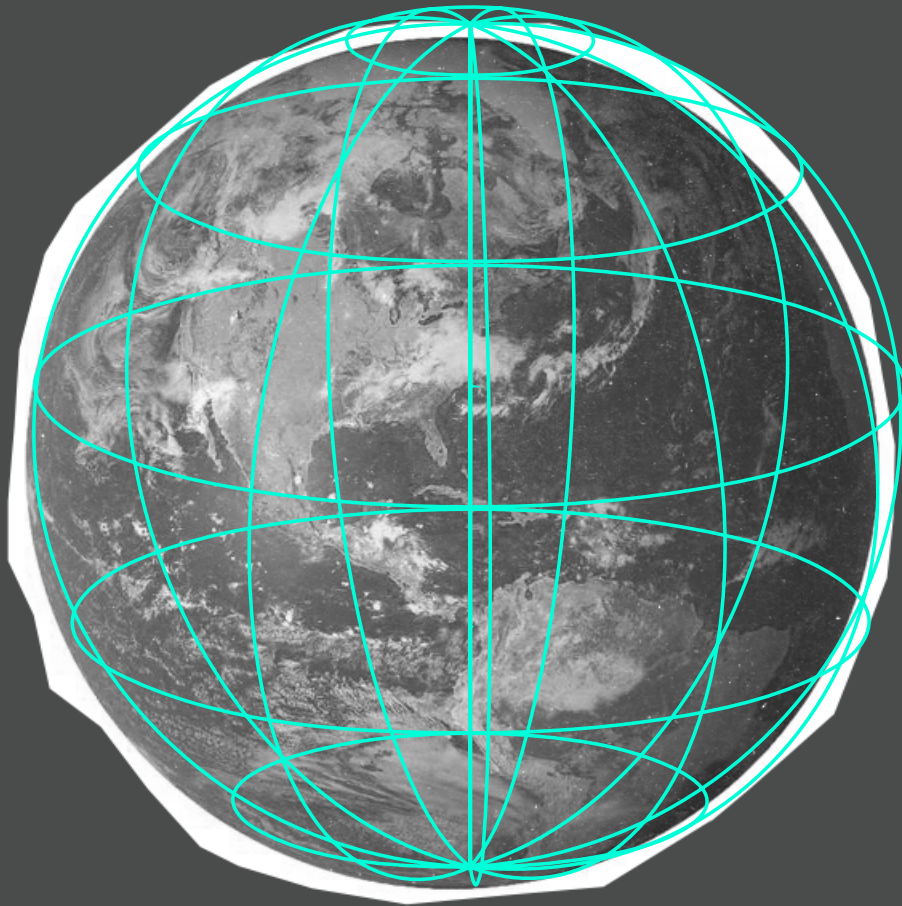


In Praise of the Future

Using Speculative Design to create an Experience that lets people think critically about Erasmus's values



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In Praise of the Future

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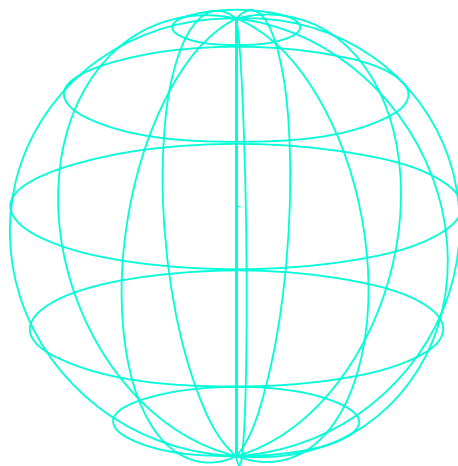
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October 2024



Preface

Dear reader,

This thesis concludes this project that has taken over my life for the past couple of months. For this project, I dived into a world that was unfamiliar to me 7 months ago. I explored the works of Desiderius Erasmus - somebody who I thought at the start of my project designed the famous Erasmus Bridge in Rotterdam (he did in fact not design this bridge, Ben van Berkel did). It was an interesting process to learn what Erasmus's values were and how I could relate his values to visitors of the library. I found inspiration in the world of speculative design, and I had a lot of fun doing so. During my project, I spoke to many people who have all helped make this thesis fruitful, and to those, I want to say thank you.

First of all, I want to thank everybody who participated in my research. The experts I interviewed, the people who participated in my sessions, the visitors of the library who tested my prototype, my fellow students who helped me brainstorm or helped me solve problems. Every single one of you has contributed to the end result of my project.

I want to thank my chair and mentor, Arnold Vermeeren and Jeff Love, for the inspirational talks, constructive feedback and the motivation provided throughout the project. I look back fondly on the inspirational conversations about speculative design we were able to have and I always walked out of our meetings feeling inspired. I am very grateful for the support and for guiding me when I was feeling lost.

I also want to thank my supervisors at Rotterdam Public Library, John Tholen and Charissa Hokke. Thank you for your trust in me and the knowledge you provided about the ins and outs of the library and Erasmus.

To my friends and family, thank you for always being there for me. I really appreciate all the support and the help you all gave me, even when you didn't really understand what I was working on. Especially to Lieneke, Natanya and Sophie, who made working through the summer bearable, and sometimes even fun.

I hope you will enjoy reading this thesis. It has been a challenging process, but also one of the most exciting and inspirational projects I have done.

Enjoy!

Eline

Summary

This project, in collaboration with Rotterdam Public Library (RPL), focuses on designing a renewal of the Erasmus Experience to engage citizens of Rotterdam with the values of Desiderius Erasmus through interactive and reflective activities. Despite Erasmus being an important person to Rotterdam's history and RPL holding the largest collection of Erasmus's works, many visitors remain unaware of his contributions. The Erasmus Experience, originally designed in 2016 and situated inside RPL's main building, aims to introduce Erasmus's ideas on language, behaviour, religion, and humour through an interactive format. With the renewal of the RPL, there was an incentive for a renewal for the Erasmus Experience, also because the number of visitors has decreased over the years.

The main goal for this project is to create a new experience that connects citizens of Rotterdam to Erasmus's values. The design process was inspired by RPL's mission statement, which encourages citizens to be conscious, critical, and active participants in society. To achieve this, speculative design was used as the foundation for developing the new experience.

The project uses an adaptation of the double diamond model, incorporating phases of discovery, definition, development and delivery. In the first phase, the context of the project was explored. Research was conducted on Erasmus's values through literature studies and expert interviews. This led to a framework that summarises Erasmus's values. Insights from initial user tests indicated that participants found it challenging to reflect on their values without concrete examples. In the definition phase, the design space was defined. To solve the need for concrete examples, speculative stories as a means of facilitating critical thought was introduced.

Speculative design, as a critical design approach, uses fictional stories set in future scenarios to provoke thought and discussion about current societal values. By using futuristic scenarios, visitors can engage with hypothetical situations that are more distant from their personal experiences, while giving them a concrete example to reflect on.

A key design decision was to create a "sensitising experience" for the existing Erasmus Experience, providing an initial touchpoint for visitors to engage with critical thinking before exploring Erasmus's ideas in depth. This new experience targets "individual wanderers" - visitors who explore the library and who are more open to engage with interactive exhibits. Speculative scenarios, presented through stories about the future of Rotterdam, are used to trigger reflection on moral and societal issues, aligning with Erasmus's value of critical thinking.

The final concept, *Lof voor de Toekomst* (figure 0.1), integrates speculative stories into an interactive digital experience that guides visitors through a series of reflection moments. The four reflection moments include: initial bias, writing down opinion, changing opinion and ruminating. At the end of the experience, the user is offered a token - a sticker - that serves as a tangible reminder of the experience, ensuring another reflection moment.

The project's evaluation was conducted with visitors at RPL, testing both the engagement of the interactive prototype and the achievement of the design's goal: encouraging critical reflection. While the prototype struggles to attract spontaneous participation in a busy public space, those who engaged with the experience demonstrated deep reflection, relating the speculative stories to their personal lives and societal concerns.

The final evaluation showed that speculative design was effective in prompting critical thinking but also highlighted areas for improvement, such as increasing the experience's visibility and clarity on the time required for participation. Future recommendations of the project should refine these aspects while continuing to explore new stories that resonate with Rotterdam's citizens.

By using speculative design to explore modern societal themes in an engaging and accessible way, the project shows the potential to successfully encourage reflection and is in line with RPL's broader educational and cultural goals.

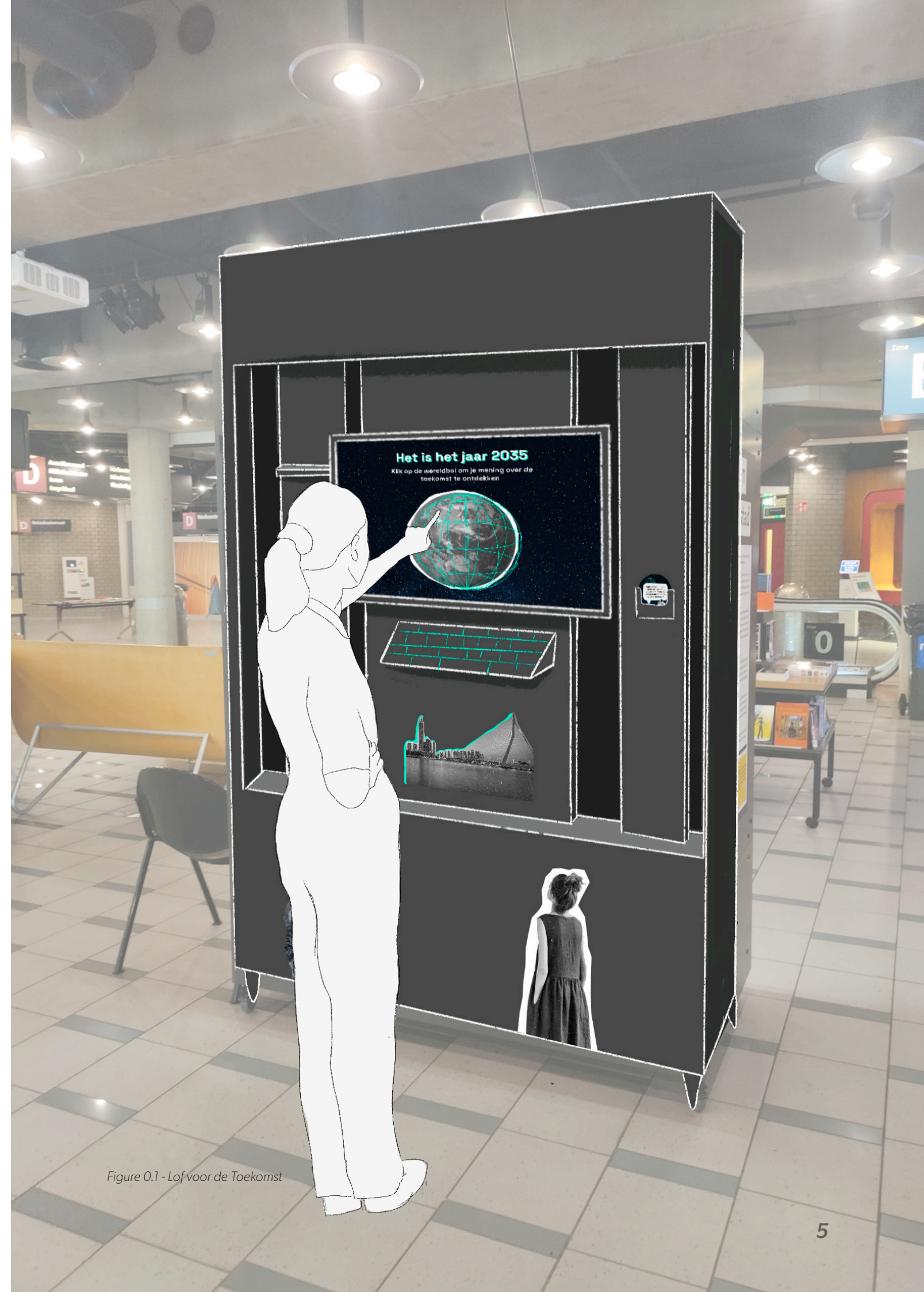


Figure 0.1 - Lof voor de Toekomst

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PART 1

Introduction

This section outlines the project's context and relevance. I introduce the client, Rotterdam Public Library, and provide an overview of the existing Erasmus Experience. From there, I initiate an initial project brief, setting the first design objective to redesign the current Erasmus Experience. Finally, I describe the design process, which also serves as a guide for the structure of this report.

Context of the project

Desiderius Erasmus (1466/1467/1469 - 1536) was a humanist, Catholic theologian, philosopher, philologist and educator born in Rotterdam. His main standpoints included freedom of expression, respect for others, knowledge and culture, tolerance and education (Huizinga, 1952). These themes remain relevant in today's society.

Though Erasmus (figure 1.1) spent little time in Rotterdam after his birth, he referred to himself as Erasmus of Rotterdam (Desiderius Erasmus Rotereodamus). Following his death, the city embraced him as a cultural icon, with numerous landmarks and institutions named in his honour, such as the Erasmus Bridge (figure 1.2), Erasmus University, and Erasmus Medical Centre. Additionally, the Erasmus Programme, which promotes student exchange, is recognized globally.



Figure 1.1 - Portrait of Erasmus. (de Jonge, 1523)



Figure 1.2 - Erasmus Bridge. (Chy, 2011)

Despite his significant historical impact on Rotterdam and the numerous landmarks bearing his name, many people - even those living in the city - remain unaware of Erasmus' legacy and contributions. This has led to the creation of the Erasmus Experience, located in the Rotterdam Public Library (Dutch: Centrale Bibliotheek Rotterdam). The existing Erasmus Experience introduces visitors to his ideas and invites them to engage in discussions on topics from his works. In addition, Rotterdam Public Library has the biggest collection of Desiderius Erasmus' work in the world (Figure 1.3) with over 3000 books and letters, and has been recognised by UNESCO (UNESCO, 2023).

With the renewal of the Rotterdam Public Library there's an opportunity for the renewal of the current Experience. Design opportunities lie in

attracting more visitors and creating visibility of the Erasmus Collections. Because many people have visited the experience over the years, there are less new visitors. Additionally, displaying the Erasmus Collection requires special conditions and it is therefore not visible yet in the current Experience.

As a designer, I am interested in creating meaningful, interactive experiences. My initial findings about Erasmus intrigued me, particularly is progressive ideas for his time. I was excited by the possibility of translating them to address modern societal issues.



Figure 1.3 - Part of the Erasmus Collection, located in a safe inside Rotterdam Public Library. (Centrale Bibliotheek Rotterdam, n.d)

Rotterdam Public Library

This project was done in collaboration with Rotterdam Public Library (RPL). The library, located near train station Rotterdam Blaak in the city centre of Rotterdam, has a large collection of over 500.000 books, cd's, dvd's, video's and e-books. With almost 2,6 million yearly visitors, hundreds of cultural activities, almost 3 million loans and 100.000 members, it's one of the highest visited cultural institutions of Rotterdam.

Rotterdam Public Library's mission statement is to "contribute to the personal development of every Rotterdam citizen, to connect them and to enable them to be a critical participant within our society" (Bibliotheek Rotterdam, 2023). Therefore, the library is not limited to mere books, but also organises

activities around language, culture and society. The library is supposed to be an inviting meeting place, where people are able to hang out, have fun and are given skills they need to participate in society.

Besides the RPL's main building situated in the centre, the library also has 21 other locations located throughout the city of Rotterdam (figure 1.4). This means that the target group of the Rotterdam Public Library is wide and across all Rotterdam citizens, with the main building simultaneously targeting tourists.

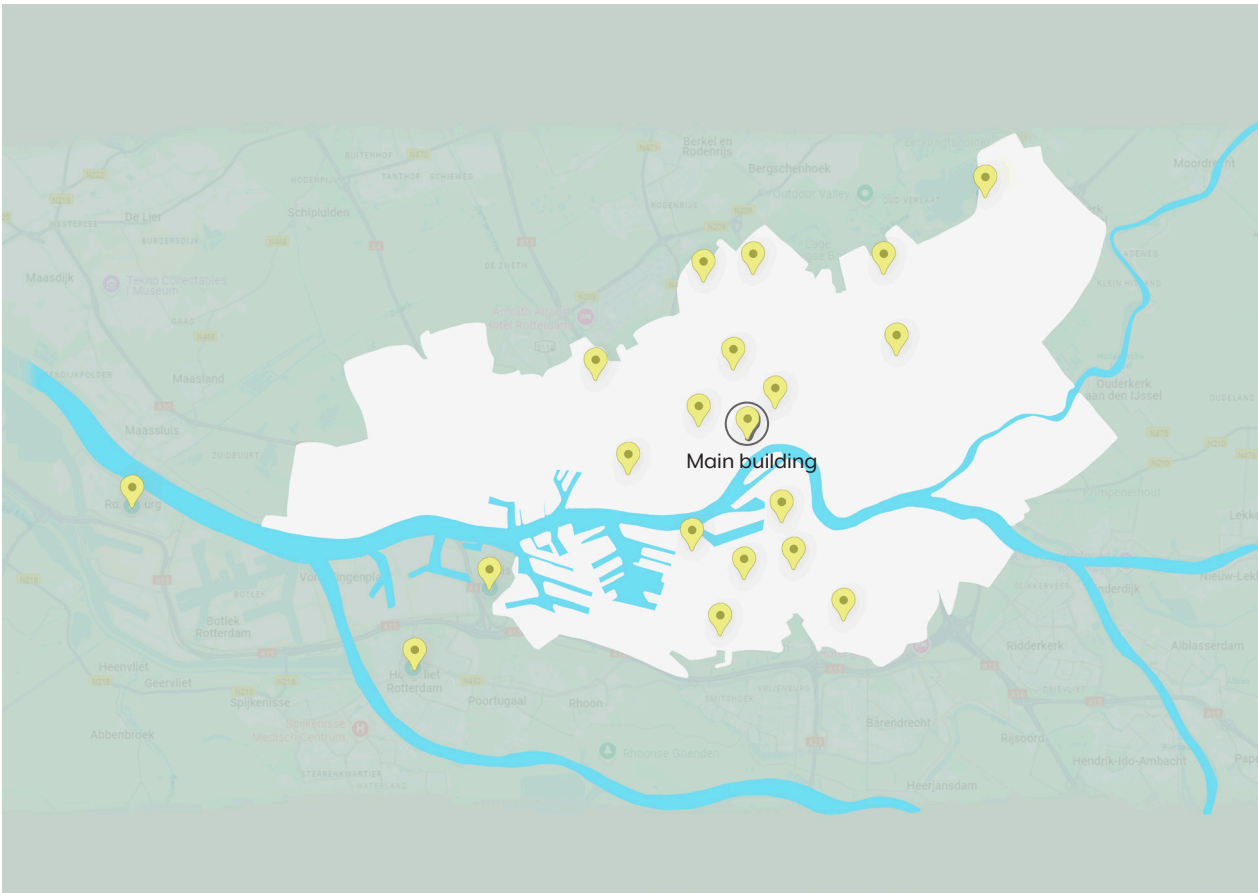


Figure 1.4 - Locations of Rotterdam Public Library, location with a circle refers to the main building



Figure 1.5 - Picture of Rotterdam Public Library

Erasmus Experience

Situated on the 3rd floor of the main building of Rotterdam Public Library, is the Erasmus Experience (figure 1.6). This experience was designed by DOOR in 2016. Its purpose is to present Erasmus's ideas to a diverse audience of all ages. Various themes are addressed, such as language, behaviour, faith and humour. Visitors are challenged to think about the world through Erasmus's eyes in an interactive way. Access to the Erasmus Experience is free, visitors of the library are able to visit during opening times of the library.



Figure 1.6 - Overview of the Erasmus Experience

According to DOOR, designer of the current experience

The current experience was designed by DOOR¹, who help art and cultural organisations with new forms of presentation, digital storytelling and experience design.

The main question from DOOR when designing the Erasmus Experience, is how to build an exhibition that doesn't feel like 'a printed book on the wall' but captures the essence of the books and documents available. This resulted in an Experience that, in

their words, has "a radically different starting point from 'ordinary' exhibitions. Visitors are actively made to think about themselves and the world by forming opinions on a variety of issues. Thanks to RFID technology (radio-frequency identification, which keeps track of the decisions made) combined with digital storytelling, each visitor gets their own, highly personal experience where they look through the eyes of Erasmus." (DOOR, 2016).

Build up of the Erasmus Experience

The Erasmus Experience consists of several steps that must be completed in order to finish the Experience. Along the way, they are invited to explore Erasmus's worldview and consider how it relates to their own.

1 The volunteer
At the start of the experience, a volunteer is present who can explain the Experience to visitors. A total of 22 volunteers work at the Erasmus Experience, so there's always someone on duty during opening hours. The volunteer is able to give a quick explanation of who Erasmus was and the different steps involved in the experience.

2 The bracelet
Every visitor receives a bracelet at the start of the experience, which keeps track of the decisions they make during the Experience (figure 1.7).

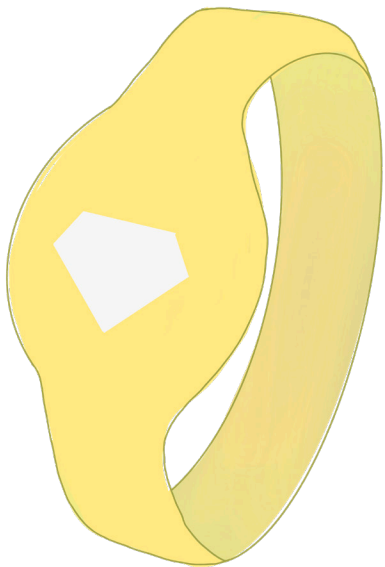


Figure 1.7 - Bracelet

3 The jump
With the bracelet on the visitor's wrist, it's time to take a plunge. Visitors will stand on the circle placed on the floor and will literally jump. Their silhouette is then displayed on the screen in front of them. The silhouette is used as an avatar later on in the exhibition (figure 1.8).



Figure 1.8 - Screen with display of one's silhouette. Translation of text on screen: "Jump up and down and empty your head"



Language	Comings and goings (behaviour)	Religion
"I can say what I like"	"War is unavoidable"	"Religion is a personal affair"
"Words make us who we are"	"A good person is at home in any country"	"Religion and humour go well together"
"Living together starts with language"	"I can do whatever I want to"	"God is love"

Figure 1.10 - Overview of the 9 different statements

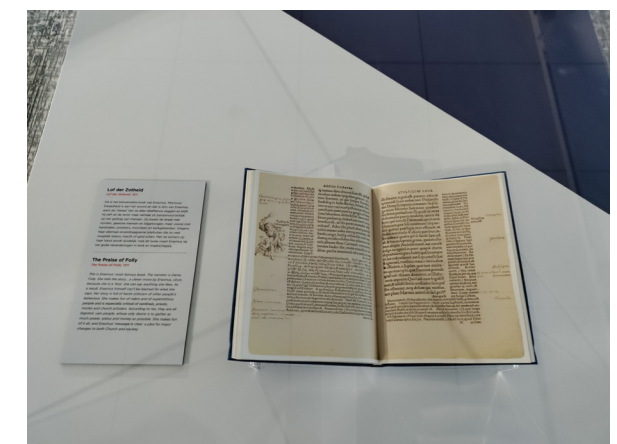
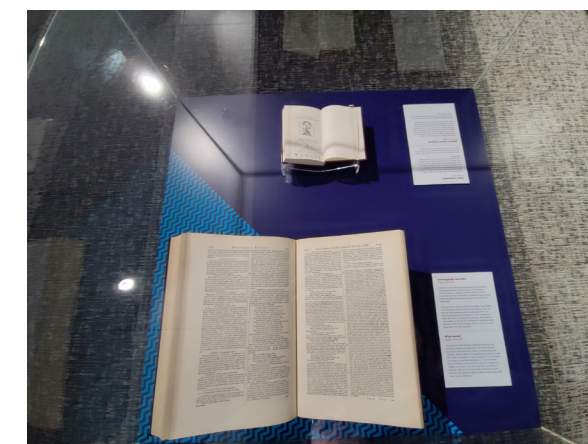


Figure 1.11 - A few (copies) of Erasmus's works, displayed throughout the experience

Throughout the experience different copies of the works of Erasmus are displayed. Due to the special conditions under which the original works must be preserved, only copies or interpretations of his work are available (figure 1.11, 1.12).



Figure 1.12 - Display cases with Erasmus's works spread throughout the experience

4 The statements

The walls of the Experience display some of the areas of knowledge that Erasmus has explored, including language, religion and behaviour. They illustrate Erasmus's thoughts on these topics and how his ideas have been applied to modern society, supported by quotes from his work. Visitors can engage by expressing their views on nine different statements, using their bracelets to select either 'agree' or 'disagree' against the interactive boards (figure 1.9, 1.10).



Figure 1.9 - Walls with text and images (top) and close up of statement (bottom)

Project brief

After almost 40 years of use, Rotterdam Public Library is renovating its main building. In 2025, the library will temporarily move to another location, after which renovation will take place. This will provide opportunities for the current Erasmus Experience. Considering it has been in use since 2016 (figure 1.15), it could benefit from a renewal and the renovation could be a good start for this.

Rotterdam Public Library set out two main design opportunities. Firstly, since a lot of people have visited the Erasmus Experience in previous years, the amount of visitors is decreasing. How can more visitors be attracted? Additionally, displaying the Erasmus Collection requires special conditions and is therefore not visible yet in the current experience. Can the Erasmus Experience connect visitors to this heritage collection, without damaging the historic materials?

The mission statement of RPL (Bibliotheek Rotterdam, 2023) served as an inspiration throughout the project. With its focus on encouraging Rotterdam citizens to be conscious, critical, and active members of society, it raised the central question: how can the new experience contribute to the personal development of Rotterdam's citizens?

The goal of the project is to keep this mission statement in mind and create an experience that connects citizens of Rotterdam to Erasmus's values. By encouraging reflection on their own morals, visitors can gain insights into their behaviour within society. This approach might address the first design opportunity of attracting new visitors. By providing an engaging way for individuals to connect with new values in a refreshed experience, it can spark renewed interest and draw in a broader audience (appendix A).



Figure 1.15 - Opening of the Erasmus Experience in 2016, with special attendee King Willem Alexander. (Fecken, 2016)

5 Conversations with Erasmus

Next, the visitor scans their bracelet and is able to have a “conversation” with Erasmus. The aim is to have people critically think about the answers they have given in the previous step and give them the possibility to change their minds. The visitor can select a topic and Erasmus will give a detailed explanation of his opinion. The user can then choose one of two options - these options are more descriptive than just ‘agree’ or ‘disagree’, but amount to more or less the same thing. With each conversation the visitor has with Erasmus, a diamond is earned. When the visitor has earned three (or up to a total of nine diamonds), the visitor is allowed to go to the next step (figure 1.13).

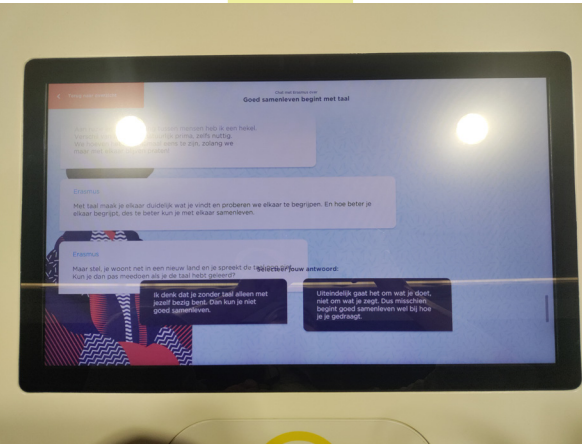
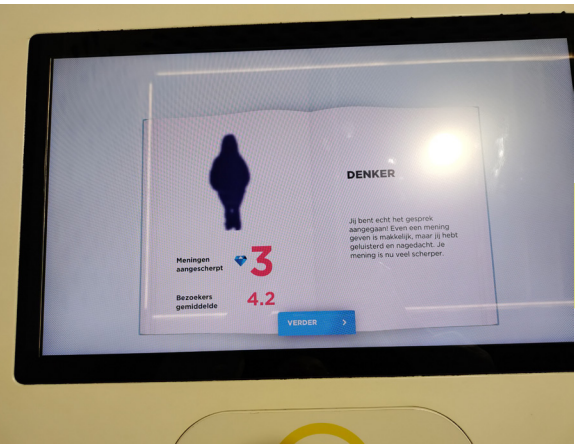


Figure 1.13 - Choose a topic (top), have a conversation (bottom right) and earn points (bottom left)

6 The safe

At the end of the Experience, visitors are invited to store their reflections in a virtual safe, turning them into a digital booklet. This booklet can be sent to the user's email address, so they can revisit their thoughts on the themes explored. Although the booklet is said to be added to the library's Erasmus collection, this is symbolic rather than literal. The final step concludes with the opening of the safe, so the visitor gets to have a virtual glimpse inside the library's archives (figure 1.13).



Figure 1.14 - Virtual vault

Design process

For this project, an adaptation of the double diamond approach (Design Council, 2005) was used. The double diamond consists of a few phases of design, where divergent and convergent thinking are alternated. This thesis is structured in 5 parts (figure 1.16):

Part 1 - Introduction

This consists of the first information provided. It introduces Rotterdam Public Library, the Erasmus Experience and the first project brief.

Part 2 - Discover

This first stage involves a broad exploration to understand the problem space. In this stage, the teachings of Erasmus and the topic of values get explored and initial findings are shared.

Part 3 - Define

In this stage, insights from the discovery phase are synthesised to clearly define the problem. The focus gets narrowed and a clear design brief and design direction gets formulated.

Part 4 - Develop

The 'develop' stage involves brainstorming and prototyping multiple potential solutions. For this project, that meant using speculative design and exploring the potential of speculative stories for a future experience.

Part 5 - Deliver

In the 'deliver' phase, the outcomes from the explorations done in part 4 are used as a basis for the final design. The design and its features are thoroughly explained.

Part 6 - Conclusion

The conclusion focuses on the evaluation of the final design and adds some recommendations and final thoughts.

Throughout the project, various accent colours are used to help guide readers through the thesis. Each part will feature a unique colour, making it easier to navigate.

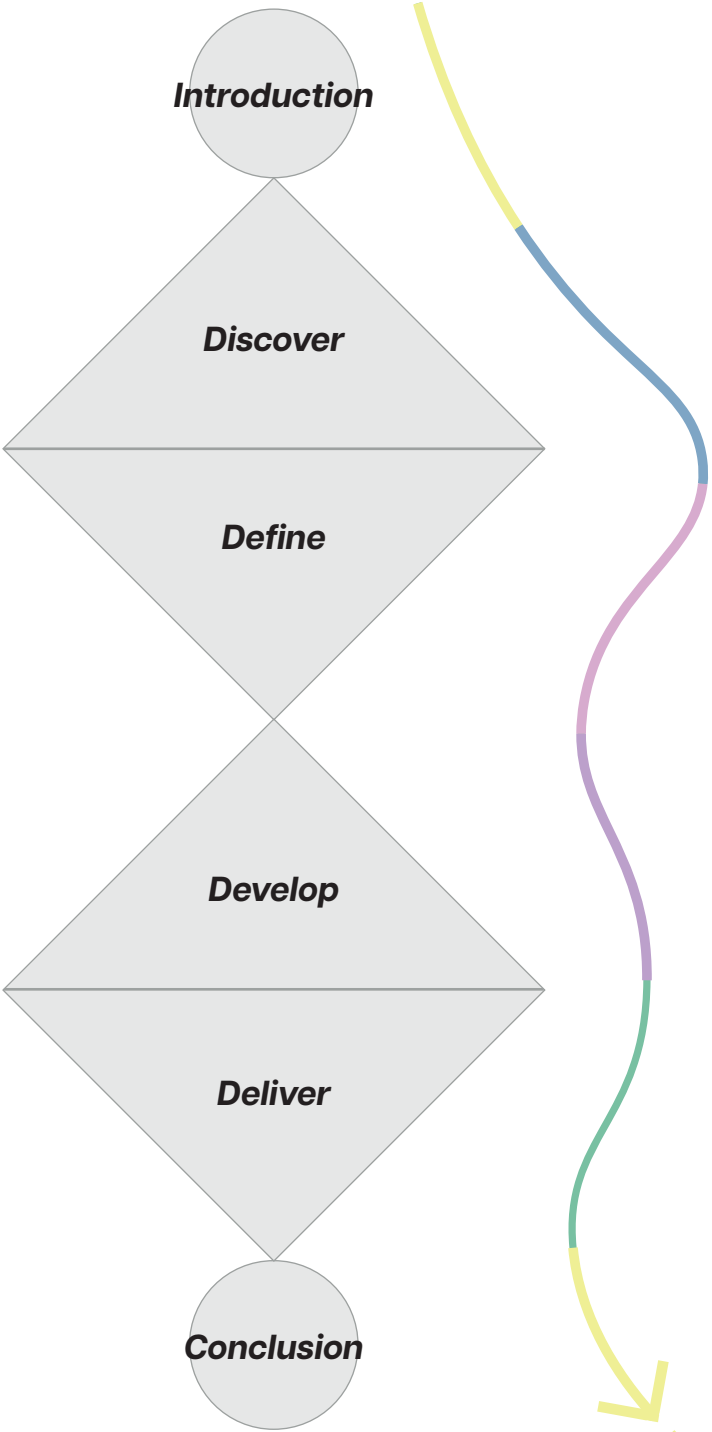


Figure 1.16 - visualisation of the structure of the report using the double diamond model

Research and design activities

Below is an overview of all the different design and research activities I implemented for this design project.

Part 2

Literature research on Erasmus and values

Interviews with experts

Experts about Erasmus

Employees of Rotterdam Public Library

Observations in the Rotterdam Public Library

Field research on triggering people to think about values

Part 3

Literature research on speculative design

Formulating a **design goal**

Part 4

Ideation sessions to start conceptualization

Generative sessions to test speculative stories

Part 5

Storyboarding to narrate the concept

Prototyping to design the interactive elements using figma

Evaluation with visitors of the library

PART 2

Discover

The discover phase is about understanding the problem space. In this phase, I conducted literature research and interviews with various experts to gain understanding on Erasmus and his philosophy. This has resulted in a framework that explains and summarises Erasmus's values. Next, I explored the topic of values. This section contains a short literature study on what values entail and gets followed up by some initial user tests on getting people to reflect on values. This discover phase also includes an overview of the target group of Rotterdam Public Library. The end of this part concludes with the key insights generated from this part.

Research approach

In this chapter, I derive the main research question from the initial project brief in part I. From there on, I describe the activities conducted to answer the sub questions.

In the previous part, I outlined the project goal as follows:

“Creating an experience that connects the visitors of Rotterdam Public Library to Erasmus’s values by creating reflection on their own morale”.

The main incentive of the Discover phase was to create a better understanding of this context. I needed to thoroughly explore Erasmus and his values, as well as see how people can be triggered to think about their own values. In addition, I analysed the visitors of Rotterdam Public Library and the current Erasmus Experience. This resulted in the main research question:

How can Erasmus’s values be used to trigger visitors of Rotterdam Public Library in reflecting on their own values?

This part is structured in 3 chapters. The first chapter gives an overview of Erasmus, his works and which values can be derived from this. It ends with a framework that summarises his values. The second chapter elaborates on conducted user studies whose main goal was to trigger people to reflect on their own values. The third chapter gives an overview of the visitors of RPL. At the end of this part, an overview of the takeaways in regards to the research question is provided.

Research activities

Below is a list of the activities I conducted to answer the sub research questions.

Who was Desiderius Erasmus and what were his values?

- Literature study on Desiderius Erasmus
- Interviews with Erasmus scholars and experts

How can you trigger people to reflect on their own values?

- Literature study on values
- Initial user studies involving people to reflect on values

Who are the visitors of Rotterdam Public Library?

- Interviews with employees of Rotterdam Public Library

About Desiderius Erasmus

The content discussed in this chapter started with one central research question: who was Desiderius Erasmus and what were his values? To answer this, I explored extensive works written about Erasmus, conducted interviews with Erasmus scholars about his life and ideas, and examined the zeitgeist of the late Middle Ages and early Renaissance. Through this research, I developed a framework that highlights his core values and demonstrates how certain values overlap and interact with one another.

Given the scope and timeframe of this project, I opted to focus on secondary sources and expert analyses rather than diving into Erasmus’s original writings. This approach allowed me to gather an understanding of his values while ensuring that the information remained relevant to the project’s goals. It’s worth noting that much has been written about Erasmus, and the material presented here is based on a selection of more detailed and authoritative works, such as van Raak (2023), that provide insight of his lasting influence.

Life in the Late Middle Ages/early Renaissance

To gain an understanding of the ideas of Erasmus, it is essential to have some background information on the historical context in which he was born. Erasmus grew up in the late Middle Ages and early Renaissance, a period of history that looked vastly different than modern day society.

What society was like during this time

Life in the Middle Ages (500 - 1500) was mostly shaped by Christianity - the Catholic Church was the most powerful institution in Europe during this period. Catholicism affected political, social and economic influences greatly. It provided a framework for daily life, shaping everything from moral values and social hierarchies to law and governance (Duffy, 1993).

Erasmus grew up in a period where life slowly transitioned from the Late Middle ages into the Renaissance (figure 2.1). The Renaissance was a period of cultural, artistic and intellectual revival characterised by a renewed interest in classical learning, human behaviour and scientific inquiry. (Black, 2002). This also marked the start of humanism.

Humanism

Humanism stems from 14th century Italy with authors like Petrarca (1304-1374), who had an emphasis on classical learning from Greece and Rome, promotion of the Human Potential, focused on the human experience and promoted civic engagement (Black, 2002).

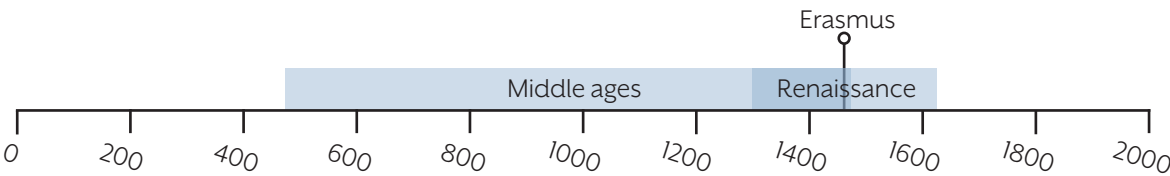


Figure 2.1 - Timeline showing the Middle Ages, Renaissance and Erasmus’s life

Humanists considered education in classical literature and the development of civic virtues essential for individuals to realise their full potential, both for their personal benefit and for the improvement of society (Black, 2002).

This perspective differed from the dominant worldview of the Middle Ages, which placed a strong emphasis on religious authority and its role in shaping society. While the Renaissance did not drastically diminish the political influences of the Church, humanism encouraged a more anthropocentric worldview, where principles shouldn't be accepted until tried and tested. This laid some of the groundwork for modern scientific thinking (Ross, 2004).

Erasmus is known as a prominent figure for humanism due to his advocacy for learning classical languages, his emphasis on critical thinking and intellectual freedom and his commitment to reforming society and the Church through the pursuit of knowledge and morale (Huizinga, 1952).

A short biography of Desiderius Erasmus

Desiderius Erasmus of Rotterdam, born between 1466 and 1469, came into the world as the son of a Catholic priest named Gerard and Margarethe Rogerius, the daughter of a doctor. Despite naming himself Rotterdamus, he only lived there for a short time. Most of his childhood was spent in Woerden en Gouda.

In 1478, 12 year old Erasmus was sent to a monastery in Deventer, a "centre of the Modern Devotion", a movement that promoted self-guided reading and critical thinking, encouraging individuals to trust their own conscience rather than solely relying on the church. This environment influenced Erasmus and aligned with the emerging ideals of humanism, which valued individuality and the quest for shared human values. By 1492, Erasmus was ordained as a priest, marking the beginning of his theological career.



Figure 2.2 - Portrait of Erasmus when he was around 52 years old in France. (Massys, 1517)

After being ordained as a priest, Erasmus spent his life travelling through Europe (figure 2.2, 2.3). He went to university in Paris and gave lectures in Cambridge. He got a doctorate in theology at the University of Turin and stayed at theologians in Leuven. Throughout his life, Erasmus alternated between cities like Leuven, Basel and Freiburg, often seeking refuge from political and religious conflicts at the time. His mobility allowed him to have a wide network of correspondents.

Erasmus settled in Basel in 1521, a city located in Switzerland known for a large intellectual community and relative religious tolerance. This is where he eventually passed away, on July 12th 1536 at age 69 (van Raak, 2023).

Erasmus's ideas

Erasmus was many things, but most of all he was a scholar. Throughout his life he wrote over 3000 letters and numerous books, with a large collection of these stored in RPL. His work embodies his central ideas of humanism, education, religious reform and peace, often done in a comical way (van Raak, 2023).

One of his most famous works, *In Praise of Folly* (1511), is a satirical critique of the church and society. It highlights the absurdities and moral failings of both. Though very religious, Erasmus was critical of the church and believed it was important to keep reflecting on one's self and not blatantly follow the church.

One of the works Erasmus himself was most proud of, was *Novum Instrumentum* (1516). This was a critical edition of the Greek New Testament with his Latin translation and annotations in which he tried to bring the text back to its most original

form. Erasmus believed that understanding the Bible in its original language was important for honest Christian faith, highlighting his desire for a more personal relationship with God, free from the corruption of the church hierarchy.

In *Adages* (1500), a collection of proverbs and aphorisms from Greek and Latin origin are presented. This work highlights his belief that morals formulated in classical antiquity were not just relevant to their own time but held value for guiding behaviour in his time as well.

In *The Education of a Christian Prince* (1516) the role of education in shaping strong leaders is emphasised. This work is about the belief that education provides knowledge and therefore helps improve individuals and society. He argued that a ruler should rule with wisdom and justice guided by Christian morale, rather than power or personal gain.

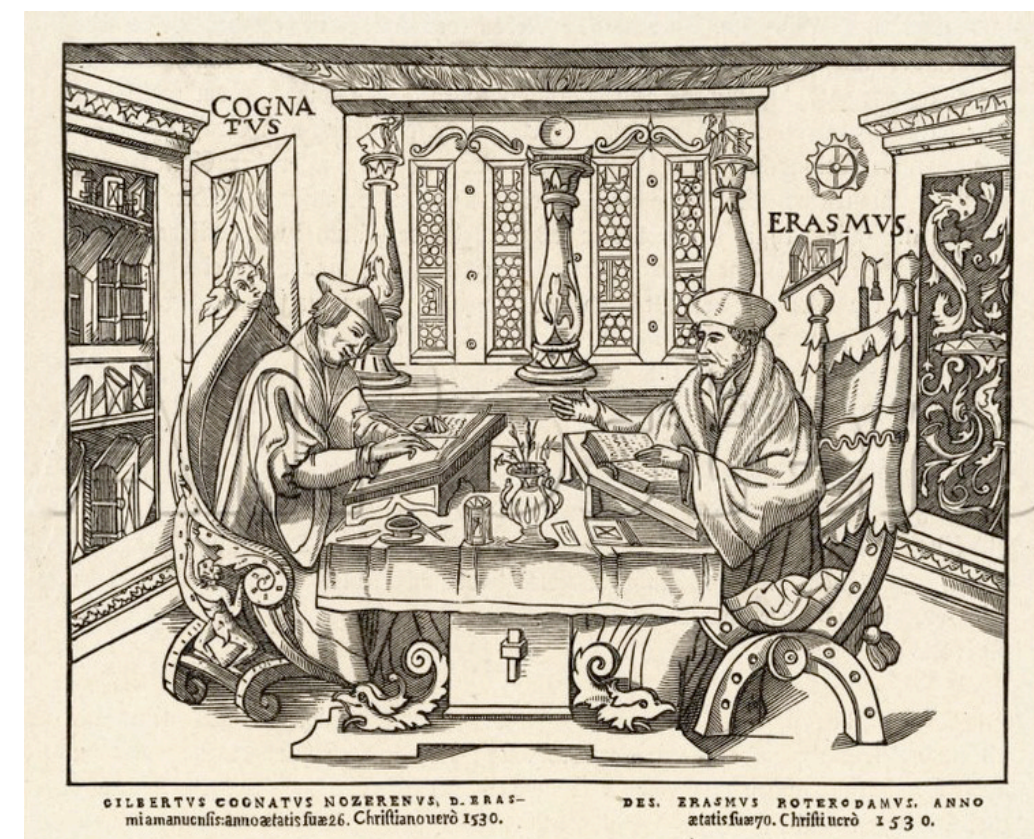


Figure 2.3 - Erasmus (right) with friend and fellow theologian Gilbert Cousin. (n.d., 16th century)

Erasmus's morality

For Erasmus, morality was a guiding principle that was deemed essential for individual wellbeing and societal harmony. Besides, morality was an important factor in humanism, as this was the time that encouraged people to start critically thinking for themselves (Black, 2002).

“By reflecting on Erasmus's values, you can reflect on your own values. It sparks conversation when facing controversial issues. Do I agree, and why or why not?” - Erasmus scholar S. Steen (personal communication, March 18 2024).

To gain some perspective on what Erasmus's morality was, I developed a framework to categorise the values of Erasmus based on his writings.

5 categories of values

The aim for the framework was to create a complete overview of Erasmus's moral philosophy. This includes different values that best summarise the aim of Erasmus's work but also how these values interact with each other. This framework was built based on a synthesis of the current experience, background on Erasmus's based on readings and discussions with Erasmus scholars.

The framework (figure 2.4) consists of 5 different categories:

1. **Knowledge** - For Erasmus knowledge was crucial. It meant that individuals were capable of cultivating wisdom and engaging critically with the world. Erasmus was an advocate for education and using education to shape an individual's perspective on the world.

2. **Communication**. Communication meant to Erasmus that people were able to express themselves by being able to write and communicate freely. According to Erasmus, this was best done with humour. This is prevalent in 'Praise of Folly' in which he satirically described society.
3. **Religion**. Erasmus was a devoted Catholic. Though critical of the church, religion provided him a framework for spiritual growth, ethical guidance and the deepening of one's knowledge and understanding of God and humanity.
4. **Treatment of others**. Erasmus was a firm believer in treating others with kindness, having respect for one another and being fair, even when people might disagree with one another or are critical about one's ideas.
5. **Freedom**. Freedom was an important value for Erasmus. He was a firm believer that people had free will. People should be able to have freedom of speech and autonomy. In this instance, freedom also means travelling. This provided cultural enrichment and firsthand observation of different customs and societies according to Erasmus

Framework of Erasmus's values

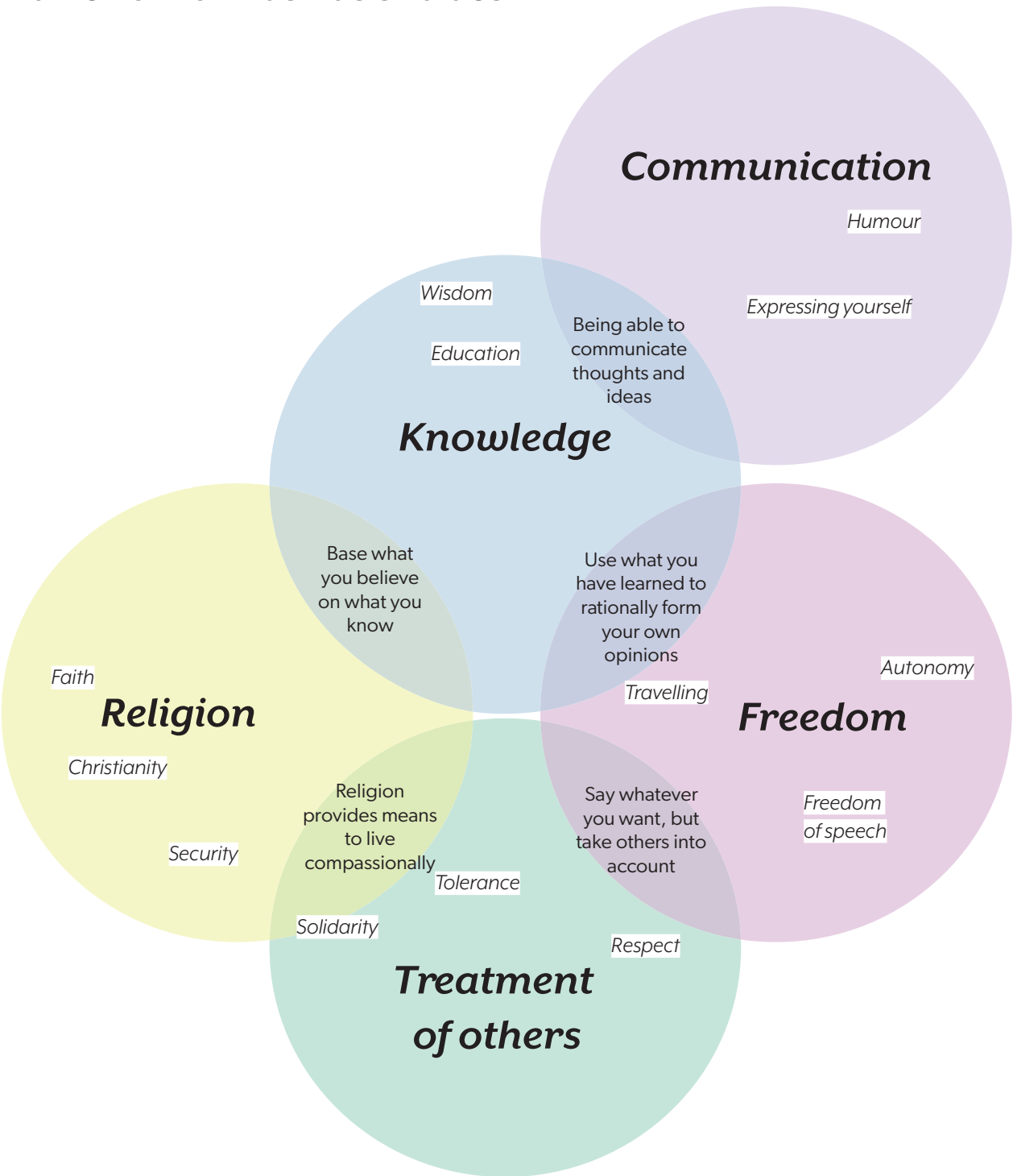


Figure 2.4 - Framework of Erasmus's values, including overlaps and highlighted key words

Overlaps

Additionally, the 5 categories overlap with each other on certain points, allowing for a more thorough and in depth explanation of the values and therefore provide a more comprehensive and valuable insight into Erasmus’s morale. Based on an exploratory sensitising session (see section xx), it was decided to not only focus on the values by themselves, but rather focus on these overlaps as this proved to be more inspirational when reflecting on values.

Knowledge + communication

According to Erasmus, it was important to not only be able to cultivate knowledge, but also communicate those thoughts. Learning contemporaries to read and write was a crucial part of this, always motivating others to critically think while elaborating on one’s ideas (figure 2.5).

“Erasmus taught his contemporaries to write and, as far as he was concerned, you did that with humour and irony, by playing with words and images and using them to challenge yourself and make others think.” (van Raak, 2023, p.33)

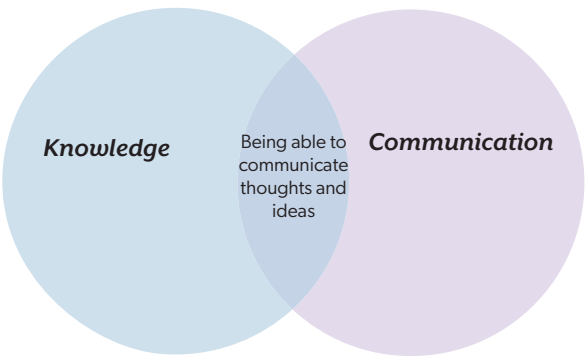


Figure 2.5 - Overlap of knowledge and communication: Being able to communicate thoughts and ideas

Religion + knowledge

Erasmus was a devout Catholic, but had criticism of the Church. The Church has become a maze of absurd rules, money-dealing and misused power. Nevertheless, he believed that the core of religion can be found in the life and ideas of Jesus Christ. He deemed it important that religion provides a means for living. However, people must remain critical about what they read and base what they believe on knowledge (figure 2.6).

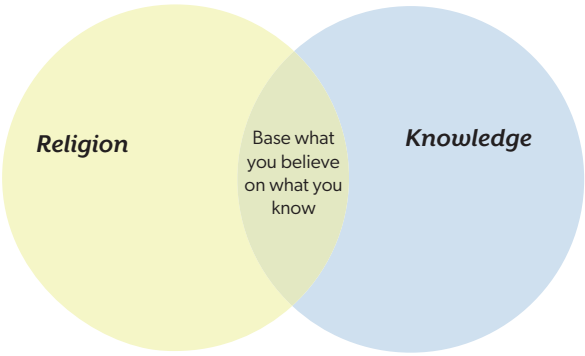


Figure 2.6 - Overlap of religion and knowledge: Base what you believe on what you know - be critical

Treatment of others + religion

Erasmus viewed religion as a means to cultivate compassion and empathy, guiding individuals to live morally and ethically in their interactions with others (figure 2.7).

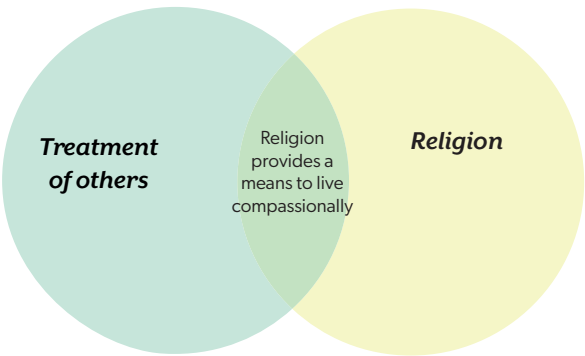


Figure 2.7 - Overlap of treatment of others and religion: Religion provides a means to live compassionally

Treatment of others + freedom

Erasmus believed in the power of dialogue and mutual respect, advocating for understanding and empathy while emphasising the importance of being able to express oneself freely (figure 2.8).

“The most important condition for happiness is that you want to be what you are” (In Praise of Folly, 1511)

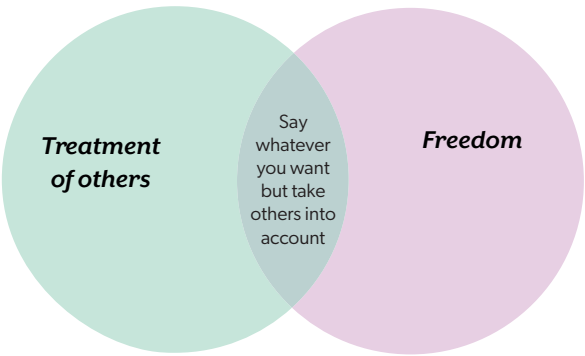


Figure 2.8 - Overlap of treatment of others and freedom: say whatever you want but take other into account

Knowledge + freedom

Erasmus encouraged his companions to use their knowledge to rationally form their own opinions (figure 2.9).

“Only if we shed dogma and indulged in other points of view could we gain knowledge and develop ourselves morally” (van Raak, 2023, p.36)

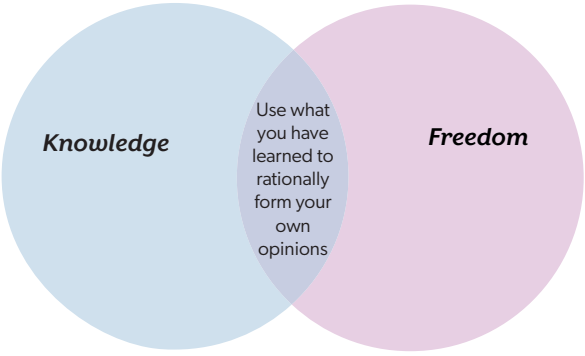


Figure 2.9 - Overlap of knowledge and freedom: Use what you have learned to rationally form your own opinions

Reflecting on values

Ronald van Raak, professor of Erasmian values at the Erasmus University Rotterdam, wrote in his book *Spelen met waarden, betalen met gedachten*:
“Erasmus’s moral philosophy offers an interesting perspective because for him, shared values cannot be imposed from outside, but have to come from the people themselves. Erasmus turned things around again - as he was accustomed to doing - and asked not which values society should impose on people, but how society could enable citizens to develop themselves morally - and thus gain insight into the obligations we have towards each other” (van Raak, 2023, p.58).

This quote served as an inspiration for this project: how can we let people reflect on their own values and morale? The research described in this chapter focused on one main question: how to trigger people to think about their own values. To answer this question, literature research was done to gain understanding on what values entail. This theoretical knowledge is then applied to form tests that enable participants to reflect on their own values.

Literature review

A literature study was done to gain understanding on what values entail. This section contains a definition for values, what characteristics values have and compares the definition of values to words with a similar meaning, like beliefs and morale. To conclude, I provided an explanation of what values will mean for the remainder of this thesis.

What are values?

Values are “desirable transsituational goals, varying in importance, that serve as guiding principles in the life of a person or social entity.” (Schwartz, 1994). In other words, they are individual beliefs that influence human behaviour and serve as a guide for their actions. Values are based on upbringing, and the cultural norms and traditions that come along with it. This leads to people perceiving their values as “right” (Schwartz., 2012).

The concept of values is closely linked to the notion of what is important to us in life. Each individual possesses numerous values, such as achievement,

security and self-direction, with varying degrees of importance. The significance of a particular value may be important to one person but unimportant to another (Schwarz, 1992).

Attitudes, beliefs, norms and morals

When attempting to explain the reasons behind an individual’s actions, it is common to refer to attitudes, beliefs or norms. The concepts of morals, beliefs and values are also often used interchangeably. However, they all have distinct definitions and roles (figure 2.10).

Values vary in importance as guiding principles that shape an individual’s actions and decisions.

An *Attitude* is an evaluation of an object as either good or bad, desirable or undesirable. Attitudes may be directed towards individuals, actions or incidents and can be both positive and negative in nature. Values form the foundation of our attitudes and serve as a basis for evaluations.

Beliefs are convictions or acceptances that certain things are true or real. They are often based on

cultural, religious, or personal experiences and can be deeply personal. Beliefs shape how individuals interpret the world and can influence both values and morals.

Norms are standards or rules that prescribe the expected behaviour of members of a group or society. Our values influence our acceptance or rejection of specific norms. As norms dictate behaviours with defined consequences, our inclination to accept them is influenced by whether these consequences align with our valued objectives or not.

Morals are the principles or habits with respect to right or wrong conduct. They serve as a personal compass for ethical behavior and are often derived from societal norms, religious doctrines, or personal beliefs. Morals define how individuals should act and make decisions based on their understanding of right and wrong and are a result of somebody’s values (Schwartz, 2012).

Letting people discover their own values

In this design project, the term values will be used to indicate the fundamental beliefs and principles that guide somebody’s actions, decisions, and understanding of what is right or wrong.

Many values are shared, as people tend to find similar things important in life. For example, a value like equality is shared by many people. However, what this means to someone may differ from person to person. Some people interpret that in striving for gender equality, others may be drawn towards economic equality. And even when looking at a concept like gender equality, this may be perceived completely differently across individuals.

No opinion is necessarily right or wrong. However, it can be beneficial that people are at least aware of the reasoning behind this thought process, rather than thinking from a point of view where something ‘feels’ right or wrong.

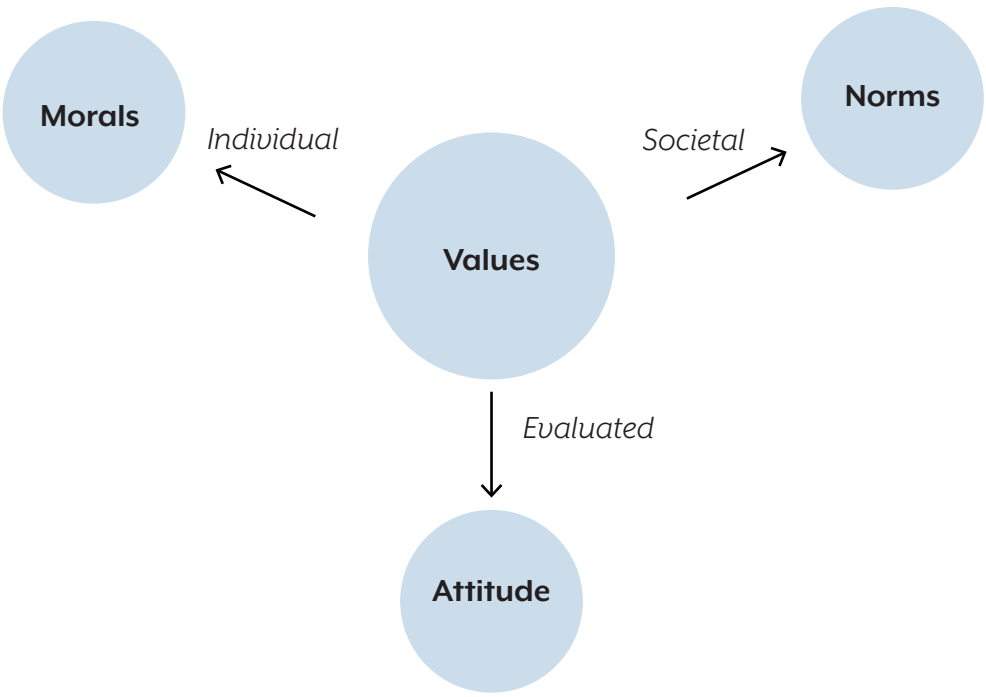


Figure 2.10 - Mapping of the relationship between values, attitudes, morals and norms

Triggering people to think about their own values

In order to explore how people can be stimulated to reflect on their values, two exploratory studies were conducted. The first study let people think about which values they agreed or disagreed with by using a statement board where participants could paste stickers on the values they agreed with. The second study focused on creating a discussion around values by using a sensitising exercise.

Statement boards

The first exploration consists of an A0 board (Appendix B) where visitors of the library were encouraged to give their own opinion on certain values. People are inclined to think certain values

are “right” or “wrong” (Schwartz, 2012). Therefore, the aim of this experiment was to trigger people to think about their opinion on certain values in an approachable and anonymous way. The board was hung on a prominent spot near the escalators on the 3rd floor, where the Erasmus Experience is situated. 5 different statements were presented in different circles (figure 2.11):

- You must be respectful towards one another
- It is important that different cultures and groups live well together
- Religion is essential in order to be a good person
- You have to be able to say anything to each other
- Freedom (in the broadest sense) is a human right

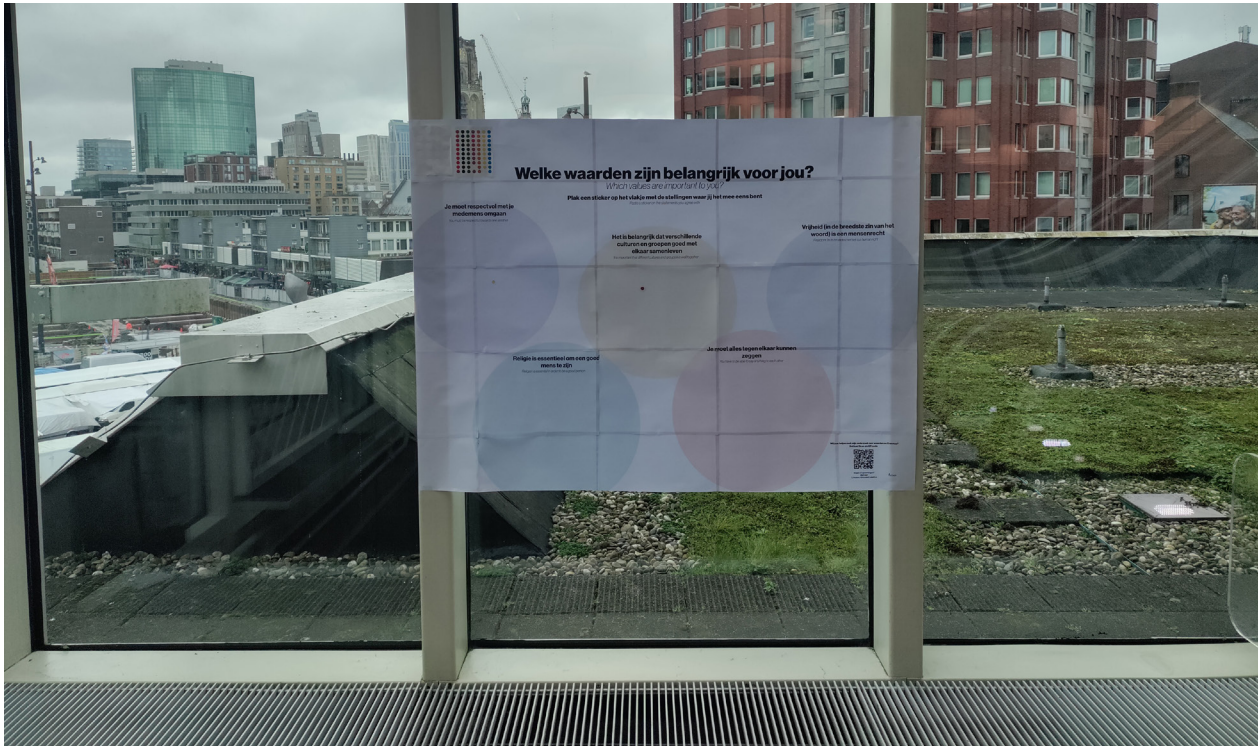


Figure 2.11 - Close up of the statement board, for the full A0 sheet, see appendix xx

When choosing the statements, the 5 main values of Erasmus were kept in mind (knowledge, religion, treatment of others, freedom and communication). Additionally, some of the statements had some controversy to get people to not blindly choose something - it was preferred that visitors might feel an adverse reaction to some of the statements. Each statement was placed in an individual circle and printed out on an A0 poster. Next to the board, there were stickers. Visitors were encouraged to paste a sticker on the statement that resonated most with them (figure 2.12, 2.13). The board was removed after a few hours, which is reflected in the results.

Results

The results of this study lacked some depth. Merely agreeing with a statement doesn't reveal how strongly participants felt about it or if there were specific instances that made the statement resonate more with them. A more meaningful approach would be to encourage deeper reflection on their values, rather than just having them place stickers on a board.

During the short time the statement was displayed in the library, it did attract some attention, with 28 stickers placed on it. This suggests there was some interest in expressing opinions, though it raised further questions about the motivations behind their choices.

The board's placement near the escalators appeared to be effective. Observation showed that it was directly in visitor's walking paths, which increased its visibility and made it more likely to catch their attention.



Figure 2.12 - Statement board in the library, indicated with a circle

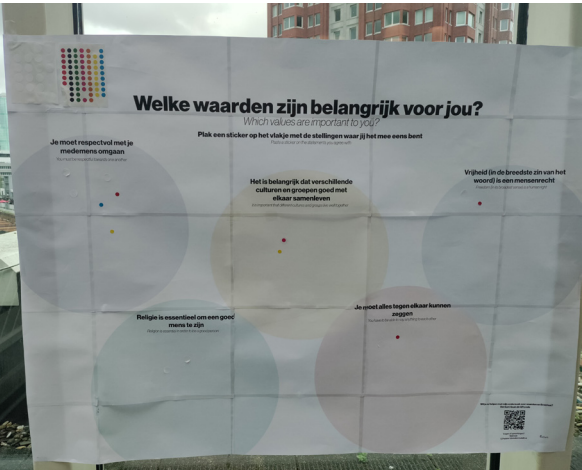


Figure 2.13 - Inviting text and stickers on the top left

Sensitising exercise

The second exploration built upon the findings of the previous one. To create more depth and get more insights, the decision was made to stimulate reflection by creating discussion about values. For this, the category ‘treatment of others’ was chosen from the framework - more specifically the value of respect. This was chosen because people generally feel that respect is important, as could also be seen in the first exploration, but they often struggle to explain what this means.

A generative session was held with two groups consisting of n=4 people. These were all IDE university students ages 20-27. Each group received 7 sheets, each sheet containing a different question (Appendix C). The questions ranged from respect on a personal level to respect in relation to others, to how respect was valued in society (figure 2.14, 2.15). The participants were encouraged to discuss the questions with each other and write down the answers.

- Opening statement ranging from disagree to agree: how much does respect mean to you
- What does respect mean to you?
- Own experiences with respect
 - Positive experiences you’ve had with respect
 - Negative experiences you’ve had with respect
- How do you believe respect influences relationships?
- In what ways do you think respect contributes to a harmonious and inclusive society?
- How can individuals navigate situations where their values of respect conflict with societal norms or expectations?

Results

It proved challenging for participants to articulate their understanding of the value of respect in the moment. Some participants appeared to find it easier to focus on the negative aspect of respect, rather than its positive qualities.

The participants needed a lot of guidance to form opinions. The question “what does respect mean to you?”, resulted in participants guessing what the definition of respect would be. Perhaps using the overlaps from section *Framework of Erasmus’s values* will provide for a more in depth and meaningful discussion.

A meaningful discussion commenced when participants provided concrete examples. By making the value more tangible, participants were able to engage in a meaningful conversation about respect. Though it took some time for participants to warm up, after finding a subject they were mutually interested in, they were able to have a meaningful discussion about what the value of respect means to them.



Figure 2.14 - Participants in the sensitising exercise



Figure 2.15 - Sensitising materials

Visitors of Rotterdam Public Library

This chapter discusses the different target groups of the library and how the library is organised to cater to all visitors. To better understand who these people are and their motivations for coming to the library, I conducted interviews with RPL employees responsible for the marketing of the library.

RPL strives to attract a diverse audience including Rotterdam residents, as well as tourists. The central library, with its iconic yellow tubes and central location (figure 2.16), is a place where many tourists come to have a look. However, the majority of visitors are local “Rotterdamers”, who visit more frequently. These locals are more likely to hold library subscriptions or participate in the library’s events and activities.



Figure 2.16 - Library with its distinct yellow tubes

Areas in the library

RPL aims to create an environment where everyone feels welcome, and has therefore divided the library into distinct areas to cater to different needs.

The entrance hall (figure 2.17) serves as a gathering space - this is where people meet, can have a coffee at Starbucks, apply for a Rotterdampas, and play life-size chess. This is also the place where exhibitions are displayed and where there are movie- and game nights are held.



Figure 2.17 - Entrance hall of RPL with view of Maakplaats010 on the first floor

The first floor is also known as the youth space. Here is the ‘Maakplaats010’, where young people can engage with 3D printing, laser cutting and robotics. It’s also a space for chess, language support, and general information about the library’s offerings.

The second floor’s main focus is on children. This floor holds the children’s and youth books and there is a corner specially equipped for parents with young children there.

On **the third floor**, in addition to the books, cultural heritage can be found. The cultural heritage involves the Erasmus Experience, as well as Beeldkraken, an interactive experience that helps children and teenagers to look critically at images.

Floors four to six contain mainly books, with desks designed for work and studying spread

in between. The higher the floor, the more quiet it gets. On the sixth floor is a quiet room, where people can work in silence.

Rotterdam Public Library’s target groups

RPL tries to attract a wide range of people, welcoming everyone regardless of origin or level of education. According to the library’s data (figure 2.18), it can be seen that the number of members among adults is fairly equal across all age groups. It is important to note here that the library also has a large number of visitors who are not members of the library. These include tourists or people who only visit the library to study or work. Furthermore, a membership at the library is free for children under 18, making this a relatively large group.

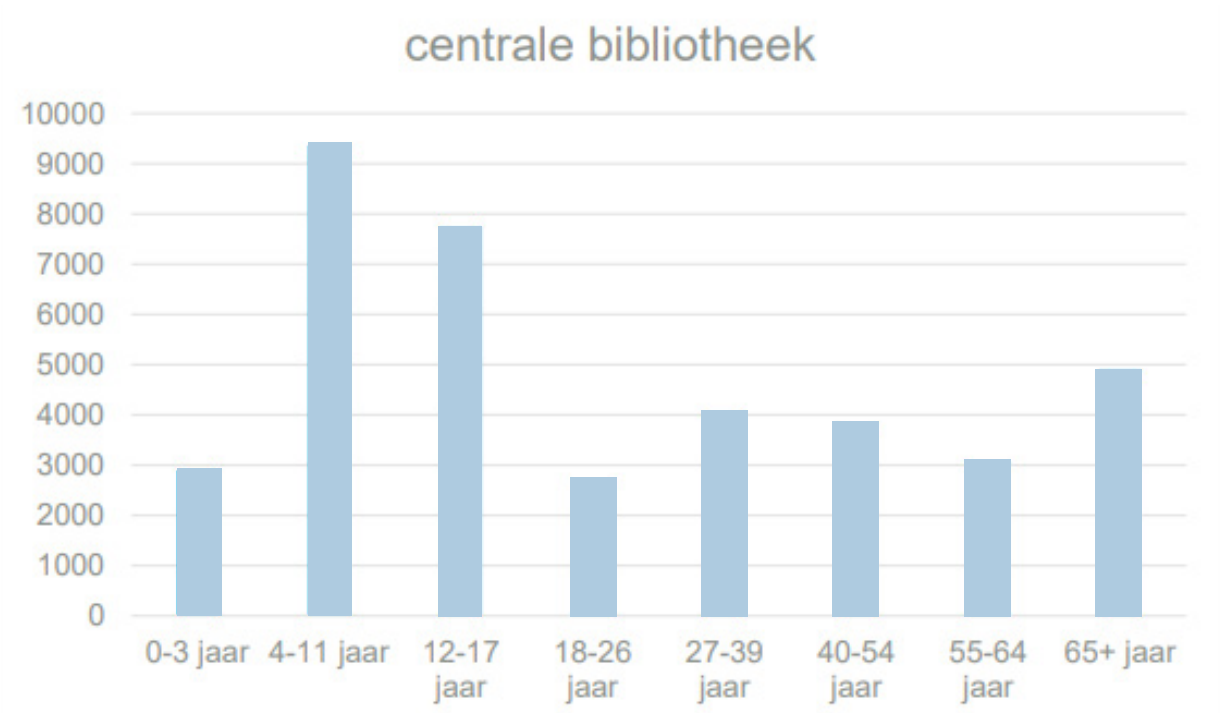


Figure 2.18 - Number of members per age group. (Centrale Bibliotheek Rotterdam, 2021)

Specifically for the Erasmus Experience, according to RPL, two groups are broadly targeted: groups of (school)children and the 'unaware customer' (figure 2.19).

Schoolchildren are frequently engaged through organised outings for children aged 11 to 17. The Erasmus Experience is a regular part of the education program of certain schools, thus allowing new children to be targeted every year.

The onbewust klant or '**Unaware Customer**' is a term used by RPL to refer to people who walk, read or are in the library and may be prompted in some way to walk to the Erasmus Experience. This is a non-committal group that basically just refers to visitors of the library. This group refers to individuals that may visit the library, but also couples or (small) families. This is also the group that currently gets addressed less in the current Erasmus Experience. When the experience was newly opened, this group was large because of the press and the attention that came with it. At this point, people came to the library especially for the Erasmus Experience. Over the years, this has diminished and it therefore creates an opportunity to try to re-engage this audience.

An evaluation of the current Erasmus Experience was conducted as part of this project to assess how well it resonates with these target groups. While not directly central for the remainder of this project, the evaluation provided useful insights into visitor engagement and is included in the appendix for further reference (see Appendix D).

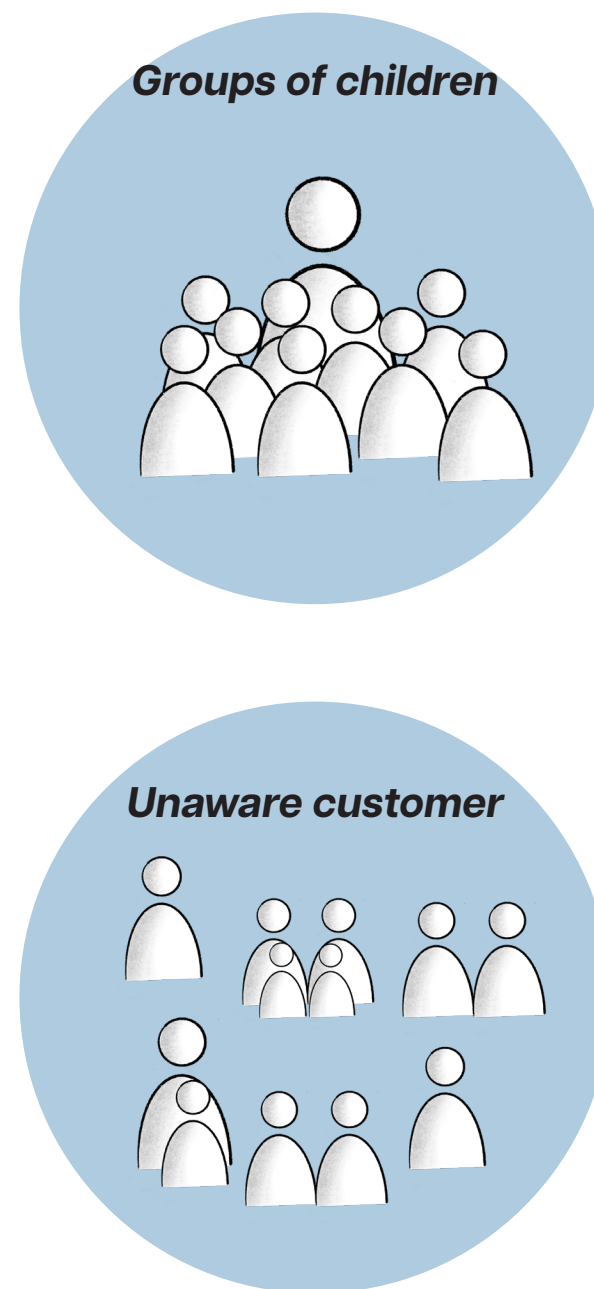


Figure 2.19 - Two main target groups: organised groups of school children (top) and the unaware customer (bottom)

Takeaways

This section provides the main takeaways from the discover phase.

Visitors

- The target group to attract to the Erasmus Experience that has the most potential are the 'unaware customers'. These are the visitors of the library that may be incentivised in some way to walk to the Erasmus Experience when visiting. This is the target group that currently visits the Experience less and therefore provides an opportunity.

Values

- Erasmus's values can be summarised in 5 different categories: knowledge, religion, communication, treatment of others and freedom, with overlaps in some areas. The overlaps are expected to be more fruitful in discussion about values.
- Values are the guiding principles that define a person's stance in the world: the things they find important that affect their behaviour. They are influenced by society and upbringing, and can differ greatly between individuals.
- Discussion proved to help people in reflecting on their values. However, if applied to a different case, these are the points that need to be taken into account:
 - Simply agreeing or disagreeing with statements does not encourage people to consider the reasons behind their feelings
 - It is easier for people to talk about and reflect on values when discussing a concrete example
 - The respondents had little interest in discussing their values. To encourage participants to think about values, it is essential to incorporate an engaging element. For example, something funny or absurd to get people thinking and make it exciting.



PART 3

Define

In the Define phase, the solution space gets defined. This part starts with the design direction of speculative design. Then I elaborate on the choice for a sensitising experience, the specification for the recommended target group and the chosen scope. This part finishes with a newly defined design goal and a metaphor that served as inspiration.

Speculative design

This section provides an explanation of the chosen design direction: speculative design. First, I discuss the reasoning behind selecting speculative design for this project, followed by a brief explanation of what it entails. Lastly, I outline how speculative design can be used for reflection.

Why speculative design?

The insights in the chapter *Reflecting on values* showed that participants found it difficult to talk about values or reflect on their values without being given a more concrete example. Since RPL must remain politically neutral and is therefore limited in showing real life examples of for example new articles, I chose to move forward with some form of fictional stories to encourage reflection on values.

To seek an inspirational way of getting people to reflect on values in a way that suits both visitors and the vision of RPL, the decision was made to focus the design direction on speculative design. Speculative design uses stories about possible futures to engage people in considering the consequences of our decisions in a thought-provoking and often playful way (Dunne & Raby, 2013). This approach provides concrete examples

while creating enough distance from participants' personal experiences to encourage reflection without much discomfort.

Furthermore, speculative design can fit into Erasmus's image. He advocated for using knowledge to question established norms and think independently, which is exactly what speculative design encourages. The playful and creative exploration of difficult moral issues in an engaging and accessible way would have fit with Erasmus' humanist ideals, which emphasised the importance of having morale. Furthermore, Erasmus's humoristic and satirical approach to difficult topics fits with the playfulness that speculative design brings (figure 3.1).

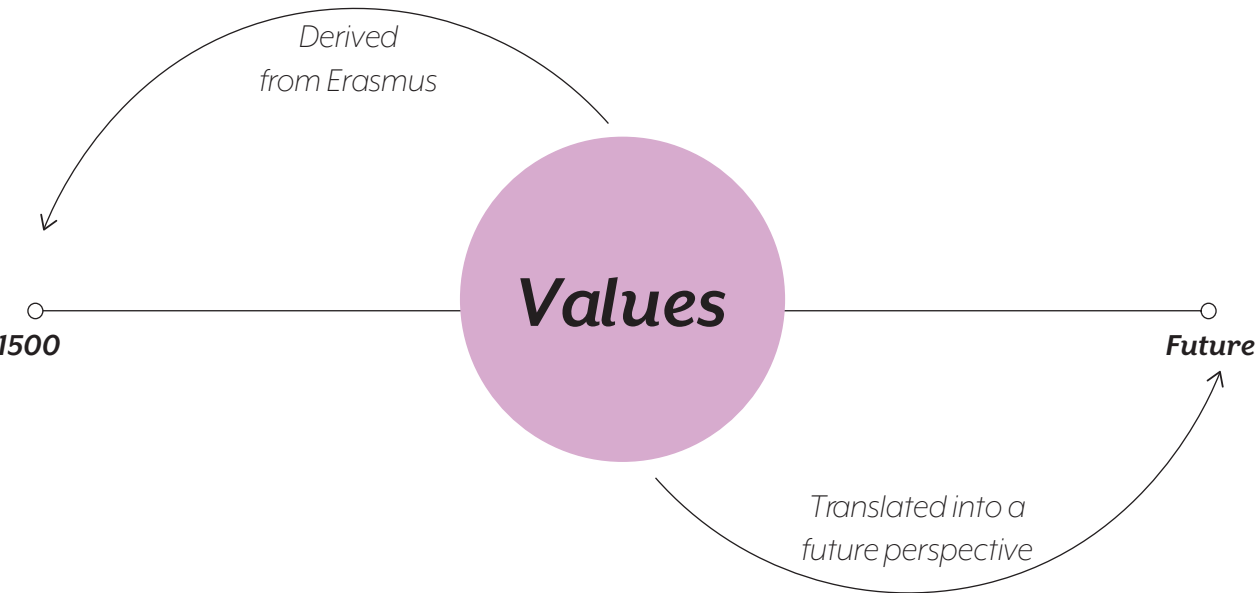


Figure 3.1 - Translating Erasmus's values into a future perspective

What is speculative design?

Speculative design is a critical design approach which uses design to explore and critique possible futures (Dunne & Raby, 2013). According to Dunne & Raby (2013), two of the first researchers to dive into this topic, speculative design allows society to explore alternative futures and increase the probability of desirable outcomes by reflecting on current trends. While it doesn't aim to predict the future, it helps pinpoint factors that may lead to both positive and negative outcomes, so they can be addressed early on.

Rather than designing an end product, the goal of speculative design is to encourage the audience to reflect on the decisions shaping modern society. An example of Speculative Design in modern media is the Netflix series *Black Mirror*. This series presents futuristic, and often dystopian scenarios with the intention to provoke the audience to critically assess the present and consider the potential consequences of current trends, technologies or behaviours (figure 3.2).



Figure 3.2 - Still from an episode of *Black Mirror*, in which a futuristic scenario is presented where an implant in the eye records everything and allows the person to play any moment back. (Netflix, 2023)

Using speculative design as a means for reflection

By creating hypothetical scenarios, speculative design allows for the exploration of alternative futures and the consequences of current decisions, making it a powerful tool for reflection and debate. This is apparent in several ways.

Challenging assumptions

Speculative design challenges assumptions by presenting scenarios that are unfamiliar or unexpected. This disruption causes people to question underlying assumptions and reflect on the implications of these imagined futures. By imagining different futures, speculative design aids in uncovering things that are not usually thought about, such as the values, norms and beliefs that shape current day thinking (Tanenbaum et. al, 2016; Dunne & Raby, 2013)

Promoting debate and discussion

Speculative design creates a space for discussion and debate by presenting controversial or provocative futures. These speculative scenarios can serve as a starting point for discussion by expressing and exploring different viewpoints. Dunne and Raby propose that the role of critical design is to "stimulate discussion amongst the public, designers and industry" (Dunne & Raby, 2001, p.58).

Creating a safe space

Speculative design creates a safe space by creating a context in which people are invited to explore complex or sensitive issues in a less direct and more imaginative way. Design fictions allow us to play with hypothetical scenarios to create some distance between reality. By creating a distance between the discussion and reality, it allows people to think about difficult topics without feeling personally implicated. (Tanenbaum et. al, 2016).

A sensitising experience

This section explains the reasoning behind choosing a sensitising experience. A sensitiser is a word often found in the design world and refers to a tool or method that is used to prepare participants for something, in this case get familiar with Erasmus's way of thinking (Sanders & Stappers, 2012).

Rather than redesigning the current experience, the decision was made to make an experience that was completely different. The main reasoning behind this is that redesigning the current experience would become too big given the timeframe for this project and that it would be hard to fit speculative stories into the current Erasmus Experience, considering it is vastly different from the way the Experience is set up right now.

One of the design opportunities described in the original project brief, was to attract new visitors. The current Erasmus Experience has struggled to attract new visitors since its opening in 2016. Based on personal conversations with visitors (see section *Target group* and Appendix D), it appeared that most visitors to the library do not know of the existence of the Erasmus Experience, do not know where to find it or (wrongly) assume that it is an experience intended only for children.

Therefore, the concept will be a sensitiser to the current Erasmus Experience, inviting visitors to explore the Erasmus Experience at the end. Should they be interested, they can find out more about Erasmus' thinking there. According to Falk (2016), a visitor's experience in a museum begins even before they arrive, during the pre-visit phase. By offering library visitors a way to become familiar with Erasmus's ideas beforehand, they might be more inclined to visit the Erasmus Experience.

For this project, a sensitising experience is a way to already expose people to critical thinking through speculative stories, something Erasmus was also known for. Although visitors are encouraged to go to the Erasmus Experience at the end, this is not a requirement. It should also be a stand-alone concept. The speculative stories are in themselves also a great opportunity for a meaningful experience (figure 3.3).

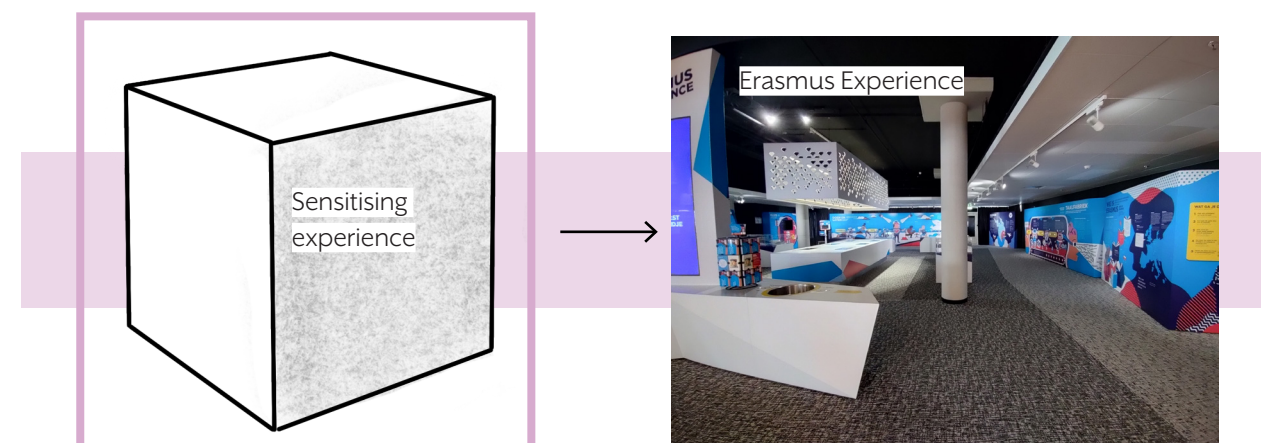


Figure 3.3 - After experiencing the Sensitising experience, the visitor gets invited to the Erasmus Experience, but the sensitising experience can also serve as a stand-alone design

Target group

In part 1, the preferred target group gets defined as the 'unaware customer'. In this section, the target group for the new experience will get defined further. In order to achieve this, user observations (Abrams, 2000) were done in Rotterdam Public Library. The aim of these observations was to see who the people visiting the library were, what they were doing and what their behaviour was. The observations were done for one whole day on Tuesday. This is usually the busiest weekday, since it is also the day the market is in front of the library. Approximately 100 people were observed. In addition to the observations, small interviews were held with a total of 3 visitors, to find out their reasoning behind visiting the library, as well as gauging if they knew about the existence of the Erasmus Experience.

Individual wanderers

The behaviour of visitors was the main incentive for generating a target group, rather than focusing on age or gender, as the experience should be enjoyable for a wide range of visitors. Behaviour indicates how people act in the library, and therefore shows better which people might be interested in an alternate experience. To gauge the incentive of people visiting the library better, conversations were had with a small number of visitors. The results of the grouping can be seen in figure 3.5 on the next page.

The x-axis is the amount of people. On the left is the individual visitor, on the right are the visitors in small groups of people, think couples, (small) families, groups of a few friends. This axis was chosen because people often behaved differently if they were alone or together.

The y-axis indicates the behaviour of the visitors. The top are the 'wanderers'. These are the people who walk around the library without a fixed destination. On the bottom are the people with a clear goal. These are the people that are not easily distracted and come to the library with a set task in mind. Overall, wanderers took their time to look around and see what new exhibitions were placed in the library (figure 3.4). The determined visitors walked in a straight line to their goal, paying little attention to their surroundings.



Figure 3.4 - Picture of someone who might be seen as a 'wanderer', taking their time to check their surroundings

This resulted into the following four quadrants:

- **Individual wanderers:** The individuals that wander around and take their time when visiting the library. For example, the members of the library who see going to the library as an outing
- **Group wanderers:** The small groups of people who take their time to look around and see what the library has to offer. In this group are tourists represented
- **Determined individuals:** These are the individuals who have set a goal before going to the library and are not easily distracted by their surroundings. This group includes students who solely come to the library to study
- **Determined groups:** These are the people who come into the library in small groups. For example, friends who are at the library to participate in one of the activities the library has to offer.

The quadrant chosen as the target group are the individual wanderers. The wanderers are the people that take their time in the library and might be the most open to an experience. Contrary, the determined visitors might be less interested in an experience - all of the people during the observation walked to the escalators in a straight line without taking any notice of their surroundings.

Considering the metaphor (see section *Metaphor*), debate, I thought it was an interesting design opportunity to try to mimic a discussion environment in an experience that is also suitable for individual use. Another reason for choosing individual users is that it attracts a larger group. When designing for small groups, you automatically design something that is not suitable for individuals. When designing for individual users, something can be created that also can be fun to enjoy for smaller groups.

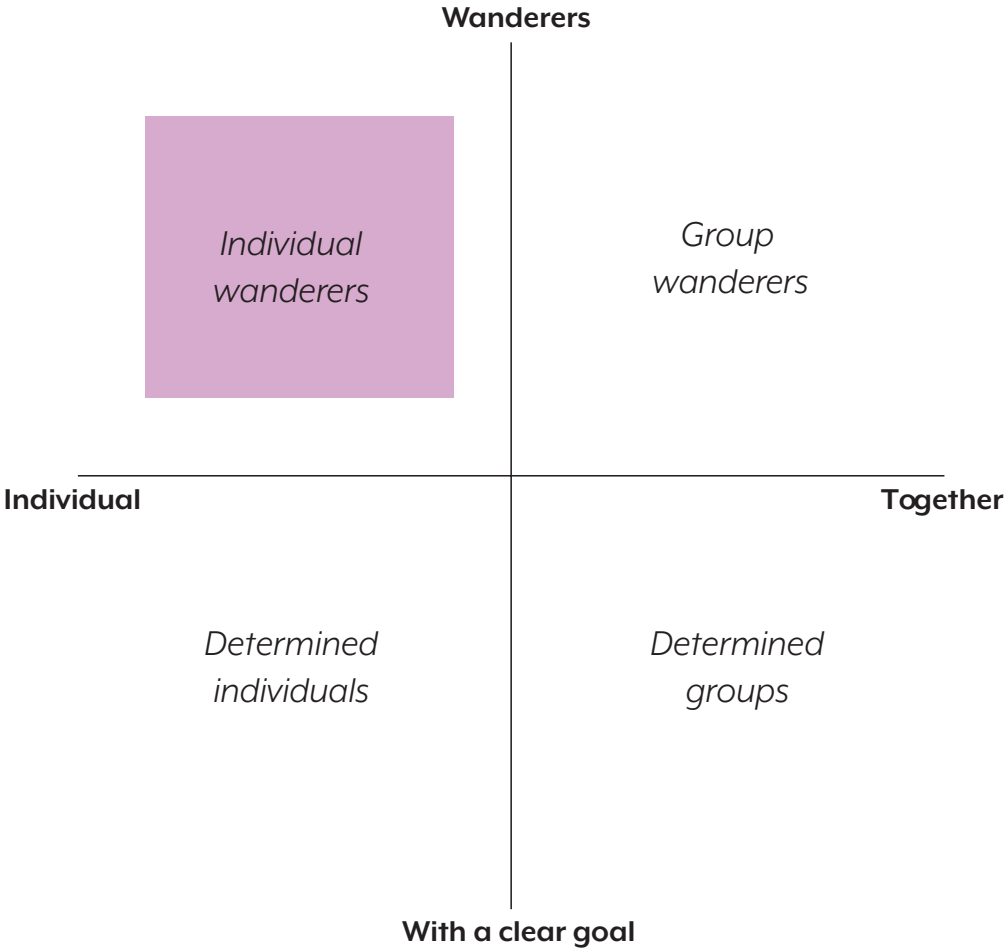


Figure 3.5 -Types of visitors of RPL

Interest

Another factor to consider is the interest people might have in speculative scenarios and reflecting on them. Younger people who already use a lot of critical thinking in for example university, will probably be more interested in stories about the future. It is important to note that this is mere speculation and reasoned from a designer's perspective, other people who might not fit into this narrative might be interested in the experience too. The perona's presented below are loosely based on the interviews and observations.

A few examples of individual wanderers who might be interested in the experience:

- **Hannah** (23) visits RPL every month to borrow new books. She takes her time to look at the interesting exhibitions displayed in the main hall and spends some time reading on the 4th floor after picking out her books. Visiting the library has become a type of ritual: as a busy student of Economics, this is the place where she comes to wind down.
- **Mo** (18) goes to the library every week to go to Maakplaats, where he works on his 3D prints. He enjoys coming to the library and he has made some awesome friends at the library. Lately, he has been taking some time to wander around the library to check out if they have some books before he goes to Maakplaats. Since he enjoys technology, he is always curious about where the future might lead to and wants to read some books about that.

In summary

- The desired qualities for visitors of the concept should be:
- Takes their time when visiting the library
- Individual
- Interest in Speculative stories
 - Likely younger individuals
- Reasons for coming to library
 - Studying
 - Borrowing books
 - Maakplaats 010 or other activities organised by the library

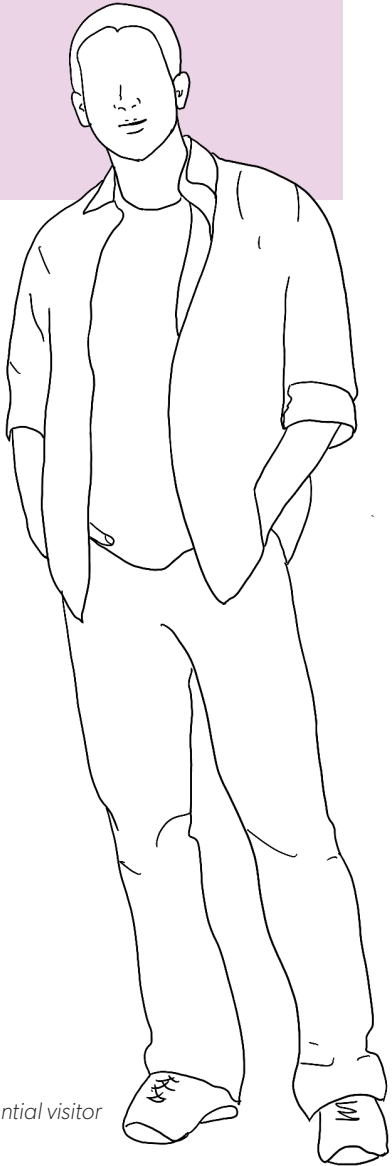


Figure 3.6 - Sketch of potential visitor

Scope

This section explains the chosen scope based on the framework of Erasmus's values

Erasmus' values framework offers opportunities to serve as a basis for speculative narratives. Specifically, the overlaps between the values can be used to prompt people to reflect on their values, as seen in the previous part of this thesis. As it is not possible, given the time frame of this project, to take into account all values, an overlap was chosen. The overlap chosen is as follows (figure 3.7):

'Use what you have learned to rationally form your own opinions' with 'knowledge' and 'freedom' as values.

This value fits well with speculative design because speculative design is essentially a form of critical thinking. By being exposed to speculative stories, the participant gets triggered to think about what he/ she thinks of these alternative scenarios.

Furthermore, this value aligns with the library's mission statement to enable Rotterdam citizens to be a critical participant within society (Bibliotheek Rotterdam, 2023). Encouraging individuals to form their own rational opinions supports the personal development of Rotterdam citizens, fostering their ability to critically engage in society.

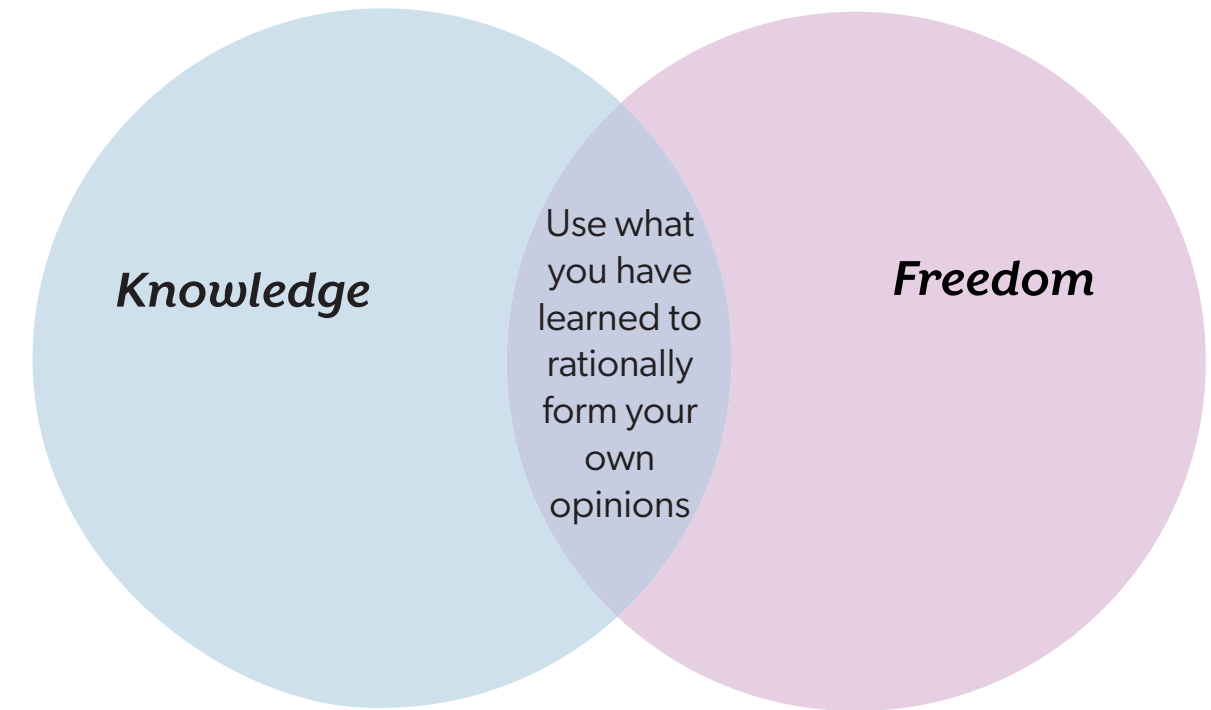


Figure 3.7 - Values Knowledge and Freedom, with overlap 'use what you have learned to rationally form your own opinions'

Design goal

In this section, the revised design goal gets discussed. This design goal serves as a guide through the designing process. The design goal is based on the activities done in the Discover phase and uses the delineations of the Define phase. The design goal is:

“.. To create a **sensitiser** for the Erasmus Experience using **speculative scenarios** to trigger visitors of Rotterdam Public Library to **critically reflect** on their own opinions”

The aim of this project is to make people think and reflect on their opinions, just as Erasmus did. The concept can be used as a sensitising experience to the current Erasmus Experience (figure 3.8).

Speculative stories give people a concrete example to reflect on how they think about a certain topic, in a way that still puts distance between them and the situation.

By engaging with speculative scenarios in an interactive way, visitors should be challenged to reflect on their opinions and what they really think

about these topics. The speculative scenarios offer visitors a concrete example in which they are encouraged to think critically about different topics.

Visitors of the library refer in this instance to the 'individual wanderers' as described in the previous chapter. These are the individuals who take their time in the library and are most open to changing up their routines. It was important that the experience should also be enjoyable for individuals, rather than focusing on groups.

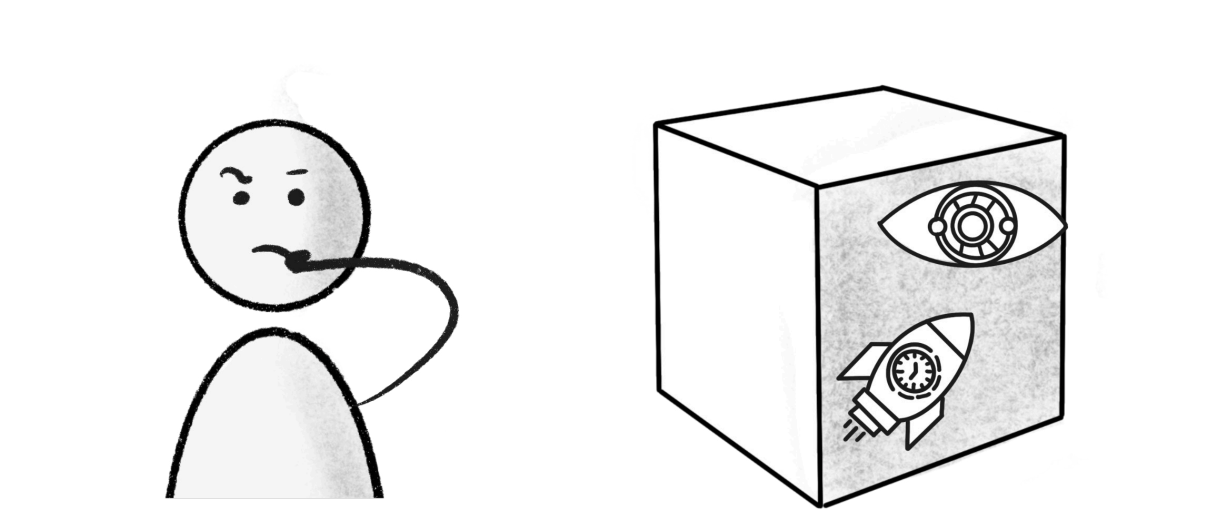


Figure 3.8 -The experience using speculative scenarios (right) should foster critical reflection in the visitors (right)

Metaphor

To give some shape to how the intended interaction should feel, I used a metaphor. This metaphor helps present the meaning a product evokes (Hey et al., 2008) and can therefore serve as inspiration during the develop phase.

Throughout this project, debate served as an inspiration. Numerous conversations and discussions have inspired me (and others) to think about values and what it means to them. The more people are able to discuss with others how certain values were thought about, the better people are able to form an opinion. However, because the experience is set for individual use, the debate served as a metaphor (figure 3.9).

The concept should encourage people to reflect and think critically, in a way that leaves room for discussion and disagreement. A debate room is where people are able to respectfully listen to each other's opinions and feel safe to share their own. Different sides of an opinion get discussed and there is room for disagreement. A few qualities are important to achieve this:

- **Open:** in a debate everybody gets the chance to say how they really feel. It should foster an inclusive space where diverse perspectives are not just welcomed but encouraged (Harvard, 2024). My concept should make people feel like they are in a safe space, that they can say whatever they want.
- **Guiding:** a debate must have structure and order to ensure meaningful discourse (Harvard, 2024). The concept should have a similar guiding quality to it, so the visitors can navigate through the experience thoughtfully, much like how a well-guided debate follows a logical progression.
- **Connected:** debate enables people of different backgrounds and with different opinions to find common ground. Harvard (2024) insinuates that engaging with different perspectives can be a valuable learning experience. The experience should cause the same type of connectedness.



Figure 3.9- Debate in a classroom. (Figuerers, 2023)





PART 4

Develop

The following part describes the 'Develop' phase of the double diamond model. In part 3, I established the design space including the design goal and target group. Before designing a concept, it was essential to explore speculative stories in a practical setting. First, the design approach, Design Fiction is explained. Next, Design Fiction is applied to make a 'magazine' from the future. This magazine was first used in a pilot session, to which some changes to the magazine were made. The newer and improved magazine is used in a sensitising session, from which the results form the requirements for the final design.

Design approach

The aim of this 'Develop' phase was to diverge and explore the potential solutions (figure 4.1). For this project, that means figuring out how speculative stories can lead to reflection on critical thinking. To achieve this, the steps described in the speculative design method Design Fiction were used (Bleecker, 2022). Based on this method, a magazine set in the future containing speculative stories was made. This magazine was used in a sensitising session in which participants were encouraged to discuss the content. The results from this session were transformed into the requirements for the design.

The main research question for this phase was:

How can speculative stories contribute to discussion about the value “use what you have learned to rationally form your own opinions”?

It was most important to see if and in what way speculative stories could help people to reflect on their critical thinking. Furthermore, some of the sub research questions are: did the stories provoke discussion? What stories spoke to people most and what about those stories made it interesting for participants? In what way do people critically think when seeing or reading speculative stories?

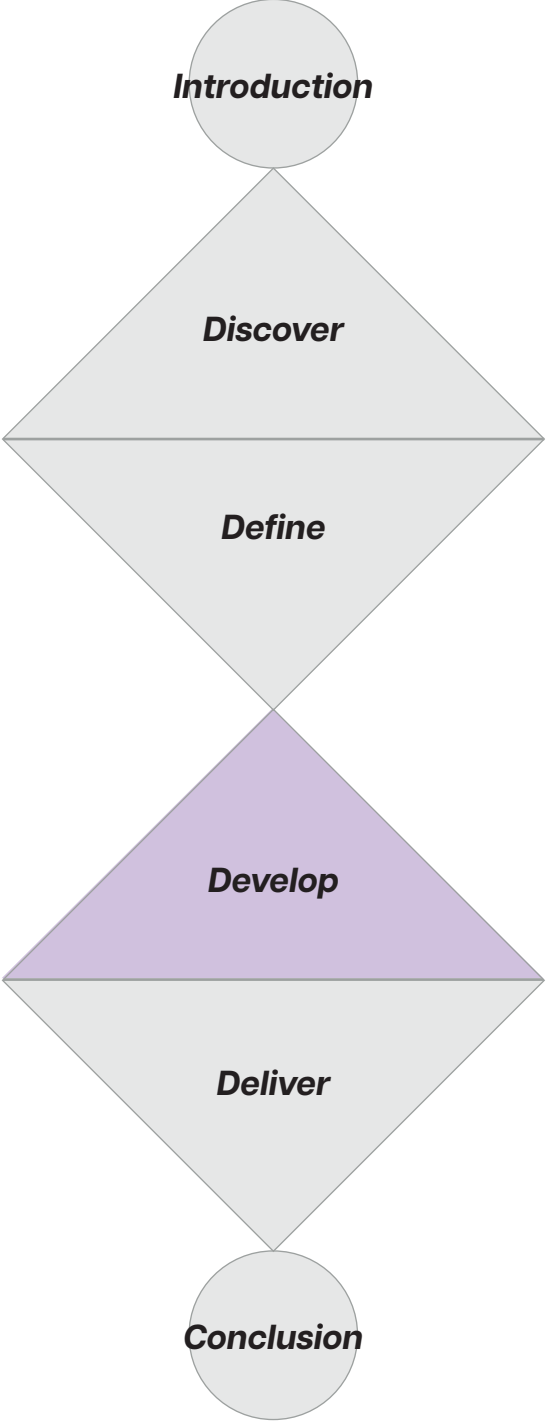


Figure 4.1 - Diverging in the develop phase

Design fiction

In this section, I explain why I made the decision to use Design Fiction as a design method and I give an explanation of what Design Fiction entails. Furthermore, there is an explanation of the adaptation of the Design Fiction method to my project.

There are many different approaches to speculative design. Including, but not limited to: reflective design, design for debate, futurescaping, discursive design, transitional design and design fiction (Dunne & Raby, 2013). These methods all have a common goal: presenting viewers with an alternate future reality to critique modern day societal practices. For this project, the decision was made to use Design Fiction as a speculative design method because it enables a way to facilitate debates by creating speculative, and often provocative scenarios narrated through designed artefacts (Bleecker, 2022)

Design Fiction is a method developed by Julian Bleecker, who defined design fiction as: “the practice of creating tangible and evocative prototypes from possible near futures, to help discover and represent the consequences of decision making.” (Bleecker, 2022, p.32).

In Design Fiction, the approach used is called “The Future Mundane”. This disregards the fantastical elements that are often used in Science Fiction and embraces the normal, everyday facets of the future. This way, the coming reality is made more understandable, relatable and “normal”. Whereas other speculative design practices may include far-away futures with extreme technological advancements, design fiction specifically addresses the near future. By focusing on everyday life in the nearer future, design fiction can help people relate to new realities better (figure 4.2).

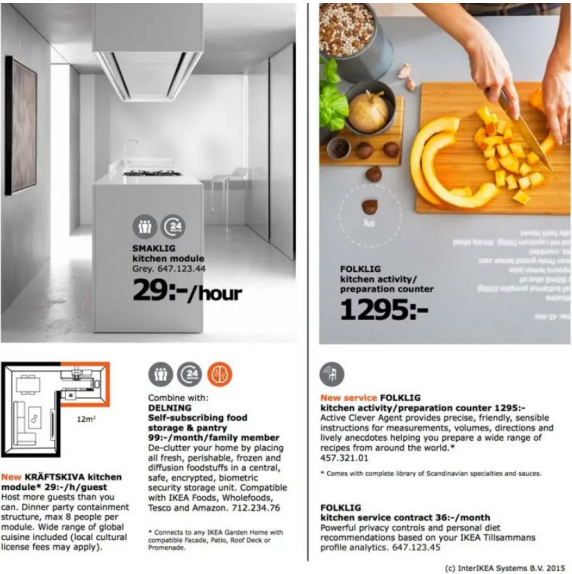


Figure 4.2 - Example of Design Fiction: an Ikea catalogue from the future (Near Future Laboratory, 2015)

Adaptation of the Design Fiction method

The Design Fiction method as described in the Manual of Design Fiction describes 10 different steps that must be taken to create a Design Fiction (Bleecker, 2022). However, the Design Fiction method often focuses on a single technology which gets translated into the future, often resulting in something like an infomercial or brochure.

For this project, the most important aim was using speculative stories for creating discussion and reflection and creating an interactive experience that showed these stories. It was therefore decided to adapt the steps taken of the method to better fit the design goal of this project (figure 4.3). An overview of the changes can be found on the next page.

10 steps of Design Fiction

Manual of Design Fiction	Adaptation for this project
1. <i>Collect faint signals.</i> Documentation of present-day signals that indicate how technology may be changing. These signals can be real-life observations, news articles, reports, etc.	1. <i>Collect faint signals.</i> Documentation of present-day signals that indicate how technology may be changing. These signals can be real-life observations, news articles, reports, etc.
2. <i>Select an archetype.</i> Selecting a suitable format for the design fiction so the stories can become tangible. As mentioned before, the archetype in which the design fiction is presented should be something familiar, like a leaflet, a piece of packaging, a magazine	2. <i>Select an archetype.</i> Selecting a suitable format for the design fiction so the stories can become tangible. As mentioned before, the archetype in which the design fiction is presented should be something familiar, like a leaflet, a piece of packaging, a magazine
3. <i>Present stimulus materials.</i> Documentation of present-day signals that indicate how technology may be changing. These signals can be real-life observations, news articles, reports, etc.	3. <i>Present stimulus materials.</i> Documentation of present-day signals that indicate how technology may be changing. These signals can be real-life observations, news articles, reports, etc.
4. <i>Extrapolate from your signals.</i> Selecting a suitable format for the design fiction so the stories can become tangible. As mentioned before, the archetype in which the design fiction is presented should be something familiar, like a leaflet, a piece of packaging, a magazine	4. <i>Extrapolate from your signals.</i> Selecting a suitable format for the design fiction so the stories can become tangible. As mentioned before, the archetype in which the design fiction is presented should be something familiar, like a leaflet, a piece of packaging, a magazine
5. <i>Identify the “what-if” scenario to explore.</i> Based on these signals and the discussion, the key themes and scenarios are determined. The “what-if” scenario that results, is an inspiring and speculative question, that inspires the exploration of the key themes.	5. Design requirements. Use the results from the discussion to shape up the design requirements

6. <i>Know your tropes.</i> Figuring out what details are important to make the prototype as convincing as possible	6. Medium for experience Figuring out how to translate futuristic stories into an interactive experience, while keeping in mind the design requirements.
7. <i>Design workshop.</i> Whatever it is that must be made - an infomercial, a brochure - start deciding on its contents, mapping it out etc.	7. <i>Design workshop.</i> Whatever it is that must be made - an infomercial, a brochure - start deciding on its contents, mapping it out etc.
8. <i>Disseminate.</i> Spreading the artefacts to a larger group.	8. Iterate. Use small groups of people to test small parts of the experience.
9. <i>Make the thing.</i> Bringin the archetype to life. This is an important step. The fictional story must be made tangible in a way.	9. <i>Make the thing.</i> Bringin the archetype to life. This is an important step. The fictional story must be made tangible in a way.
10. <i>Debate and reflect.</i> Observe people’s responses to the artefact. Document opinions and allow a larger group to discuss the implications	10. Reflect. Put the interactive experience inside RPL to see people’s responses to the futuristic stories

Figure 4.3 - Steps of design fiction as described in the Manual of Design Fiction (left), compared to the adjustments done (right). The adjusted steps are incidated with a bold font

As can be seen in figure 4.3, the first four steps remain the same. The differences start at step 5: ‘creating a what-if statement.’ Instead of a what-if statement, the results from the sensitising exercise in step 4 get translated into design requirements.

By doing this, these design requirements can get translated into an interactive experience, instead of something like an infomercial or brochure which is usually the case for Design Fiction.

A magazine from the future

In this section the chosen archetype to display stories - a magazine - gets presented. This highlights the first 3 steps of the Design Fiction method. First, I collected faint signals and translated them into stories. Then, I elaborate on the archetype that conveys the stories best. Finally, the final magazine gets explained. The aim is to create a booklet that will cause participants to discuss the contents.

From signals to stories

In Design Fiction, ‘signals’ refer to small, emerging indicators or trends in the present that may suggest future developments. These signals form the foundation for narratives and are used to explore the possible consequences or impacts of these trends on society, technology or culture. Signals can be found in newspaper articles, social media posts or in observations of people. Anything that can be found inspiring to the designer, is sufficient.

When selecting signals the scope of the project was considered: ‘use what you have learned to rationally form your own opinion’, with the matching values of ‘freedom’ and knowledge’. These signals were grouped and form the basis for the different stories that were created.

A pilot study was done with a first draft of a booklet (Appendix E). This study focused on seeing whether natural discussion would immerse and if the topics of the stories were liked (figure 4.4). These stories were mostly based on AI, considering that the rise of AI can mean people need to think more critically whether something is true or not. Results revealed that the stories were too similar to each other to create a diverse discussion. To address this, a broader range of themes relevant to the city of Rotterdam was chosen to encourage a wider variety of opinions and deeper engagement. The signals were divided into four broader categories: society, environment, safety and personal relations. These categories were chosen for several reasons. Firstly, though finding signals is partly subjective, these topics came forward

a lot during the search for signals, in particular from news outlets. Secondly, through discussions with RPL, these themes were identified as being particularly of rising concern for the near future. These categories provide a balanced exploration of the future, covering broad areas such as society and environment, alongside more personal topics like safety and relationships. A full overview of the categorisations including the signals can be found in Appendix F.

All stories are set in 2035. The reason 2035 was chosen is that it is far enough into the future to speculate on what the future might look like, but not so far that it becomes unrealistic. This allows participants to imagine what it would be like if this future became reality.

The next pages show the different stories, with the signals that were used for these topics. The full booklet can be found in Appendix G.



Figure 4.4 - Pilot session

Archetype for the stories

In the context of Design Fiction, an archetype is a fitting format to display the design fiction. This is an important step because it makes the stories real and tangible. According to the Manual of Design Fiction, it is important to take into account the following principles (Bleecker, 2022).

Familiarity

Picking an archetype that is familiar to the audience and will get recognised immediately. Something that gives them the opportunity to generate their own thoughts on the topic.

Relevance

Choosing an archetype that relates to the format that is being explored. It should relate to the area of concern.

Ease of production

It has to be feasible to make the archetype. Take into account skills, but also production tools and available time.

Based on these principles, it was decided to create a magazine as the archetype. Magazines are a widely recognised medium, familiar to a broad audience. This familiarity makes the prototype easily accessible and understandable to users, as they have likely encountered magazines before. Magazines are also relevant in that they are often associated with trends, lifestyle and cultural comments. While magazines are not currently used by younger people, a magazine remains a recognisable and tangible form of media. Besides, magazines fit within the scope of the library, as libraries offer physical copies of readable material. A magazine is also something that is easily accomplishable, given that I have experience in designing and using formatting programs like Adobe InDesign and that it is a relatively easy and less time consuming task.

Magazine

Based on the signals and the themes, summaries for the stories were formed. These summaries illustrated in a short sentence what the future story should be about and were formed by using some creativity to think about the way the signals could translate into the future (figure 4.6).



Figure 4.5 - Printed booklet

The text of the articles was then generated using ChatGPT using the following prompt:

“Write a short article (around 200 - 300 words) like it’s written for a future newspaper or magazine in 2035. The article is about “summary 1”

This text output was adjusted and rewritten slightly to better fit the desired narrative. Pictures were added to give more context to the stories and headers were added. The booklet was designed in a way that was similar to how a magazine might look (figure 4.5). All the articles had a picture at the top (generated using playground.ai or stock photos) and a clear title, the text was divided into two columns. The front of the magazine had the title ‘the Rotterdammer’ to imply that it was a local magazine. The date placed on the magazine was ‘May 2035’ to make it clear that these were future stories. The full booklet can be found in appendix G.

Personal relations



The Silence of Society: The Decline of Unprompted Conversations in a Digital World

The dominance of online communication has profoundly altered the way we interact. Most conversations now occur through digital platforms, rendering spontaneous, unprompted dialogue in real life almost extinct.

Public spaces once filled with the buzz of casual chatter are now eerily quiet. People, absorbed in their digital devices, rarely engage in impromptu conversations with strangers or even acquaintances. The natural flow of spontaneous dialogue has been replaced by the structured nature of online messaging and social media interactions.

“People just don’t talk to each other anymore,” observes Dr. Elena Vasquez, a sociologist studying the impact of digital communication. “The convenience and immediacy of online platforms have made face-to-face interactions seem almost redundant.”

This shift has profound implications for society. The decline of spontaneous conversation is eroding our ability to connect on a personal level, reducing opportunities for serendipitous encounters and the rich, unpredictable exchanges that come with them. Social skills, empathy, and the ability to read body language are all in decline as digital interfaces mediate more of our interactions.

The psychological impact is significant as well. Many report feeling more isolated despite being constantly “connected.” The depth and quality of relationships suffer when real-life interactions are minimal and conversations are premeditated rather than organic.

As we navigate this digital landscape, the challenge lies in balancing the efficiency of online communication with the irreplaceable value of genuine, spontaneous human connection.

Categorisation

Personal relations

Summary

“Most communication happens online, therefore people don’t speak to each other unprompted in real life anymore”

Signals

- Influenced by years of neoliberal rule, everyone has been thrown back on themselves
- Growing concerns over social media use teenagers: ‘must become normal again to be inaccessible’
- With the advent of dating apps, people are meeting fewer and fewer people in real life

Categorisation

Safety

Summary

“To keep people safe with all the ongoing violence, the municipality is keeping constant watch via new surveillance technology”

Signals

- Worries about war among Dutch increased
- Man shot in street Rotterdam-Noord
- Rotterdam has 42 camera’s per every square kilometer, more are coming
- Sense of safety in Rotterdam declines

Safety



Enhanced Surveillance Ensures Safety Amid Rising Violence

Advanced surveillance network deployed

A new extensive surveillance network to counteract increasing violence and ensure public safety has been implemented. The municipality has deployed advanced AI-powered cameras and drones across the city, capable of real-time monitoring and rapid response to incidents.

Prioritizing Public Security

These state-of-the-art systems are strategically placed in high-risk areas and public spaces, providing continuous oversight. The AI technology can identify suspicious behavior and potential threats, alerting authorities instantly.

deterring crime and enhancing public security.”

Balancing security and privacy

While the increased surveillance has led to a notable reduction in violent incidents and quicker resolution of crimes, it has also sparked debates about privacy and civil liberties. Many residents appreciate the heightened security, but some express concerns over constant monitoring and potential misuse of data.

The municipality has pledged to maintain transparency and strict regulations to address these concerns, ensuring that the surveillance measures are used responsibly and ethically.

“Ensuring the safety of our residents is our top priority,” says Mayor Laura van Dijk. “Our advanced surveillance network allows us to respond quickly and effectively to any situation,

As Rotterdam pioneers this high-tech approach to urban safety, other cities facing similar challenges are looking to its model as a potential solution for maintaining public order in an increasingly volatile world.

Society



Digital Echo Chambers And Gentrification Responsible For The Rise Of Societal Segregation

A new form of societal segregation is grappling Rotterdam driven by advanced algorithms, gentrification, and digital echo chambers. These forces have created pockets of homogeneity where residents increasingly interact only with those who share similar backgrounds, beliefs, and economic statuses.

Algorithms designed to personalize content and services have inadvertently isolated individuals into digital bubbles, reinforcing existing biases and limiting exposure to diverse perspectives. Social media platforms and tailored news feeds ensure that people see and hear only what aligns with their preexisting views.

“Gentrification has further deepened this divide,” says urban planner Marieke Jansen. “As affluent areas flourish, lower-income residents are pushed to the outskirts, reducing opportunities for

meaningful cross-cultural interactions.”

This growing separation is evident in daily life. **Neighborhoods once known for their vibrant, multicultural fabric are becoming increasingly insular.** Schools, workplaces, and social venues reflect these divides, with limited interaction across different social strata.

The municipality is aware of the issue and is exploring initiatives to foster inclusivity, such as mixed-income housing projects and community events aimed at bridging gaps. However, reversing the trend is challenging in a city increasingly shaped by technology and economic forces.

As Rotterdam faces this modern segregation, the challenge lies in finding ways to restore social cohesion and ensure that its diverse population can once again connect and thrive together.

Categorisation

Society

Summary

“Segregation of society is on the rise. Algorithms, gentrification and other factors have lead to people in Rotterdam only interacting with and seeing things they agree with”

Signals

- Many young voters want more radical choices than democracy allows
- A large majority of Dutch people are concerned about polarisation. They think of deteriorating manners and hardening in political and public debate
- Increasing racism and discrimination police department Rotterdam

Categorisation

Environment

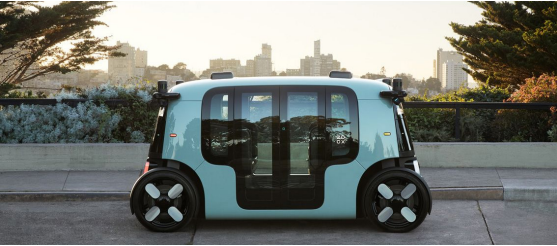
Summary

“The only cars that are allowed in the city centre of Rotterdam are self-driving taxis like Waymo”

Signals

- Stricter environmet laws for cars inner city Rotterdam 2025
- Rottedam plan to be a fully circular society and climate neutral-city by 2050
- Uber, lyft and bolt are soaring in stock values
- Self driving taxi Waymo is on the rise

Environment



City Center Reserved Sofor Self-Driving Taxis

Rotterdam has taken a bold step towards a futuristic, eco-friendly urban environment by exclusively allowing self-driving taxis, such as those operated by Waymo, to navigate its city center. This pioneering move aims to reduce traffic congestion, lower emissions, and enhance safety for pedestrians and cyclists.

The transformation has been dramatic. The bustling heart of Rotterdam is now dominated by sleek, autonomous vehicles efficiently ferrying passengers to their destinations. These self-driving taxis, powered by cutting-edge AI and electric propulsion, operate seamlessly, providing a reliable and eco-friendly alternative to private car ownership.

Residents and visitors alike have praised the convenience and efficiency of the system. With fewer vehicles on the road, public spaces have been reclaimed for parks, pedestrian zones, and bike lanes, fostering a more vibrant and livable city center.

However, the transition has not been without challenges. Traditional taxi drivers and car owners have had to adapt to new regulations and find alternative routes or modes of transport. The city has implemented comprehensive retraining programs to support those affected by the shift.

As Rotterdam leads the way in autonomous urban transportation, other cities around the world are watching closely, considering similar measures to create smarter, more sustainable urban environments.

“Restricting the city center to self-driving taxis has revolutionized urban mobility,” says Mayor Laura van Dijk. “We’ve seen a significant drop in traffic accidents and pollution levels, making Rotterdam a cleaner and safer place to live and work.”

Figure 4.6 - overview of the articles, including the summary which is based on the signals

Sensitising session

This section refers to step 5 of the Design Fiction method: discussing the stimulus materials in a multi-disciplinary group. The main goal of the sensitising session was to spark discussion around the created magazine. The participants were encouraged to express their opinion based on the speculative stories. Some additional research questions were: does the magazine in itself lead to discussion? What parts of the magazine lead to discussion and reflection? Were there specific stories that triggered discussion or spoke to the participants? What parts do they agree with or disagree with and why?

Method

A focus group of 5 people was selected to participate in the sensitising session. When selecting the focus group, the goal was to have a diverse group based on gender, people's interest and studies. These were all adults between 20 and 25 years old, with different backgrounds and genders. Two were working, the other three were university students in different majors.

The booklet was printed out on paper to serve as a tangible reference for participants during the

session. A short explanation about the project was provided verbally at the start of the session (Appendix G provides the full session guide). The project brief was quickly described and the futuristic aspect of the booklet was explained. Participants were encouraged to read the booklet and select what stories they found interesting and freely express their opinions. From there on there was limited interference from me, as I wanted to see if a natural discussion could commence from just the articles (figure 4.7).



Figure 4.7 - Picture from the sensitising session

Results

In general, the session was successful in stimulating the desired discussion. The discussion flowed quite easily, without interruption from me. Participants found it interesting to discuss the futuristic stories and were able to express how they felt. The results are divided into 3 parts: content to see which stories were found interesting, if it caused critical thinking and some additional comments

Content

Participants found it more interesting to talk about stories that were involving stories about human behaviour instead of technology. These were the stories about the separation of society and the loneliness caused by people communicating in person due to social media. This was due to people being able to relate more to the stories about people, rather than something abstract like technology.

“but, for example, last part about much less contact with other people and much less encounters, that seems more intense and have a bigger impact on society, I think than the other one, so yes.”

“with some stories, technology just affects technology and for others, technology affects human behaviour. And I think that's what resonates with me the most”

In terms of layout, the booklet was clear. People didn't take much notice in the pictures or the headers, even though some mentioned that it made reading easier. The articles were slightly too long and some words were unclear.

“I do like reading when that's (referring to subheaders) more in there.”

“I hadn't looked at the pictures that much actually.”

Critical thinking

The stories provoked discussion quite easily. Participants were able to quickly talk about their opinion. Participants felt free to share their opinions and could easily imagine the future and how they felt about it. One participant also mentioned that the future stories helped give direction to the discussion.

“I think you can use future stories well to discuss. It provides a bit of context of: suppose this happens, what do you think?”

The longer the discussion lasted, the more interesting the discussion became. People could articulate better how they felt about the future stories and could better articulate their opinions. In general, participants were able to critically think about the stories. This was proven by the lengthy discussion they were able to have based on the magazine.

Some additional comments

After a while, the discussion became less about the articles, the participants began talking about how they envisioned the future. The topics of the articles were used as a theme. However, they began talking about how likely it was that certain new advancements would take place, separate from what was mentioned in the article. This was interesting, and caused a fruitful discussion.

Design requirements

Based on the results generated from the sensitising session, design requirements were formulated. These are the design requirements as stated in step 5 from the Design Fiction method (figure 4.3). The design requirements form, in combination with the design goal formulated in part 3, the basis for the final design.

Stories

- Futuristic articles helped in creating dialogue about values. Because articles highlight both sides of a story, they provide a nuanced overview of the topic. It is therefore important that there is use of text or another form that can convey the nuance of a topic in the final design.
- The content of the stories should revolve around people. Stories about the effect that technology has on society or individuals were found to be more interesting, because participants were able to relate to it more.

Layout

- When using the form of articles, the articles should have clear headers and images. Headers and images help the story in becoming more clear and more easily understandable.
- The text should contain around 200 words or less. The articles used in the sensitising exercise had 300 words, which was considered to be too long. The language used should be clear and easy to understand for a large audience.

Multiple reflection moments

The sensitising exercise shows that the longer a discussion lasts, the better people are able to express themselves. Hearing different opinions or reading the nuance of an article allows people to change their minds, thus learning to think critically. Offering multiple moments of reflection in an experience gives users the chance to keep thinking about their opinions.

Taking the discussion home

The most interesting discussion and reflection commenced when people were able to discuss their personal views of other future perspectives. Because this is hard to recreate in a short experience (since the discussion took 45 minutes), it is recommended that the users of the experience are able to take the discussion home in a way. By doing this, people are able to have discussions that go farther than the experience can offer in the comfort of their homes.

PART 5

Deliver

In this part, I discuss the final design. It shows the chosen medium, placement and how the stories are implemented in a way to make it into an experience. I provided a storyboard, and elaborated on the interactive elements. This section ends with an evaluation of this prototype.

In Praise of the Future

The experience is called 'Lof voor de Toekomst' (In Praise for the Future), a nod to Erasmus's In Praise of Folly, while also mentioning the futuristic aspect of the design.

Lof voor de Toekomst is an interactive experience which lets visitors of RPL critically think using speculative stories (figure 5.1, 5.2). The interactive part of the experience consists of a digital touch screen and a physical keyboard. Considering it is placed in a library, there is space on the left of the experience for books related to the experience - these may include works by Erasmus, science fiction novels, or books on critical thinking. On the right, a brief explanation of the experience is provided, with stickers below. These stickers serve as a tangible reminder, allowing visitors to continue reflecting and discussing the topics at home.

The design fosters a debate like setting by creating an *open* environment wheer participants feel safe to express their views. providing a *guiding* structure that helps them navigate through speculative stories, and encouraging a sense of *connectedness* by prompting discussions that bring together diverse perspectives.

The goal of the product is to get visitors to critically reflect on future scenarios. The interactive touch screen facilitates this by presenting a futuristic story on a topic relevant to Rotterdam, structured across multiple frames. Throughout the story, 4 different reflection moments are used to guide the process. The 4 reflection moments are as follows:

1. 1st reflection moment: expressing initial bias by agreeing or disagreeing on a statement
2. 2nd reflection moment: visitor can type their opinion regarding the statement after reading the article
3. 3rd reflection moment: visitor has the opportunity to change their mind after reading the articles



Figure 5.1 - Visualisation of Lof voor de Toekomst

4. 4th reflection moment: this part is taking the discussion home. The visitors has the option to take a sticker at the end of the experience and continue the conversation elsewhere

At the end of the experience, the visitor gets invited to the Erasmus Experience. If they enjoyed this way of critical thinking, they might enjoy the Erasmus Experience as well. They can also take a sticker, to serve as a token.

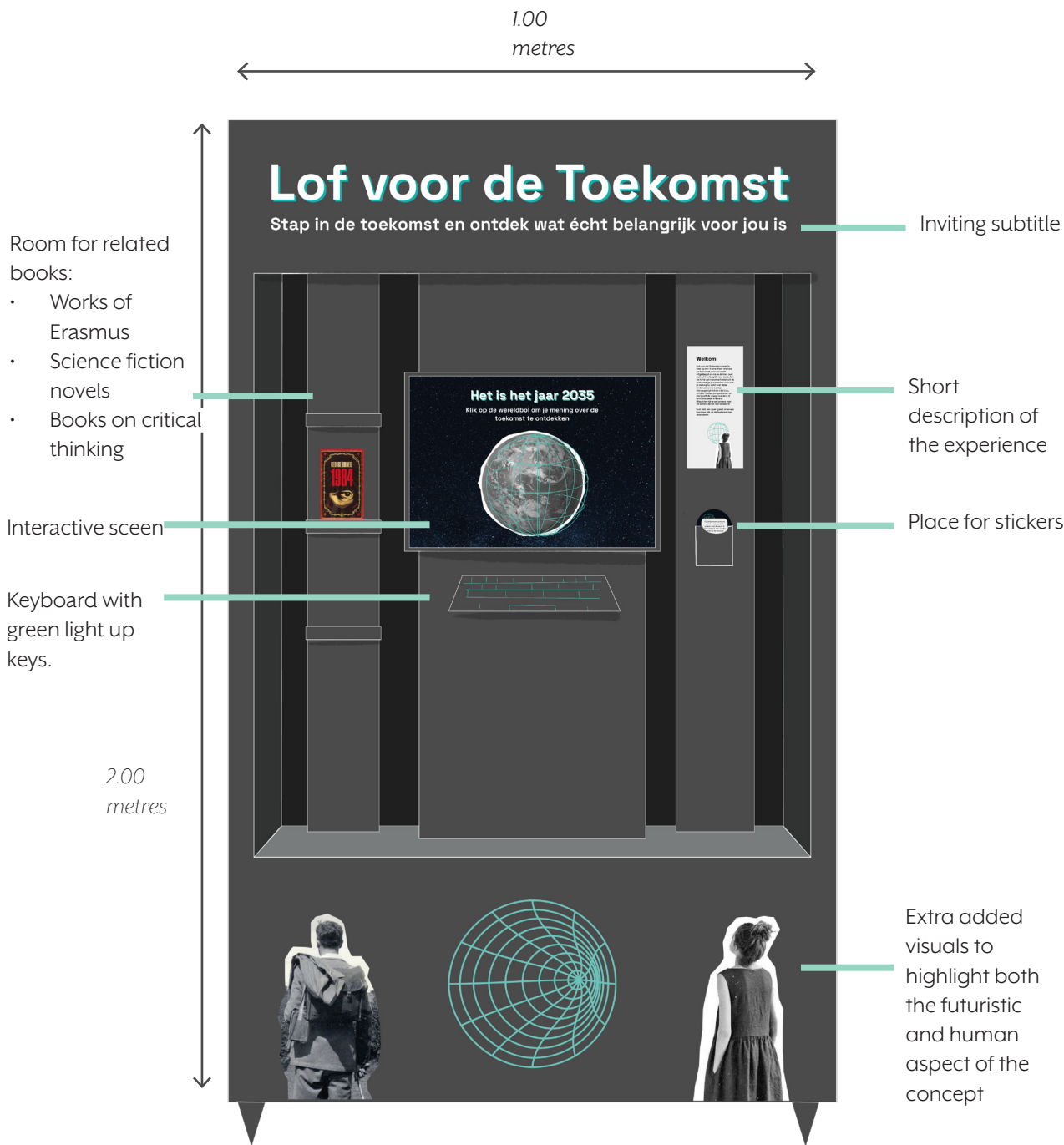
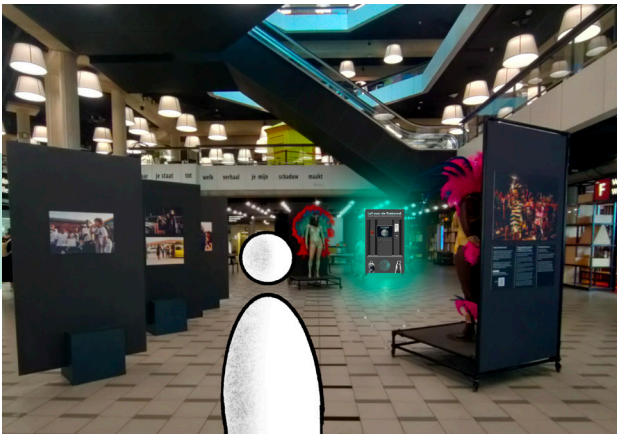


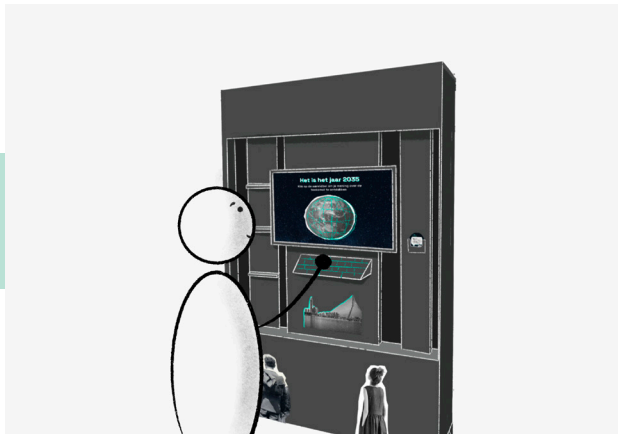
Figure 5.2 - Set up of Lof voor de Toekomst. Measurements are estimations and can be adjusted

Storyboard

Below is a storyboard that conveys the complete user journey of *Lof voor de Toekomst* (figure 5.3). This storyboard follows Tim, a member of the library who frequently visits.



Tim walks into RPL for his monthly book pick-up. He is always interested to see what exhibitions the library has to offer. Today, he sees something new. *Lof voor de Toekomst*? He thinks, I wonder what that is about?



Intrigued, Tim starts interacting with the touch screen. He has always been interested in the future, and lately, quite worried about what the future might bring with all the wars, climate change and polarisation



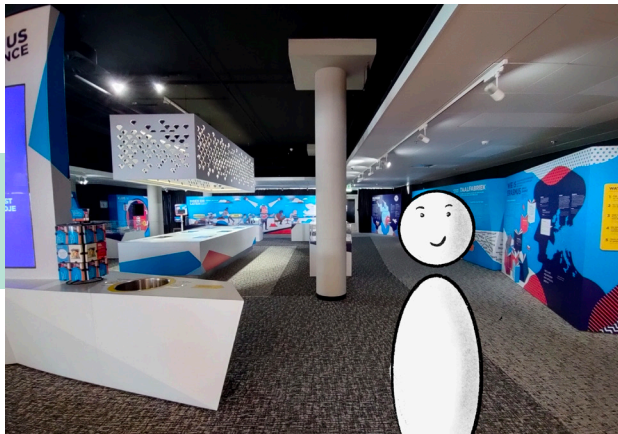
During the experience, Tim is given a futuristic story on which he reflects with the provided questions on a statement. He is able to critically reflect on his opinion by reading the article and answering the questions



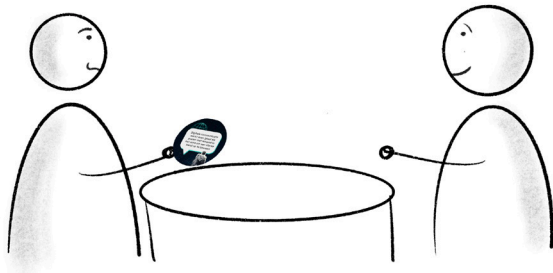
At the end of the experience, Tim gets invited to the Erasmus Experience. Despite coming to the library often, he has never checked the Experience out. He didn't know that Erasmus was known for his critical thinking!



Tim grabs a sticker, because stickers are always fun! He might put it on his laptop. *Lof voor de Toekomst* has him thinking about the future of loneliness.



When continueing on his quest for books, he decides to stop by the Erasmus Experience. He never knew what things Erasmus was known for



Later, at home, Tim finds the sticker in his backpack. He decides to talk to his roommate about the experience and about everything he has learned.

Figure 5.3 - Storyboard

Medium

For this concept, an interactive touchscreen was selected as the medium to facilitate user interaction. Several factors were taken into account for choosing this medium. First of all, a touch screen allows users to actively engage with the content (figure 5.4). Easy to use interactivity in museums, such as touch-screens, can lead users to experience higher levels of cognitive engagement, which positively influence learning (Pallud, 2016). By using different frames, the touchscreen can guide users through the multiple reflection moments.

In addition, touch screens provide adaptability. In the future, there may be different stories that RPL wants to explore. A digital touch screen provides a way to change stories, statements or questions and gives the possibility to remove certain aspects that may prove to be not relevant anymore. If RPL decides at one point to add videos or audio, this

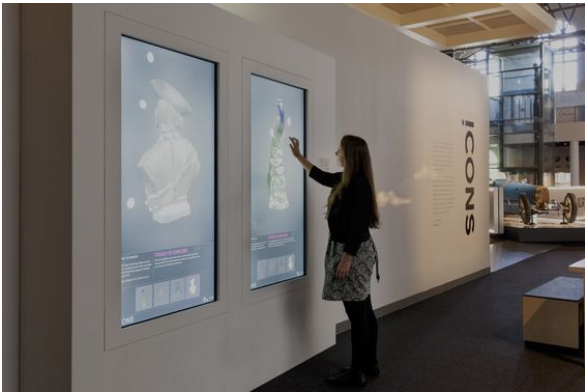


Figure 5.4 - Touchscreen used in museum (UNIT, n.d.)

could also be easily implemented using a touch screen. Furthermore, considering RPL has a wide audience, including people who may not speak Dutch, a touch screen can easily provide the option to change language. It can also provide an option to hear the text for hard of hearing people.

Below the touch screen is a physical keyboard. One of the steps in the design requires typing an opinion, therefore a keyboard is added to make it easier to express one's opinion (figure 5.5).



Figure 5.5 - Chosen medium: touchscreen with physical keyboard

Placement

The insights from the observations on the target group in the previous chapter, have led to some insights on the placement of the experience. This section explains what factors go into choosing the best spot of the experience, based on the observations. The observations were made inside the library, so the recommendations are based on that location, though these recommendations may also be applicable to other spots in or around the library.

Recommendations

When looking at a good place to place the experience, a few factors should be considered:

- **Crossroads of decisions:** At certain points, people can make decisions on where to go. This could be a good position for the experience, as this is a point where people stand still for a moment.
- **Flow:** The experience should be around a place that aligns with people's natural movement through the room. When looking at the entrance hall, all visitors walked right from the front desk after entering. This natural walking path can be used.
- **Accessibility:** The experience should be easily accessible
- **Visibility:** The position of the experience should be in the natural sightline of visitors. Furthermore, the experience should be noticeable enough to be visible from a distance.

Recommendations for proposed placement

On the next pages are a few recommendations for the proposed placement of *Lof voor de Toekomst*. For this, the proposed recommendations are based inside the library. Though it may also be useful to look at other spots in the future, such as other locations of the library or public spaces, such as perhaps train stations. The proposed placements are all weighed to previously posted requirements. Based on this, the entrance hall proves to be the best spot.

Entrance hall

The entrance hall serves as a gathering space and is a place where people have to move through to get to the other floors. This can therefore be a good spot to place the experience (figure 5.6).

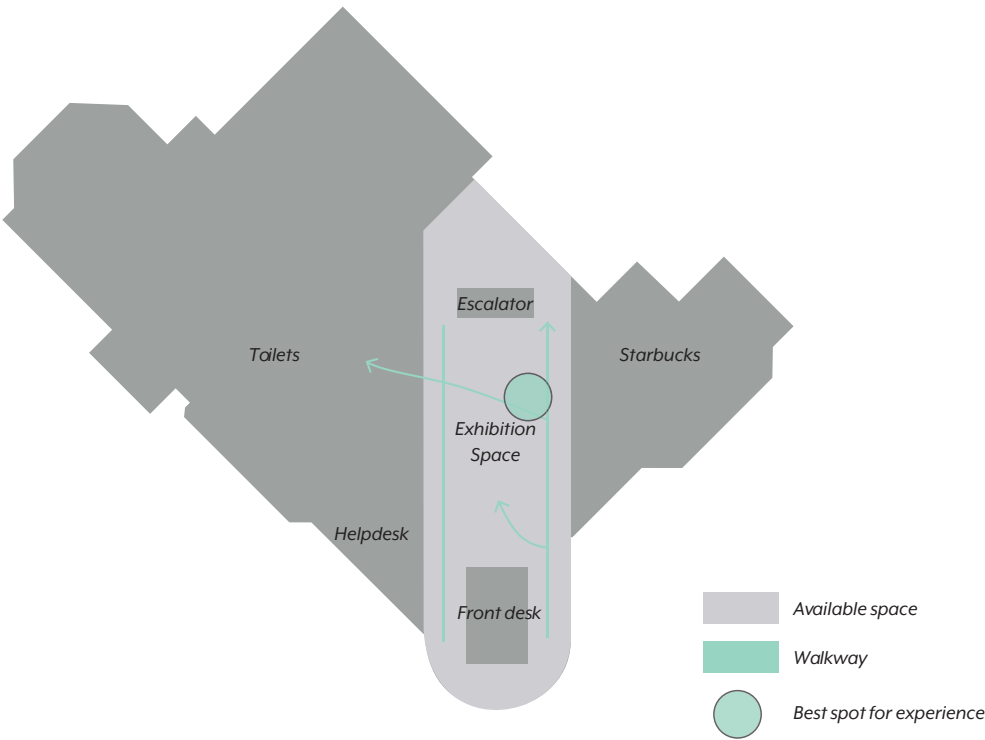


Figure 5.6 - Map of entrance hall with best placement

- + **Crossroads of decisions:** The entrance hall is a place where visitors make the decision where to go next: to the different floors, to the coffee shops, to the toilets.
- +/- **Flow:** Constant flow of visitors. However, visitors in a rush might not have time to fully engage with the experience. It is in a high-traffic area, so it has the potential to attract wanderers
- +/- **Visibility:** The entrance hall provides high visibility, but it's also a space that is filled with distractions which might make the experience less noticeable
- + **Accessibility:** The entrance hall is easily accessible to everyone entering the library. No escalators or elevators are required to access the experience.

First floor

The first floor has a big open spot in the natural walking path, which is often used for exhibitions. This could also be a good place to put the Experience. This spot is in the natural flow of the visitors in the library, as people have to pass this area to get to the escalators. It's also positioned near Maakplaats010, a place where many young people come to build things (figure 5.7, 5.8).



Figure 5.8 - Map of first floor with best placement



Figure 5.7 - Example of an exhibition in the intended spot on the first floor

- +/- **Crossroads of decisions:** the first floor has some areas for decision-making, especially those interested in the activities that are offered on this floor. However, the decisions here may be more niche, and visitors may not be open for new experiences
- +/- **Flow:** The first floor has less traffic than the entrance hall, though this spot is still in the direct walkway, since visitors have to pass the spot to go to the next floor
- + **Visibility:** The visibility is high in this spot on the first floor. People directly see this area when entering the floor through the escalators
- +/- **Accessibility:** While the first floor is easily accessible by escalator or stairs, it may not be the first destination for visitors. It is also less accessible for those who are mobility impaired

Entrance hall

Placing *Lof voor de Toekomst* on the same floor as the Erasmus Experience means it is already near a place that is contextually relevant. In the section *Statement boards* in part 2, the place near the escalators comes forward as a spot that visitors noticed (figure 5.9, 5.10)



Figure 5.9 - Proposed placement on 3rd floor

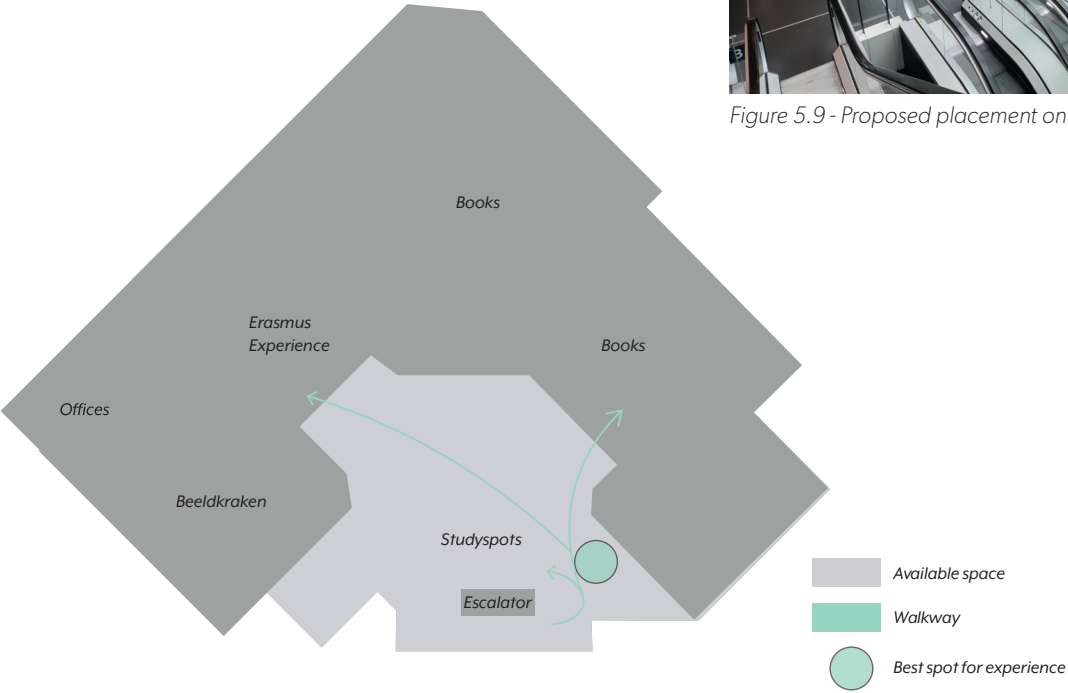


Figure 5.10 - Map of third floor with best placement

- +/- Crossroads of decisions:** The third floor is a quieter, more focused space. Visitors are likely to make deliberate choices about engaging with exhibitions. This means fewer passerby but a higher likelihood that these are people interested in an experience
- +/- Flow:** Traffic on the third floor is lower compared to the first floor and entrance hall. While this spot is in the natural flow of the visitors, there are fewer people who pass by
- Visibility:** The visibility in this space is considerably less. It's a more niche place where not everybody comes
- Accessibility:** Being on the third floor, this spot is less accessible for visitors, especially those who are not familiar with the library layout or who do not visit upper floors.

Conclusion

Factor	Entrance hall	First floor	Third floor
Crossroads of decisions	+	+/-	+/-
Flow	+/-	+/-	+/-
Visibility	+/-	+	-
Accessibility	+	+/-	-

Figure 5.11 - Summary of all the qualities

According to the requirements, the placement in the entrance hall (figure 5.11, 5.12, 5.13) comes forward as being the best suitable option for placing *Lof voor de Toekomst*, though the first floor comes close. This spot is placed inside the natural flow of the entrance hall. All of the people observed went right when entering the building. A majority of the people walked in a straight line to the escalators, another part went to the right to Starbucks, or to the toilets on the left. The proposed point is at a crossroad: this is the point where visitors would make decisions. This place is also easily accessible and visible.

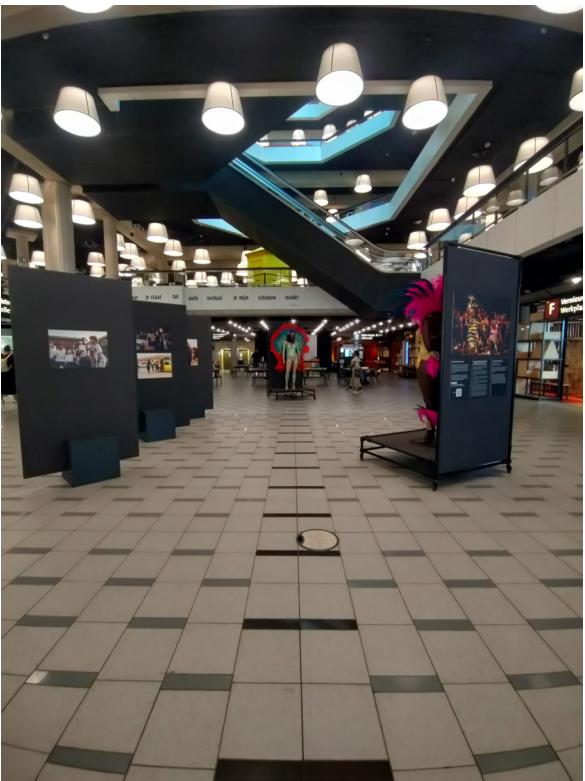


Figure 5.12 - The entrance hall



Figure 5.13 - Proposed placement of Erasmus Experience

Visual style

A style that can also be described as 'vintage futurism' was chosen for this design.

Futuristic designs are often characterised by neon colours and abstract shapes. More often than not, the settings are displayed in the night sky (figure 5.14). Because the stories are meant to convey a futuristic element, it is important that this is reflected in the design.

To combat the futuristic elements, the decision was made to use vintage looking elements as well. Combining both historical and futuristic elements helps convey the idea that values, like those of Erasmus, are not fixed in one era but evolve across time. Besides, as described in the Design Fiction method, the design fiction should have a recognisable element. By adding real pictures, the aim is to create some recognisability for the viewers.

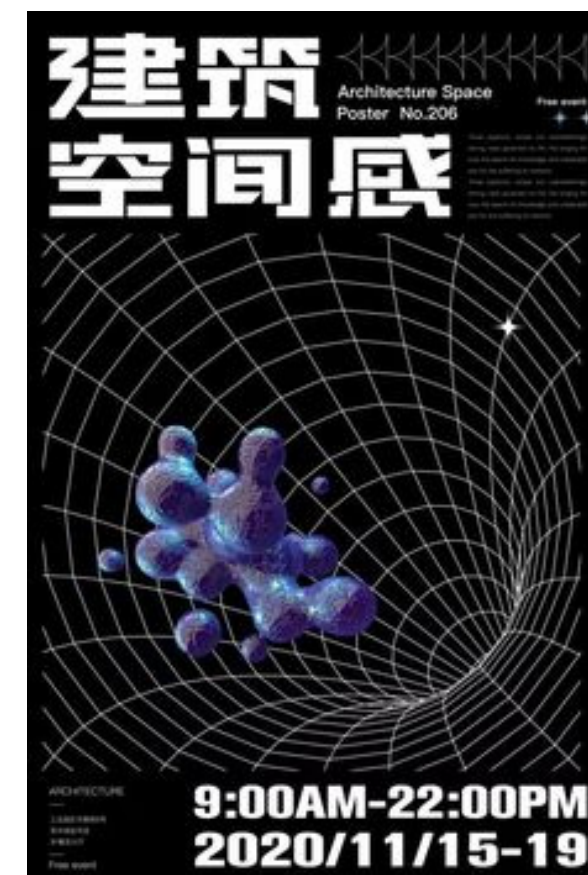


Figure 5.14 - Example of futuristic poster

This all gets combined in the style of *Lof voor de Toekomst*. The font used is 'space grotesk', which gives a futuristic appearance with the geometric cut of the letters. The space background adds to this appearance. When choosing the colour scheme, neon green is chosen, as this gives a futuristic feel. Abstract shapes compliment the overall futuristic style. This is contrasted by the black and white pictures cut out in collage style. All the pictures are edited to add texture for a more vintage feel (figure 5.15,5.16).



Figure 5.15 - Visual style: vintage futurism. Futuristic through space background, abstract shapes, font, neon colours. Vintage through the cut out vintage globe



Figure 5.16 - One of the vintage pictures with added grain

4 reflection moments

Based on the design requirements defined in the previous part, the choice was made to use multiple moments of reflection to best get participants to think critically about their opinions. The experience consists of 4 different reflection moments. The guideline for the reflection moments is a statement linked to the story they have chosen. This statement is related to the article, but cannot be taken one-to-one from the article. The statement provides a handhold that participants can cling to in order to form a final opinion. The 4 moments of reflection are as follows (figure 5.17):

1. Initial bias

The first moment of reflection consists of expressing an initial opinion. People often have an initial strong opinion when reading a statement. Cognitive biases, like confirmation bias, lead individuals to interpret information in a way that confirms their existing beliefs and opinions (Haselton et al., 2015). By expressing their initial bias, the user can then use this to challenge themselves to think about their opinion.

2. Writing down your opinion

After reading the article, which contains a nuanced view of the future outlook, the user is asked to write down their opinion. By writing down an opinion, the user is forced to think carefully about their opinion formed while reading. Writing is a powerful tool for learning and critical thinking because it compels individuals to articulate their thoughts (Hochman & Wexler, 2017).

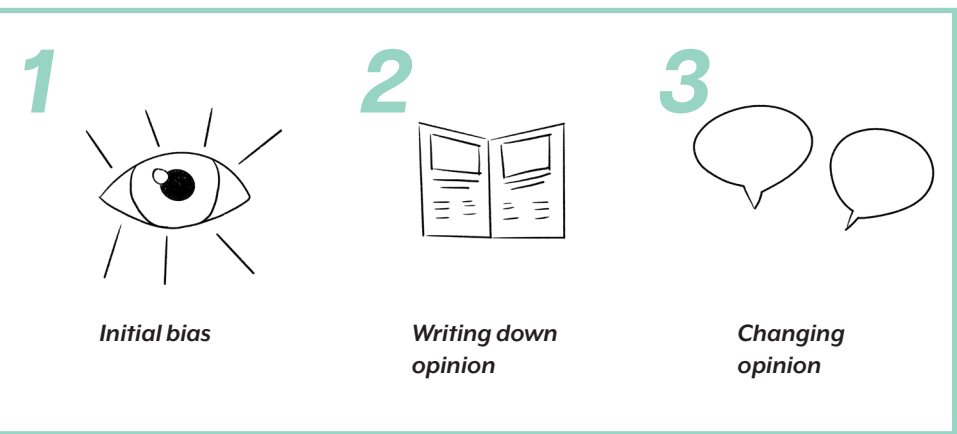
3. Changing your opinion

The user is then exposed to other people's opinions that are contradicting the one they have formed as their initial bias. This allows for a moment of further reflection. Positive dissensus is a form of deliberative disagreement which broadens viewpoints and promotes critical thinking (Landemore & Page, 2015). By creating a moment of dissensus, the user is encouraged to think whether they still agree with their stance or if they have changed their opinion.

4. Ruminating

The final reflection moment is not actually part of the experience, but is what happens after the experience. Participants have the option to take a sticker as a token and discuss *Lof voor de Toekomst* at home. More on this 4th reflection moment can be found in section *Token*.

Part of the experience



At home



Figure 5.17 - 4 reflection moments, the first three are part of the experience, the last happens at home

Content of the article

For this prototype, the story about personal relations is developed further. Due to time constraints only one of the stories is developed. The story about personal relations is about loneliness due to the rise of social media. The theme of this story has been discussed with employees of RPL, who mention that they see this becoming a real problem for the city of Rotterdam in the future. That makes this story relevant for the continuation of this prototype. Three different iterations were done with regards to the content of the story. The main incentive for these tests were to check if the tested story was clear, easy to understand and interesting.

Language

While the library also has some visitors who may not speak Dutch well (or at all), the decision was made to have the language of the prototype in Dutch. Making the prototype in Dutch meant I was able to better review the articles generated from ChatGPT, since this is my native language. Furthermore, Rotterdam has a large number of lower literacy (Gemeente Rotterdam, 2019) and this group probably doesn't grasp English as well. Taking the lower literacy in mind, the language was adjusted slightly using some of the guidelines provided by Stichting Makkelijk Lezen (Stichting Makkelijk Lezen, n.d.). This is an organisation dedicated to improving readability for people with reading difficulties.

Article

Chat GPT was again used to generate the story, using the following prompt:

"Write an article for a magazine (200 words) in 2035 in a way that it's suitable for a 7th grader. The story is about (summary story)"

The full story can be found on the next page. This story was later adjusted to make a clear distinction between pro and against arguments, to make it easier for readers to comprehend. Headers and pictures were later added to further substantiate the story (figure 5.18). The guidelines of Stichting Makkelijk Lezen were taken into account when assessing the article.



Figure 5.18 - Article with headers and pictures

De stille maatschappij

Het verdwijnen van spontane gesprekken in een digitale wereld

Online praten in plaats van persoonlijk

De meeste mensen in Rotterdam praten nu vooral online en niet meer in het echt. Door digitale communicatie is de manier waarop we met elkaar omgaan veranderd. Persoonlijke gesprekken gebeuren steeds minder.

Minder gesprekken in openbare ruimtes

Openbare plekken waar vroeger veel gepraat werd, zijn nu stil. Mensen kijken vooral naar hun telefoons en praten zelden zomaar met anderen. Online berichten en sociale media hebben echte gesprekken vervangen.

Gevolgen voor onze sociale interactie

“Mensen praten gewoon niet meer met elkaar,” zegt Dr. Elena Vasquez, een socioloog die dit onderzoekt. “Online platforms maken persoonlijke gesprekken minder belangrijk.”

Voor- en nadelen van digitale communicatie

Deze verandering heeft voor- en nadelen. Een voordeel is dat digitale communicatie handig is. Je kunt snel contact maken met vrienden en familie, waar ze ook zijn. Het helpt ook mensen die praten in het echt moeilijk vinden. Maar er zijn ook nadelen. Minder persoonlijke gesprekken betekent minder kans om echt contact te maken. Sociale vaardigheden, zoals inlevingsvermogen en lichaamstaal lezen, worden slechter. Veel mensen voelen zich eenzamer, ook al zijn ze altijd online verbonden.

De impact op onze relaties

Psychologisch kan dit schadelijk zijn. Relaties worden minder sterk als je te veel online communiceert. De waarde van spontane, echte gesprekken gaat verloren, en dat maakt onze relaties minder diep.

Rotterdam en de toekomst van communicatie

Terwijl Rotterdam zich aanpast aan dit nieuwe digitale tijdperk, is er nog veel werk te doen om dit te veranderen.



Figure 5.19 - Image used in the article, generated by AI using playgroundAI.com

Interactive prototype

This section provides an overview of the interactive prototype. Since the chosen medium is a digital interface, it was essential to choose a platform that supports the intended interaction. Figma, a widely used interface design tool, was selected for this purpose. Figma is an interface design tool that is often used to prototype websites, mobile apps or other digital experiences and therefore serves as a great way to convey the desired user interactions.

Iterations

Three iterative testing sessions were conducted to develop the final prototype (5.20). A mock-up of the prototype was created in Figma and tested with three participants (n=3) during separate sessions. Of these participants, there was one duo. After each session, adjustments were made based on feedback, and the prototype was tested again. To ensure unbiased feedback, new participants were selected for each session to provide fresh perspectives. The primary goals of testing were to determine whether the interaction was intuitive and whether the content was clear. For a detailed breakdown of the changes made through the iterations, see Appendix H. Overall, the concept remained of similar structure, but some tweaks were made.

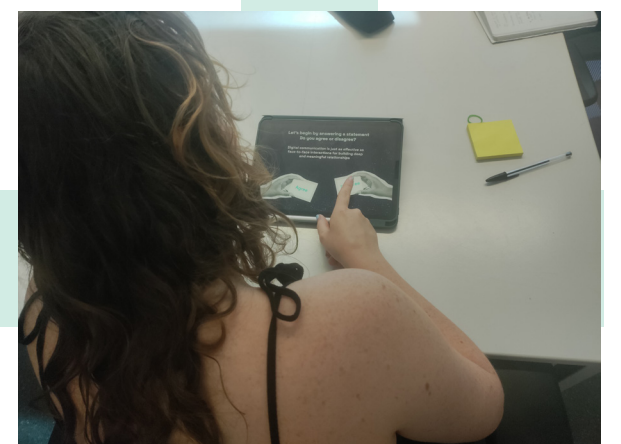


Figure 5.20 - Evaluation session 1 (top), session 2 (bottom right) and session 3 (bottom left)

Interaction based changes

- Scroll functions were added to both the frames opinion of others, as well as the frame with the article (figure 5.21) to ensure readability
- The reflection moments were shuffled. Initially, participants were asked if their opinions changed after reading the article. However, it was found that the article by itself did not prompt the users to change their opinion. It was therefore decided to put this reflection moment at the end
- The frame opinion of others now presents the opinions of those opposite to the one the participant gave at the first reflection moment. This way, the participant receives a contradicting view to their own
- There was no final page in the initial design. Several participants were unsure if the experience was finished. One participant mentioned that he wanted to see another story. It was therefore decided to create a final page which lets users have the option to either read a different story or end the experience
- A button to go back was added

Content based changes

- The opinions were initially generated with AI. However, this seemed authentic to some of the participants. Therefore, a small sample size of people were selected to write down their opinions on the article.
- The content of the article was adjusted slightly. The text was made slightly shorter and easier based on the guidelines from Stichting Makkelijk lezen. The text was presented with more pictures and headers to make the content more clear (figure 5.22). Furthermore, the content was adjusted slightly so the pros and cons of the article came forward.
- The story about Erasmus was adjusted slightly. A concrete example was provided to give participants a better overview of what Erasmus has done.

Duos

Though initially designed for individual use, this prototype was also tested with a duo to see whether the critical reflection also occurred in a smaller group. Reading the article was a bit awkward, since the duo had different reading speeds. However, the discussion that commenced between the two was interesting. They were able to discuss the answers and when writing down the opinion, they naturally discussed the positive and negative sides to come together into one opinion. This insight, though only a small sample size, suggests that *Lof voor de Toekomst* might also be interesting for smaller groups. This would require further testing.



Figure 5.21 - Example of the change of the article

Flowchart

Figure 5.22 illustrates the flowchart of the intended interactions with the touch screen. The green bubbles indicate the different frames while the arrows indicate the actions. The overall structure of the actions is quite straightforward.

In step 6, the opinions presented vary depending on the outcome of the first reflection moment. After this reflection moment in step 3, the flowchart splits, ensuring you get opinions that differ from your own.

On the final page indicated by step 8, the user can choose either to go back to the homepage (step 1) or choose another article (step 2).

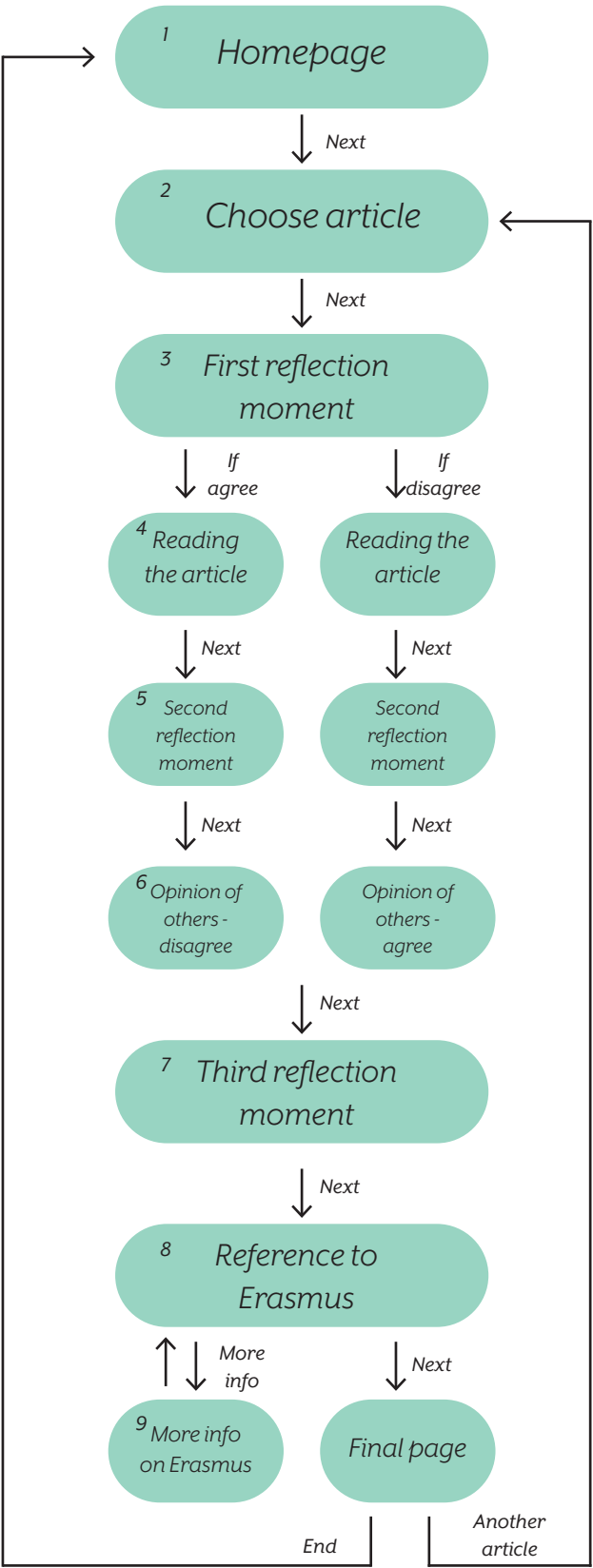


Figure 5.22 - Flowchart of the interactions

Frames

The following pages describe the different frames. The interaction and other qualities get mentioned. Figure 5.24 shows a legend in which both the interactions and reflection moments get mentioned. These can also be seen in the following pages when explaining the frames. Pressing on the globe on the left leads you to the interactive figma prototype, try it!

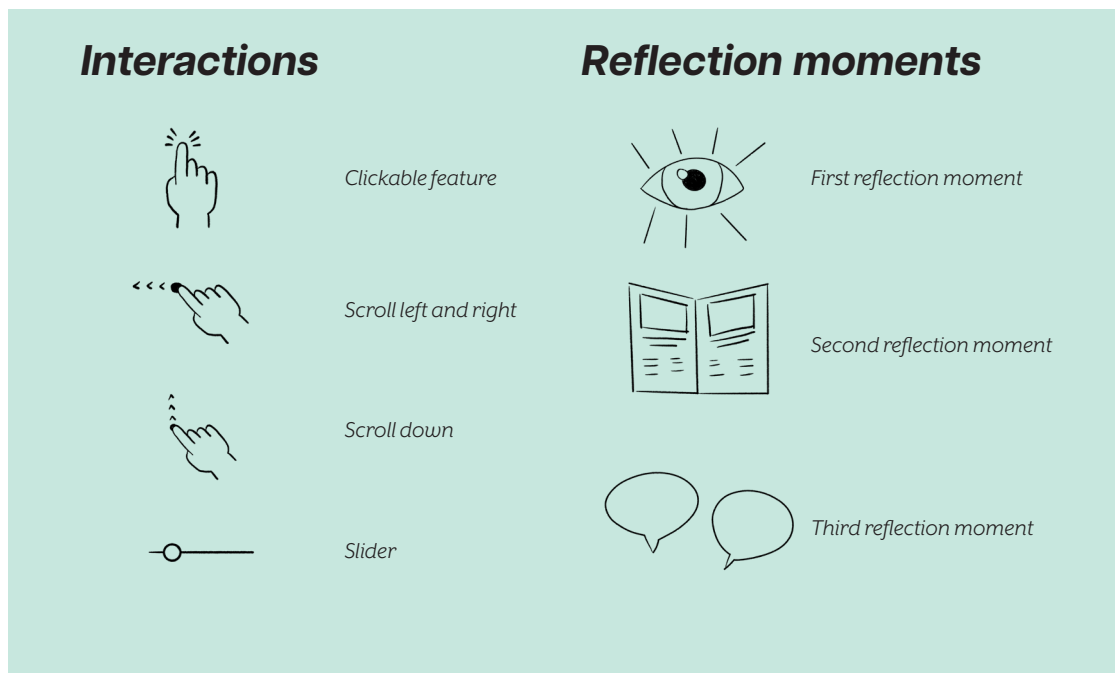
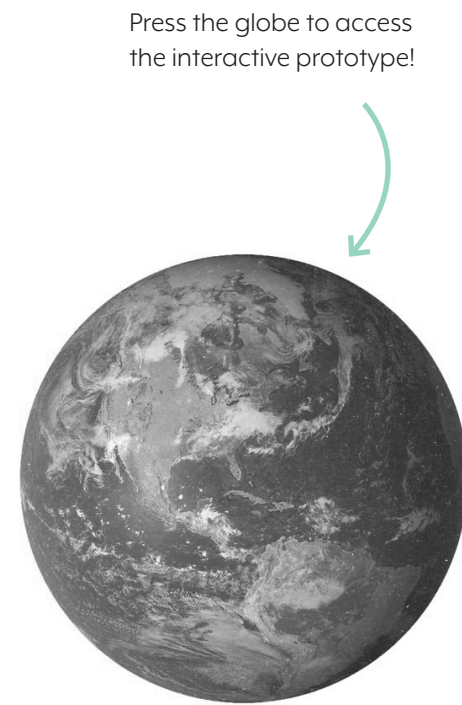


Figure 5.24 - Legend of the different interactions and reflection moments

Homepage



Globe with abstract lines to add to the futuristic feel

This page is meant to attract visitors. It has a header on top that says “it’s the year 2035” to make people aware that the experience is about the future. The chosen background for this prototype consists of a starry sky, contributing to the futuristic feel.

The visitor is supposed to press on the globe to start the Experience. To make it more inviting to use, an animation is added that shows the globe turning slowly.

Choose an article



Different articles are displayed. The header is about the theme of the article to curiosity. For this prototype, only the topic of loneliness is worked out. The less opaque options should give the impression that there can be more subjects to explore, but that they are unavailable at this moment.

Recommendations for future implementation

I recommend that there are about 5 different topics worked out to give the visitor plenty of options without getting overwhelmed with the amount of articles

1 First reflection moment

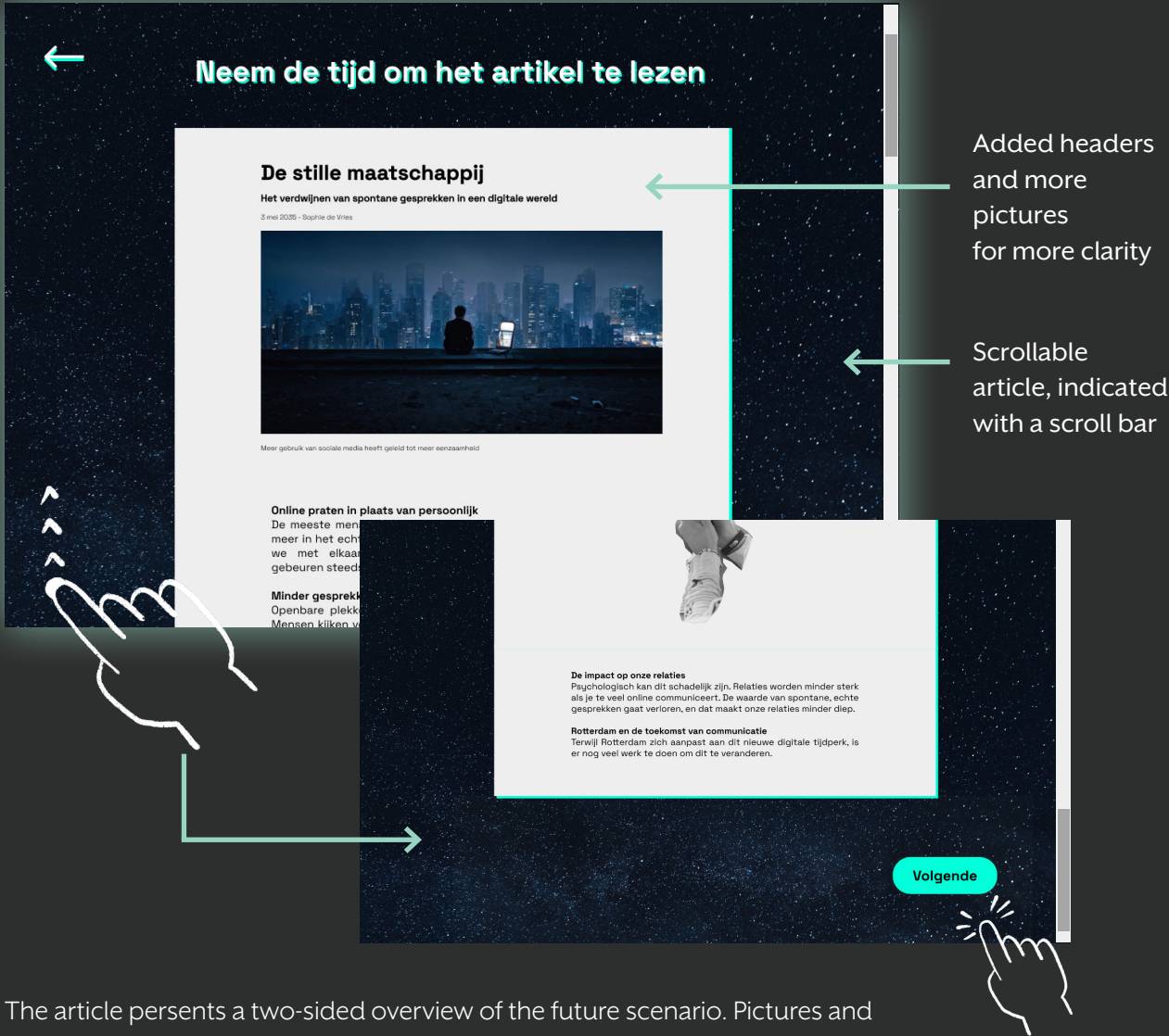


The visitor has the option to agree or disagree with the statement. Agreeing with the statement will lead to negative opinions at a later stage, disagreeing with the statement will lead to positive opinions, so the visitor can get a contradicting view to their own opinion.

Recommendations for future implementation

When choosing a statement, it is important that it relates to how the futuristic scenario is presented in the article. It should spark some controversy, so that users have a strong initial response

Reading the article



The article presents a two-sided overview of the future scenario. Pictures and headers are added to provide an indication of what content the scenario contains. A scroll function is added to fit more text into the frame while maintaining readability.

2 Second reflection moment



After reading the article, the user gets invited to share their thoughts and write down their opinion. This is where the keyboard gets used. By writing down one's opinion, it enables the user to reflect deeper on their opinion.

Recommendations for future implementation

Writing down one's opinion might be seen as cumbersome to some users. It could be useful to look at other ways to let people reflect deeper on their opinion

Opinion of others



Own opinion gets displayed between the other opinions

Half visible text bubbles indicating scroll function

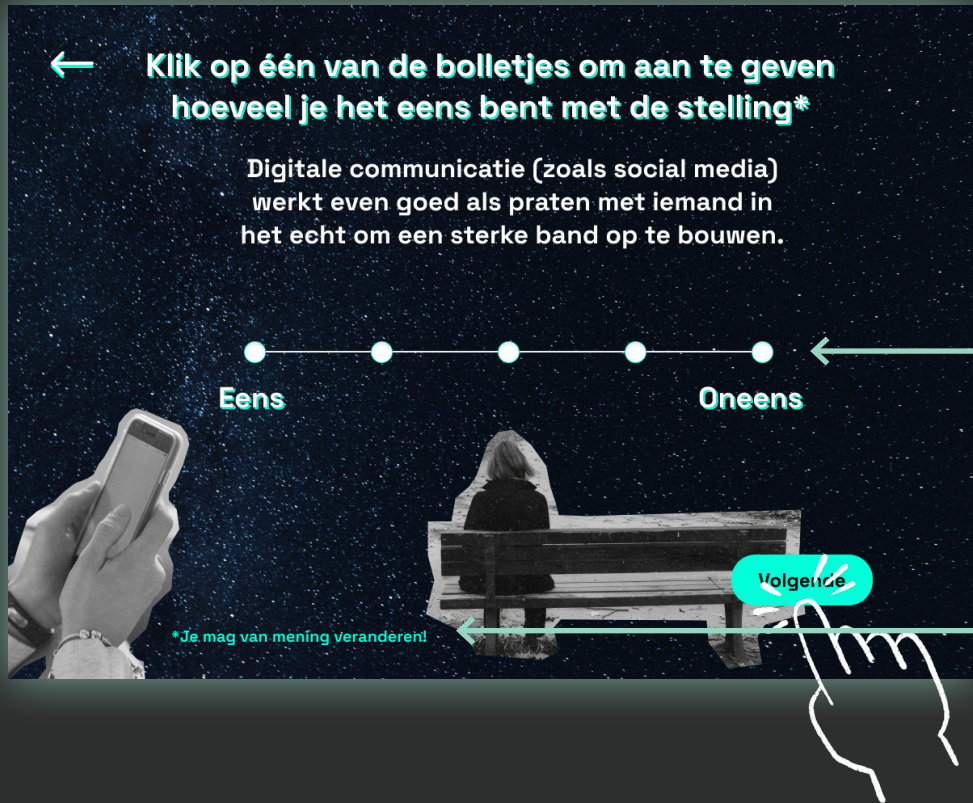
Opinions contradictory to their own

Other people's opinion get shown. This opinion is contradictory to the one someone gave at the start. To maintain the privacy of the user, the opinions are generated beforehand. The user is able to scroll horizontally through the comments, though the different opinions, the header, people and next button remain static. The user's own opinion gets shown between the other opinions.

Recommendations for future implementation

To get responses that feel as authentic as possible, I recommend asking a small focus group to express their opinions and using those, rather than letting them generate with AI (as other parts of the experience do get generated using that)

3 Third reflection moment



Indicator for slider

Being allowed to change your opinion

This last reflection moment gives users the option to change their mind after all the reflection. The slider brings more nuance than simply disagreeing or agreeing. This also gives the user a final reflection moment to see whether they have changed their mind.

Recommendations for future implementation

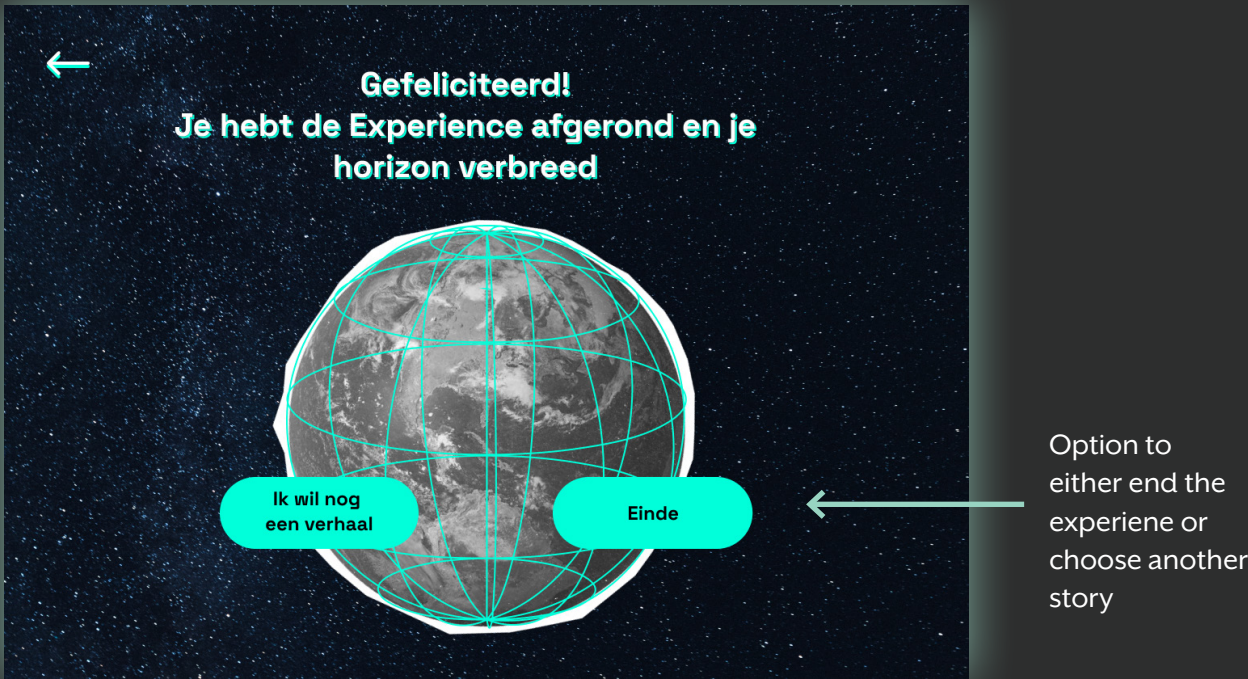
Since there was no slider function in Figma, the function is limited to a 5 point scale. For the future appliances it is preferred that an actual slider is implemented, as this is more intuitive to interact with.

Reference to Erasmus



Nod back to Erasmus. Visitors may have reflected critically similar to Erasmus. Visitors get invited to visit the Erasmus Experience on the 3rd floor. There is a button that leads to a page where more information on Erasmus is provided, including a concrete example.

Final page



The final page indicates a clear end of the experience. The user can choose for another story by pressing the left button, or ending the experience by pressing the right.

Token



Reflection moment 4

At the end of the experience, participants have the option to take a sticker as a token. This sticker features the visual style of the experience, along with an engaging text - either the statement they reflected on or the name of the experience (figure 5.25).

According to Falk (2016), a museum experience begins before the visitor even arrives and continues after they leave. While *Lof voor de Toekomst* is not set in a museum, it can share similarities with museum experiences, such as providing educational content, promoting reflection, and including interactive components (Falk, 2016). Although museum visits tend to be longer, both experiences aim to leave a lasting impact. Furthermore, providing a tangible souvenir at the end of a museum experience makes visitor's remember an experience better (Petrelli et. al, 2017).

The intention of the sticker, in addition to it serving as a fun souvenir, is to create reflection moment 4. Visitors are able to take the sticker home as a tangible reminder and can reflect on the topics discussed in *Lof voor de Toekomst*. Tangible items can serve as "cognitive anchors", helping visitors recall experiences and prompting deeper reflection over time (Aipperspach et. al, 2011). Stickers are

small, portable and can be stuck on notebooks, laptops, lamp posts etc., which makes them easily shareable with others. They can serve as word-of-mouth marketing and can be used as a conversation starter to further encourage critical thinking (figure 5.26).

The stickers can be designed as pre-made products. Stickers are a relatively inexpensive product to produce and can be ordered in batch, making it easily and cost-effectively producible for RPL. However, a future recommendation for the sticker could consist of making stickers that are unique to the visitor's experience. Making personalised tangible data souvenirs can trigger long-term reflection and promote a deeper connection with the experience (Petrelli, et al. 2017), which fits with the intended goal for *Lof voor de Toekomst*.



Figure 5.25 - Sticker in use

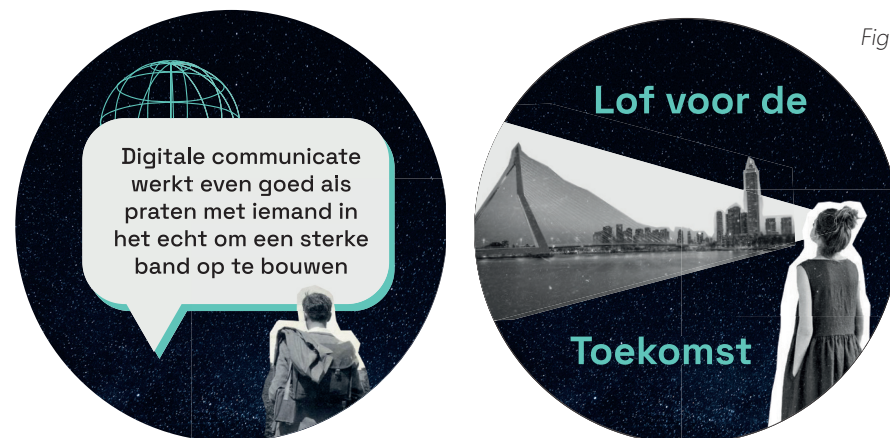


Figure 5.26 - Examples of the stickers

Presentation of the Concept

Due to time constraints, the casing of the prototype could not be developed completely. The primary focus has been creating the Figma prototype, as this conveys the interaction best. However, in order to properly test the intended interaction, a cardboard prototype was made (figure 5.27, 5.29).

The cardboard was painted black to better align with the colours of the interactive prototype. At the top, the project title is displayed, followed by the subtitle beneath it. A brief explanation of the concept is provided below (figure 5.30), giving visitors a quick introduction to what they could expect. Following this, the steps required to complete the experience are outlined. The stickers are placed next to the cardboard prototype with a sign that says: 'pak een sticker en heb het er thuis nog even over' (grab a sticker and talk about it at home) (figure 5.28).



Figure 5.28 - Presentation of the stickers

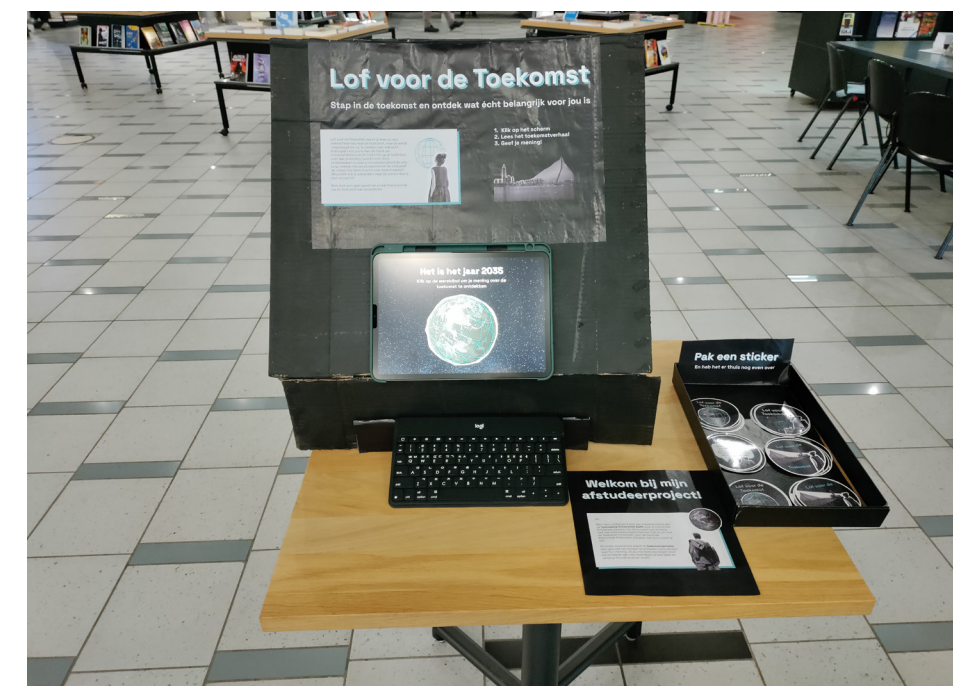


Figure 5.27 - Presentation of the cardboard prototype

Lof voor de Toekomst

Stap in de toekomst en ontdek wat écht belangrijk voor jou is

Lof voor de Toekomst neemt je mee op een interactieve reis naar de toekomst, waar je wordt uitgedaagd om na te denken over wat echt belangrijk voor jou is. Aan de hand van nieuwsartikelen uit de toekomst ga je nadenken over wat je mening nu echt over deze onderwerpen is. Laat je nieuwsgierigheid de vrije loop, ontdek nieuwe perspectieven en stel jezelf de vraag: hoe denk ik écht over deze thema's? Misschien kijk je wel anders naar de wereld dan je had verwacht!

Kom met een open geest en ervaar hoe jouw kijk op de toekomst kan veranderen

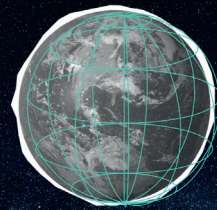


1. Klik op het scherm
2. Lees het toekomstverhaal
3. Geef je mening!



Het is het jaar 2035

Klik op de wereldbol om je mening over de toekomst te ontdekken



Lof voor de Toekomst neemt je mee op een interactieve reis naar de toekomst, waar je wordt uitgedaagd om na te denken over wat echt belangrijk voor jou is. Aan de hand van nieuwsartikelen uit de toekomst ga je nadenken over wat je mening nu echt over deze onderwerpen is. Laat je nieuwsgierigheid de vrije loop, ontdek nieuwe perspectieven en stel jezelf de vraag: hoe denk ik écht over deze thema's? Misschien kijk je wel anders naar de wereld dan je had verwacht!

Kom met een open geest en ervaar hoe jouw kijk op de toekomst kan veranderen



Figure 5.29 - Overview of the design of the cardboard prototype

Figure 5.30 - Close up of the introductory text

Evaluation

In this chapter, I will explain the evaluation of the final prototype. The prototype was placed in the entrance hall of Rotterdam Public Library, and tested with visitors. There are two main goals of the evaluation: testing the design goal and testing the product in the space. I describe the evaluation plan for both tests and share the results of the evaluation.

The final evaluation was done in the entrance hall of Rotterdam Public Library. By doing so, the evaluation could exist out of two main goals:

1. Do visitors of the library naturally gravitate towards the prototype and use it?
2. Is the design goal of critical thinking met?

Besides testing the design goal, which serves to validate this product, it was also important to test the prototype within its intended environment. Previous tests (section *Iterations*) were done at people's homes or at university with people who were not visiting the library at that moment. Considering the placement and the target group were only based on observations, it was a great opportunity to test the prototype with actual visitors of RPL.

The cardboard prototype was placed in the entrance hall in a prominent spot in the middle of the entrance hall (figure 5.31). The evaluation was set up in two parts: firstly, a couple of hours were spent observing whether interaction occurred with the prototype to test whether the first goal was met. In the second half of the evaluation, visitors were recruited and asked to participate in testing the prototype to test the second goal.

Since the usability, interaction and content of the interactable prototype has been previously tested in former tests (see section *Iterations*), this was not the primary focus. However, if there were some usability problems or recommendations that arose during the test, those were noted as well.

The stickers that served as tokens were also placed near the experience. While this wasn't an explicit part of testing, it was observed whether people took stickers by themselves or asked at the end of the experience whether participants were interested in taking a sticker to discuss the future stories further at home.

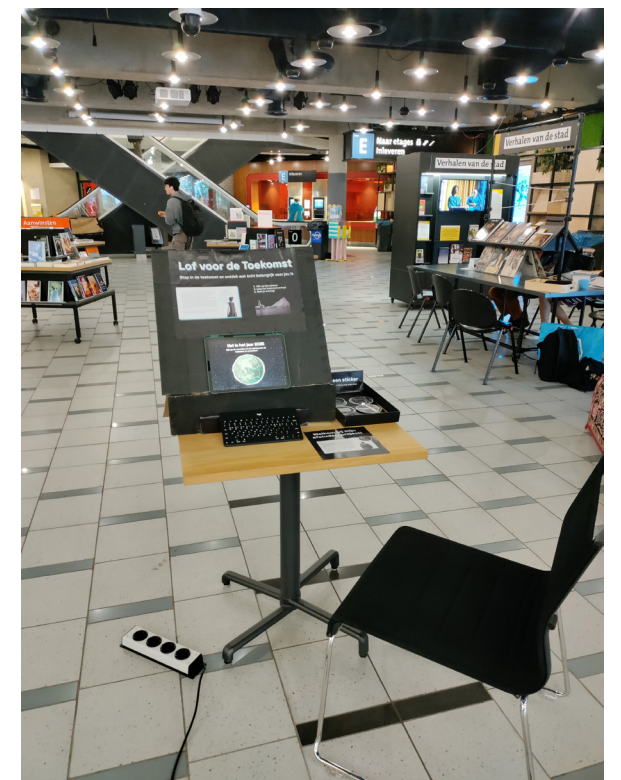


Figure 5.31 - Presentation of the prototype

Observation of the product in space

This section describes the first half of the evaluation.

Method

To evaluate whether visitors would naturally engage with the prototype, the cardboard mock-up was placed in the entrance hall of Rotterdam Public Library. This location was chosen due to its high foot traffic, providing an opportunity to observe if the prototype could capture visitors' attention and hold their interest. The mock-up was left in place for two hours to assess visitor interaction while I observed and took notes.

During the evaluation, I sat at a distance where I could observe without being directly associated with the prototype. The aim was to see if visitors would organically approach and engage with the experience. The main research questions guiding this part of the evaluation were:

- Do visitors of RPL interact with the prototype?
- Does it attract attention naturally?
- Do visitors complete the experience or walk away halfway through?

Over the course of two hours, I observed how people approached and engaged with the mock-up, noting their behaviour and whether they interacted with the prototype fully or partially. During the observation, I approached individuals who had engaged with the prototype and asked them a few qualitative questions. These questions were designed to understand their level of interest and engagement.

Results

The observation results revealed that the prototype struggled to attract attention in the busy entrance hall of the Rotterdam Public Library. It is important to note that it was not busy during this observation period, it is estimated that only around 50 people walked inside the library in the span of 2 hours. Most visitors passed by without noticing the mock-up, even when walking directly past it. Those who did notice it (n=5) tended to engage only briefly, with a few taking a moment to glance at the first screen but quickly moving on without interacting any further. Only one of the participants finished the experience by themselves.

For instance, in two separate cases, visitors paid attention to the first page but did not engage beyond that. One of these visitors chuckled when reading the title, but mentioned that he was not interested in actually interacting with it, though he thought the title was funny.

“I didn’t really want to start something, I don’t know. I did think the title was funny”

Another visitor began interacting with the prototype but became startled when the screen changed to a different frame, quickly walking away. When asked about it, it was mentioned that they didn’t expect something to actually happen.

“I was a bit surprised when something happened”

An issue occurred when visitors were unsure how long the experience would take, which deterred them from fully engaging. This led to visitors seeing the article but stopping there as there was a lack of indication on how long the experience was going to take.

“It seemed interesting, but didn’t know how long was left. 2 minutes? 10? I don’t know. I didn’t really want to do much more”

In general, the lack of voluntary participation could be due to no interest in the experience, not wanting to or having the time to engage in an experience, or because they simply didn’t notice it. One of the reasons why people lacked to notice the prototype, was because of the lack of visibility. The prototype was hardly noticeable in the big space of the library. This was apparent based on the little interactions that happened during the observations. When asked about it, a visitor mentioned that there was a lot going on in terms of screens, expositions, tables and screens in the entrance halls.

“There’s too many screens in the library, it’s not really noticeable anymore”



Figure 5.32 - Participant using the prototype

Testing the design goal

This section describes the second half of the evaluation, in which I test whether the design goal of critical thinking is met.

Method

To test the design goal, this part of the evaluation also takes place in the entrance hall of Rotterdam Public Library. Unlike the previous observation, this test involved actively recruiting participants who fit the profile of “wanderers” - visitors who appeared to be taking their time and casually exploring the space.

To ensure participants approached the prototype with an open mind, minimal information was provided beforehand. They were simply told that it was a graduation project from TU Delft and that it related to the future.

After completing the experience, participants took part in a brief interview to assess whether critical thinking had occurred during the experience (figure 5.32, 5.33). Since critical thinking is challenging to measure directly, the questions were selected to guide participants into thinking about reflection without directly asking them. The interview began with general questions about whether participants enjoyed the experience and liked thinking about future scenarios. This approach made participants more comfortable and provided the opportunity to naturally discuss any critical through processes they had during the experience. The interview then focused on the content of the story, the theme of loneliness. Participants were asked how the story made them feel and whether reading the story had changed their perspective on the topic. The full evaluation plan can be found in Appendix I.

Results

Recruiting participants for the evaluation proved to be challenging, and in the end, five visitors agreed to take part. The results are mostly on the design goal. However, some interesting results also came forward in regards to the steps of the experience and the token.

Design goal

For this project, when critical reflection occurs when a participant goes beyond absorbing the information provided in the experience and instead applies the topic to their own life. If the visitor has thought about how the topic can be applied to their personal lives or those of others, the participant has been undergoing critical reflection. This was demonstrated in several ways based on the interviews.

Some participants applied the statements directly to their personal lives, reflecting how loneliness affected them emotionally or practically.

“I then immediately started thinking about all the relationships I have that I can only have contact with digitally. My parents are far away and so are best friend and some other friends, so I could just agree to disagree because, of course, I’d much rather see them in real life!”

“I often see elderly people, for example, sitting alone in a pub or walking around who are or cannot connect digitally and I do find that sad to see”

Other participants reflected on topics related to loneliness, identifying its potential causes or consequences. For instance, one participant expressed that she though more individualism would lead to even more loneliness

“You also more often see fewer communities and community centres as it used to be, and I fear that later on we will move even more towards individualism and more people will become lonely.”

A key component of the experience was encouraging continued reflection at home, referred to as reflection moment 4 in the project. This was supported by the distribution of a token, designed to serve as a physical reminder and conversation starter. Interestingly, some participants expressed a desire to discuss the topics at home without any mention of the token:

“We don’t really talk about these things at home, but I do think these topics are important. This may help me talk about it more with my parents.”

Though not all participants felt the need to take the discussion home. One participant mentioned that the topic didn’t relate to her personal interests and she wouldn’t bring it up casually.

“I don’t think I would be so quick to bring up the subject of loneliness with someone”



Figure 5.33 - Participant using the prototype

In one case, critical reflection led to a shift in perspective. A participant mentioned that the nuances presented in the article and the opinions of others caused her to rethink her initial opinion.

Based on these results, the concept shows the potential for fulfilling the design goal. Participants were able to relate the topic of loneliness to their own lives and proved to have reflected further than the provided information.

Steps of the experience

Though not an explicit part of this evaluation, there were some insights on the different steps of the experience.

Participants seemed to like seeing the opinions of others because it caused further reflection and provided other commentary as opposed to their opinion. The statement at the beginning where people had to agree or disagree participants also let participants think:

“I liked to click on the agree and disagree. It would be nice to see more questions like that because they do excite.”

The participants were divided on whether they liked typing their opinions. Most found it too bothersome to fully type their opinion, some did enjoy doing it. However, all participants did agree that taking the time to write down your opinion increases reflection.

“I did have to really think when I got to typing my opinion, but I didn’t really enjoy doing it that much”

“I liked typing my opinion because it made me think more about why exactly I disagreed with the statement”

Regarding the content of the story, generally the topic of loneliness caused recognition, but it was not always something people could relate to. A participant mentioned that it was not something she was experiencing currently and that it therefore created less interest. Besides, not all participants realised that the stories were set in future scenarios. While one acknowledged that the article was a bit extreme, she didn’t immediately associate it with a speculative future, as the topic felt relevant to current societal issues.

Token

The token was taken by participants several times, even by visitors who were randomly walking by. Participants were divided on their opinion about the stickers, some participants thought it was a nice addition, others didn’t care for it. Two participants mentioned they were going to paste the sticker on their laptop or notebook.

PART 6

Conclusion

In this final part, I will discuss the results from the evaluation. Based on these, I will write some recommendations and conclude this part with a final conclusion

Discussion

The evaluation of the final prototype at Rotterdam Public Library aimed to test two main aspects: whether visitors naturally gravitated toward the experience, and whether the design goal of fostering critical reflection was achieved. The results provided valuable insights into both areas, though there were several challenges and limitations

Natural engagement with the prototype

The first goal was to observe whether visitors would organically interact with the prototype in its intended environment. The results showed that the prototype struggled to capture attention in the library's entrance, which may be attributed to several factors. Despite being placed in a high-traffic area, many visitors did not notice it, likely due to the overall busy and visually cluttered space of the entrance, which was already filled with screens, exhibitions, and activities.

Another challenge was the lack of clarity regarding the length of the experience. Several participants expressed hesitation in fully engaging with the prototype because they were unsure of the time commitment involved. This suggests that adding clear indications of the experience's duration could encourage more complete engagement.

While the prototype successfully piqued the interest of a small number of visitors, the overall lack of natural engagement suggests that stronger design interventions are needed. This could include more prominent signage, a better designed casing of the experience, visual prompts, or a different placement strategy to increase visibility and appeal.

Achieving critical reflection

The second goal of the evaluation focused on determining whether the design succeeded in encouraging critical reflection. Despite the challenges in attracting participants, the interviews indicated that those who complete the experience did engage in meaningful reflection. Critical thinking was apparent in how participants related the speculative scenarios to their own lives. The fact that participants applied these speculative scenarios to their personal circumstances - whether considering relationships or societal issues - demonstrates that the design succeeded in achieving reflection.

An interesting outcome was the influence of other people's opinions during the evaluation. Participants appreciated seeing other people's opinions, which sparked further reflection. This suggests that incorporating more interactive elements allows visitors to compare their perspectives with others and could enhance the experience. However, participants were divided on the typing elements - some found it cumbersome. This feedback highlights the need for a balance between usability and engagement, ensuring that tasks are not too demanding while still promoting critical thinking.

The idea of encouraging reflection beyond the experience, as facilitated by the token, was also met with mixed responses. While some participants expressed a desire to continue the conversation at home, not all felt compelled to do so. In general, participants did like the form of a sticker.

Prototype in context

The decision to test the prototype within the library environment provided a more realistic understanding of its potential success. While previous evaluations were conducted in other environments, such as homes and universities, the library test allowed for a direct interaction with the target audience. This evaluation made clear that it is important to test in real-world settings and that these insights are important for further design improvements, specifically regarding the intended target group of individual wanderers.

Limitations of the evaluation

There were several limitations of the evaluation of the prototype that may have affected the overall findings. First, the test was conducted over a short period - only part of a day - so more insights could likely have been collected with a longer observation period. However, due to time constraints and availability of RPL, this was not possible.

Additionally, the evaluation involved a cardboard mock-up of the prototype rather than the final product, which limited the accessibility and visibility. Although efforts were made to paint and present the mock-up in a visually appealing way, it did not fully represent how the final version would appear. Besides, the iPad used in the test had an 11 inch display, smaller than the intended larger screen proposed in the design. This likely impacted how immersive the experience felt to participants. Although attempts were made to make the cardboard prototype as sturdy as possible, it was still a temporary structure, which may have influenced how visitors interacted with it.

Another constraint was the placement. When looking at section *Placement*, the placement of the prototype doesn't meet all the requirements. It was positioned in an open area near the toilets and the coffeeshop, making it easily accessible but not ideally placed in the main walkway due to the library's restrictions. In the large entrance hall, the relatively small size of the prototype made it less noticeable, further limiting its visibility.

Furthermore, due to the time constraints, only one story was developed completely. This caused that there wasn't a lot of variety, and the story maybe didn't align with the participants interest. Additionally, it was not always clear to participants that the stories were set in future scenarios, as the topics felt relevant to current societal issues. Thus suggesting that the speculative aspect of the experience needs to be more explicitly communicated, through for example design cues or the framing of the narrative.

Recommendations

This prototype can serve as a basis for a new sensitising experience for the Erasmus Experience, or as something that can be completely used on its own. Considering it fits the criteria of RPL's mission to let Rotterdam citizens be a critical participant in society, this project can serve as a basis for creating critical reflection using speculative scenarios. This being said, there are some recommendations for further development.

First of all, the content of the stories, but also the way the stories are presented is something that can be played around with. Different topics that will be relevant to Rotterdam in the future can be explored. Stories such as urban development, climate change impacts on the city, safety or the future of multiculturalism. When generating more stories these are the recommendations to develop the stories:

- Use ChatGPT or another AI service to generate a story
- When choosing a subject: pick one that you see as a potential problem area or fastly changing trend in Rotterdam. Think about loneliness, safety etc.
- The article should be written in clear and easy to understand language, suitable for a 7th grader (or brugklasser) .
- The article should have clear arguments for the subject and clear arguments against
- It should be clear that the story is set in the future: ask AI to set the scene of how the world could look like
- There should be a statement that goes along with this story. The statement should be slightly controversial, so people have a strong initial bias to this story.
- The opinions of others should feel authentic. Ask around 20 people to write down their opinion regarding the statement.

Another recommendation is to refine the presentation and physical setup of the prototype. The current cardboard mock-up lacks the sturdiness and visual appeal needed to attract attention in a place like RPL. Moving forward, the casing of the prototype should be more polished. Additionally, the placement of the prototype within

the library needs to be reconsidered. The current location, while central, may not be the most effective. *Lof voor de Toekomst* should be placed somewhere where people take their time and be placed somewhere that fits the requirements as described in section *Placement*, though this is something that can be explored further. Clear prompts about the length and nature of the experience should also be integrated into the design.

The target group can also use some further refinement. Catering to a large and diverse group like visitors of a public library proved to be difficult. Further research should prove whether the group of Individual wanderers is the best group to target with this design, or if this is better suited for another (maybe more specified) target group. This also goes hand in hand with the placement of the prototype, since the placement is chosen based on the profile of the Individual wanderer.

There are different opportunities for reflection moment 4 that could be developed further. While the sticker proved to be a fun exploration, there are multiple other possibilities to create reflection at home. For example, at the end of the experience, there could be a qr code leading to an instagram page which contains more statements related to the future. But also, flyers or newspapers containing other future stories may also lead to further reflection (and serve as advertising).

A factor to consider is how to get visitors who have already visited *Lof voor de Toekomst* be incentivised to use the experience again? The experience as it is now doesn't allow for many different uses. There should be consideration in making the experience interesting to use multiple times on multiple occasions. Perhaps there could be something like a theme of the month, where new themes get highlighted. This could be indicated next to the experience with a sign "This month's theme: safety". Different reflective exercises could be implemented to make it fun and interesting. It also might be useful to, as previously stated, look at other places like train stations or malls. This might stimulate a different target group.

Conclusion

The goal of this project was to create an interactive experience that connects visitors of Rotterdam Public Library (RPL) to Erasmus's values by creating reflection.

The first step in answering this goal was to gain an understanding of Erasmus's core values. This was achieved through literature research, including scholarly works about Erasmus, interviews with Erasmus scholars, and a study of the historical context in which Erasmus lived. This led to the development of a framework that highlighted Erasmus's main values, such as knowledge, freedom and treatment of others. The framework had some overlaps, which combined several of the values in the frame, such as "use what you have learned to rationally form your own opinions" as an overlap for the values freedom and knowledge. This framework provided an overview for Erasmus's main values.

Initial user research revealed that to effectively trigger reflection on values, examples should be concrete yet sufficiently removed from the user's own life, incorporating a playful element. Additionally, participants should be challenged to engage beyond simply agreeing or disagreeing, as this deeper engagement fosters more meaningful reflection.

To achieve more effective reflection on values, speculative design was chosen as the main approach, as it effectively allows participants to engage with thought-provoking scenarios that challenge assumptions and prompt reflection. This approach not only aligned with Erasmus's interest in questioning established norms but also created a safe space for participants to critically reflect on their own beliefs and behaviours.

The final design incorporates the use of speculative scenarios into an experience using debate as a metaphor. By creating 4 different reflection moments that are all centred around, visitors get triggered to reflect on their own stance in the world. The final concept consists of an interactive touchscreen and additional keyboard.

The evaluation proved that people were able to reflect on their opinions. Though the short testing period limited the quality of the results. A longer evaluation could provide deeper insights into how "individual wanderers" engage with the experience. Additionally, balancing accessibility with deeper engagement remains a challenge, as some participants found more effortful tasks, like typing responses, less enjoyable.

Future research could look into further developing the scenarios, using different ways of portraying articles and looking at different topics. Furthermore, there could be improvement in the presentation of the concept: specifically the way the enclosure in which the experience will be placed and the placement of the concept.

In conclusion, the concept has shown potential of fulfilling the design goal of using Erasmus's values of critical thinking to trigger reflection among RPL visitors. Speculative design proved to be an effective tool to encourage personal connection and exploration of societal issues, creating reflection both during the experience and beyond.

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Appendices

- Appendix A - Project brief
- Appendix B - Statement boards
- Appendix C - Sensitising exercise
- Appendix D - Evaluation of current Erasmus Experience
- Appendix E - Pilot study design fiction
- Appendix F - Signals Design Fiction
- Appendix G - Design Fiction magazine
- Appendix H - Iterations
- Appendix I - Evaluation plan

A

Project brief



IDE Master Graduation Project

Project team, procedural checks and Personal Project Brief

In this document the agreements made between student and supervisory team about the student's IDE Master Graduation Project are set out. This document may also include involvement of an external client, however does not cover any legal matters student and client (might) agree upon. Next to that, this document facilitates the required procedural checks:

- Student defines the team, what the student is going to do/deliver and how that will come about
- Chair of the supervisory team signs, to formally approve the project's setup / Project brief
- SSC E&SA (Shared Service Centre, Education & Student Affairs) report on the student's registration and study progress
- IDE's Board of Examiners confirms the proposed supervisory team on their eligibility, and whether the student is allowed to start the Graduation Project

STUDENT DATA & MASTER PROGRAMME

Complete all fields and indicate which master(s) you are in

Family name	Peeters	7149	IDE master(s)	IPD <input type="checkbox"/>	Dfi <input checked="" type="checkbox"/>	SPD <input type="checkbox"/>
Initials	E.		2 nd non-IDE master			
Given name	Eline		Individual programme (date of approval)			
Student number			Medisign	<input type="checkbox"/>		
			HPM	<input type="checkbox"/>		

SUPERVISORY TEAM

Fill in the required information of supervisory team members. If applicable, company mentor is added as 2nd mentor

Chair	Jeff Love	dept./section	SDE	! Ensure a heterogeneous team. In case you wish to include team members from the same section, explain why.	
mentor	Arnold Vermeeren	dept./section	HCD/ HICD		
2 nd mentor	John Tolen				
client:	Centrale Bibliotheek Rotterdam				
city:	Rotterdam	country:	Netherlands	! Chair should request the IDE Board of Examiners for approval when a non-IDE mentor is proposed. Include CV and motivation letter.	
optional comments					! 2 nd mentor only applies when a client is involved.

APPROVAL OF CHAIR on PROJECT PROPOSAL / PROJECT BRIEF -> to be filled in by the Chair of the supervisory team

Sign for approval (Chair)

Name J.S. Love Date 29 Feb 2024 Signature  Digitally signed by Jeff Love Date: 2024.03.25 12:54:29 +01'00'

CHECK ON STUDY PROGRESS

To be filled in by SSC E&SA (Shared Service Centre, Education & Student Affairs), after approval of the project brief by the chair. The study progress will be checked for a 2nd time just before the green light meeting.


Master electives no. of EC accumulated in total	<input type="text"/>	EC
Of which, taking conditional requirements into account, can be part of the exam programme	<input type="text"/>	EC

<input checked="" type="checkbox"/>	YES	all 1 st year master courses passed
<input type="checkbox"/>	NO	missing 1 st year courses

Comments:

Sign for approval (SSC E&SA)

Robin den Braber
Digitaal ondertekend door Robin den Braber
Datum: 2024.04.29 12:20:32 +02'00'

Name Robin den Braber Date 29 apr 2024 Signature 

APPROVAL OF BOARD OF EXAMINERS IDE on SUPERVISORY TEAM -> to be checked and filled in by IDE's Board of Examiners

Does the composition of the Supervisory Team comply with regulations?

YES	<input checked="" type="checkbox"/>	Supervisory Team approved
NO	<input type="checkbox"/>	Supervisory Team not approved

Comments:

- Chair: Arnold Vermeeren, Mentor: Jeff Love

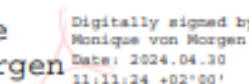
Based on study progress, students is ...

<input checked="" type="checkbox"/>	ALLOWED to start the graduation project
<input type="checkbox"/>	NOT allowed to start the graduation project

Comments:

Sign for approval (BoEx)

Monique von Morgen
Digitaal ondertekend door Monique von Morgen
Datum: 2024.04.30 11:11:24 +02'00'

Name Monique von Morgen Date 30 Apr 2024 Signature 

Personal Project Brief – IDE Master Graduation Project

Name student Eline Peeters

Student number 4,675,509

PROJECT TITLE, INTRODUCTION, PROBLEM DEFINITION and ASSIGNMENT

Complete all fields, keep information clear, specific and concise

Project title Creating an experience to connect citizens of Rotterdam to the ideas of Desiderius Erasmus

Please state the title of your graduation project (above). Keep the title compact and simple. Do not use abbreviations. The remainder of this document allows you to define and clarify your graduation project.

Introduction

Describe the context of your project here; What is the domain in which your project takes place? Who are the main stakeholders and what interests are at stake? Describe the opportunities (and limitations) in this domain to better serve the stakeholder interests. (max 250 words)

Erasmus (1469-1538) was a humanist, Catholic theologian, philosopher, philologist, and educator born in Rotterdam. Some of his standpoints were freedom of expression, respect for others, knowledge and culture, tolerance and education (Huizinga, 1952). These themes are still relevant in today's society.

The mission of the Rotterdam Public Library (RPL) is to contribute to the personal development of every Rotterdam citizen, to connect them and to enable them to be a critical participant within our society. In the existing Erasmus Experience, the ideas of Erasmus are displayed, and visitors are challenged to discuss with each other topics he mentioned in his work. (figure 1). In addition, Rotterdam Public Library has the biggest collection of Desiderius Erasmus' work in the world (figure 2), and has even been recognised by UNESCO (UNESCO, 2023).

While this experience is nicely designed, there is room for improvement. Design opportunities lie in attracting of more visitors and visibility of the Erasmus Collection. Because many people have visited the experience over the years, there are less visitors. Additionally, displaying the Erasmus Collection requires special conditions and it is therefore not visible yet in the current Experience. Can the Experience connect visitors to this heritage collection, without damaging the historic materials?

Keeping the mission and design opportunities in mind, my goal is to create an experience that connects citizens of Rotterdam to Erasmus' values and raising awareness of how people behave in society.

Huizinga, J., & Erasmus, D. (1952). *Erasmus of Rotterdam*. <http://ci.nii.ac.jp/ncid/BA1418063X>
Unesco. (2023). *Erasmus Collectie*. <https://www.unesco.nl/nl/memory-world/erasmus-collectie>

introduction (continued): space for images



image / figure 1 A part of the current Erasmus experience



image / figure 2 Part of the Erasmus Collection (not visible to the public)

Personal Project Brief – IDE Master Graduation Project

Problem Definition

What problem do you want to solve in the context described in the introduction, and within the available time frame of 100 working days? (= Master Graduation Project of 30 EC). What opportunities do you see to create added value for the described stakeholders? Substantiate your choice.
(max 200 words)

Rotterdam Public Library initiated this project to improve or change the current experience. The current Erasmus experience has been open since 2016. Here, visitors are challenged to discuss with each other topics that are still part of our society today.

For this graduation project, I want to primarily focus on the mission statement of RPL: Contributing to the personal development of every Rotterdam citizen, to connect them and to enable them to be a critical participant in within our society. I think there will be real value in connecting the ideas of Erasmus to the morals of citizens of Rotterdam and create an experience around this.

Limitations of this project consist of exploration of who citizens of Rotterdam contain and how to reach them. Additionally, of the design opportunities mentioned above (visibility of the Erasmus collection and attracting more visitors), it should be made clear in the first weeks of the project which direction (if any of these) I will take.

The design challenge is making citizens of Rotterdam reflect on certain ideals of Erasmus, such as respect and openness, and how they manifest in Dutch (or more specifically Rotterdams) society.

Assignment

This is the most important part of the project brief because it will give a clear direction of what you are heading for. Formulate an assignment to yourself regarding what you expect to deliver as result at the end of your project. (1 sentence) As you graduate as an industrial design engineer, your assignment will start with a verb (Design/Investigate/Validate/Create), and you may use the green text format:

My goal is to design an experience that uses the ideas of Erasmus to make citizens of Rotterdam reflect on current societal topics in or around the Rotterdam Public Library

Then explain your project approach to carrying out your graduation project and what research and design methods you plan to use to generate your design solution (max 150 words)

In this project, I will employ a Design Thinking Approach, divided in three phases: research, Ideation & conceptualization and evaluation. The research phase consists of discovery and definition. Starting with understanding Erasmus' ideas and current societal issues through desk research. Additionally, interviews with experts, such as Erasmus scholars and people working in the library to create further understanding of Erasmus. Then, using context mapping to gain understanding of what citizens of Rotterdam find important. Analyzing these results and converge them into a design goal.

The ideation and conceptualization phase starts with brainstorming and will then move on to prototyping, starting with ultra rapid prototyping and co-creation. In this phase, I will choose which technology is best suited for my final prototype and develop the skills needed for this. The phase ends with a final concept with working prototype.

In the evaluation phase, I will conduct a user test evaluating the final design and reflect on this.

Link to planning: https://docs.google.com/spreadsheets/d/1q3_12I7nabpnJtCicH1cZbD3KaYE7tmZWPGJJudvIOM/edit?usp=sharing

Project planning and key moments

To make visible how you plan to spend your time, you must make a planning for the full project. You are advised to use a Gantt chart format to show the different phases of your project, deliverables you have in mind, meetings and in-between deadlines. Keep in mind that all activities should fit within the given run time of 100 working days. Your planning should include a **kick-off meeting, mid-term evaluation meeting, green light meeting and graduation ceremony**. Please indicate periods of part-time activities and/or periods of not spending time on your graduation project, if any (for instance because of holidays or parallel course activities).

Make sure to attach the full plan to this project brief.
The four key moment dates must be filled in below

Kick off meeting

29 feb 2024

Mid-term evaluation

7 mei 2024

Green light meeting

8 aug 2024

Graduation ceremony

5 sept 2024

In exceptional cases (part of) the Graduation Project may need to be scheduled part-time. Indicate here if such applies to your project

Part of project scheduled part-time	✓
For how many project weeks	27
Number of project days per week	4,0

Comments:
Graduation for 4 days a week because of health reasons.
Runs a little longer because of national holidays.

Motivation and personal ambitions

Explain why you wish to start this project, what competencies you want to prove or develop (e.g. competencies acquired in your MSc programme, electives, extra-curricular activities or other).

Optionally, describe whether you have some personal learning ambitions which you explicitly want to address in this project, on top of the learning objectives of the Graduation Project itself. You might think of e.g. acquiring in depth knowledge on a specific subject, broadening your competencies or experimenting with a specific tool or methodology. Personal learning ambitions are limited to a maximum number of five.
(200 words max)

I am somebody who - apart from being passionate about design - is interested in human behavior and societal challenges. My initial findings about Erasmus intrigued me. I am compelled by his way of thinking and his progressive ideas, considering the time he was born. Moreover, I am interested in learning more about Rotterdam. As someone who recently moved there, I am constantly amazed by the different cultures and people all blended into one city. I am keen to explore a part of these citizens further and find a meaningful connection between them and Erasmus.

My two main goals are:

- Developing (user) research skills.** As a DFI Student, I am interested in better understanding wishes, needs, challenges and the context of the target group. Additionally, I want to dive into a topic that I am not yet familiar with, namely Erasmus, and see how I can apply this knowledge in a designerly way.
- Developing prototyping skills.** I want to further develop my prototyping skills to create a functional and interactive concept at the end of my graduation. This includes learning a new skill, such as using Artificial Intelligence, Virtual Reality or further developing existing skills, such as Arduino.

Welke waarden zijn belangrijk voor jou?

Which values are important to you?

Plak een sticker op het vlakje met de stellingen waar jij het mee eens bent

Paste a sticker on the statement(s) you agree with

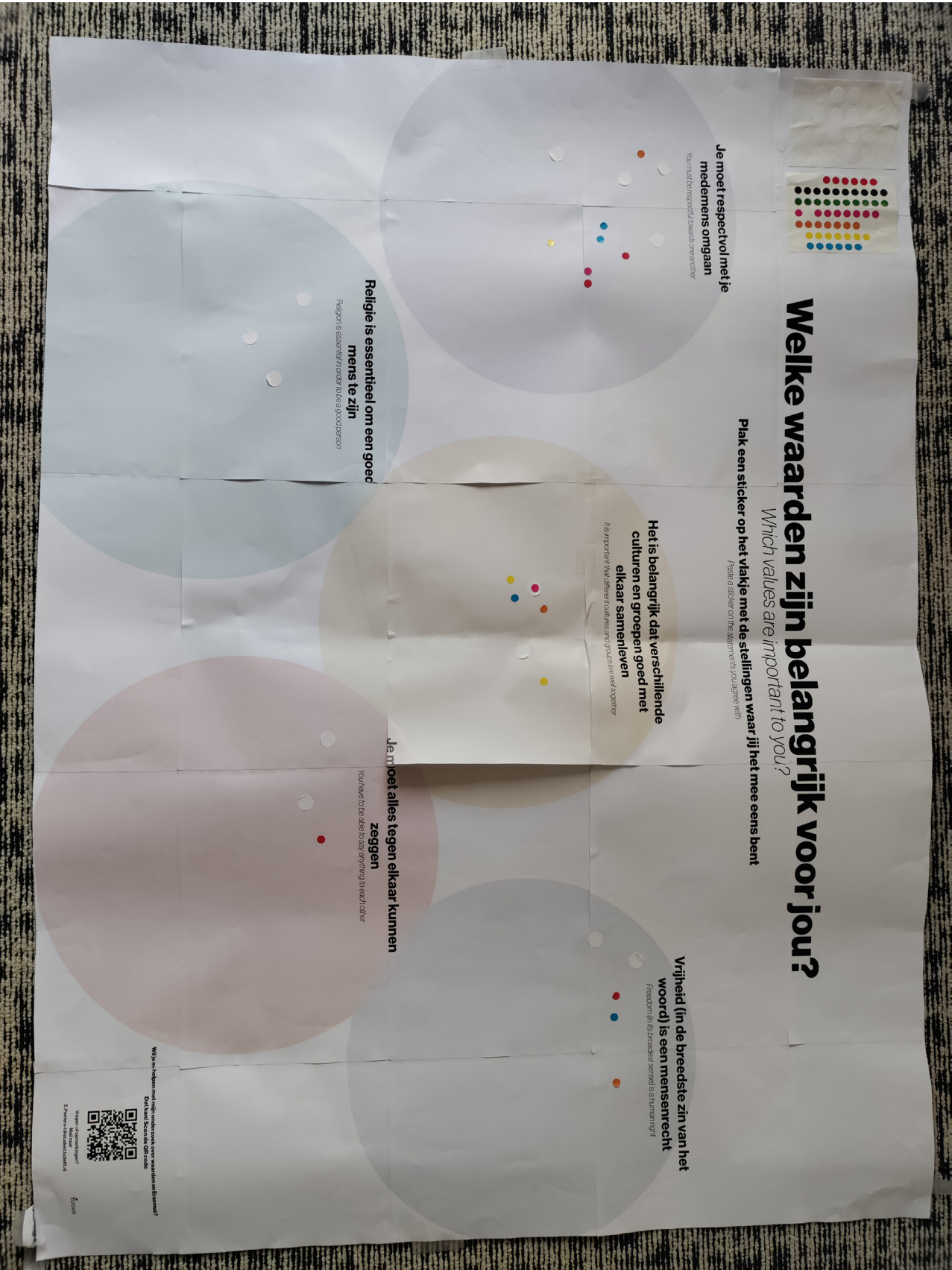


B Statement board

C

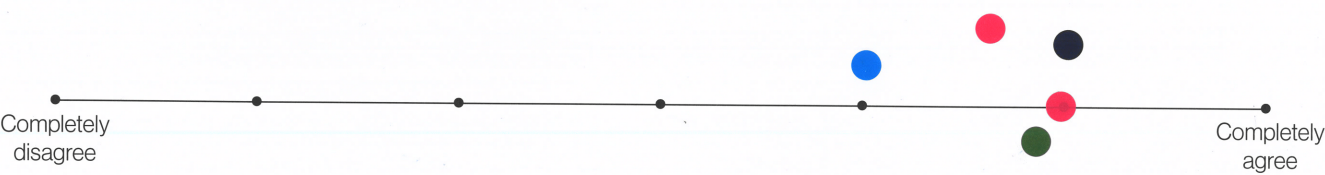
Sensitising exercise

Results after one afternoon



How much do you agree with the following statement:

"You must be respectful towards one another"



it depends...

needs to be recipirical

What does respect mean to you?

😊 be polite responsive
showing kindness

a starting point of a relationship

Equal. Being inclusive
Listening in the conversation
mutual thing

- to people
- to culture
- to environment earth?

What is a positive experience with respect you've had lately?

Different countries / cultures show different attitude to guests.
When I was in Italy / Spain / Northern Europe I felt greatly respected in restaurants and hotels.

Greetings from strangers

Being grateful to your time contribution
even if you reject him/her

respect my privacy space
arrive on time everytime

What is a *negative* experience with respect you've had lately?

paying too much attention on hierarchy when greeting others

In the dormitory, my roommate chatted with her boyfriend till late night, ignoring other people's feelings

went to be late for a meeting not respect for my time

~~At~~ No eye contact when asking for sth. at the reception with the staff.
Ignorance.

In what ways do you think respect contributes to a harmonious and inclusive society?

In the design area, the designer considers about feelings and needs of some disabled people. This is kind of showing respect and contributing to an inclusive society.

How do you believe respect influences relationships?

willing to understand other people

respect is essential for the beginning of a relationship (friendship). with time, when you are very close to the other, the respect can be not that important anymore.

Too much respect ~~could~~ ^{may} also distant you from another person

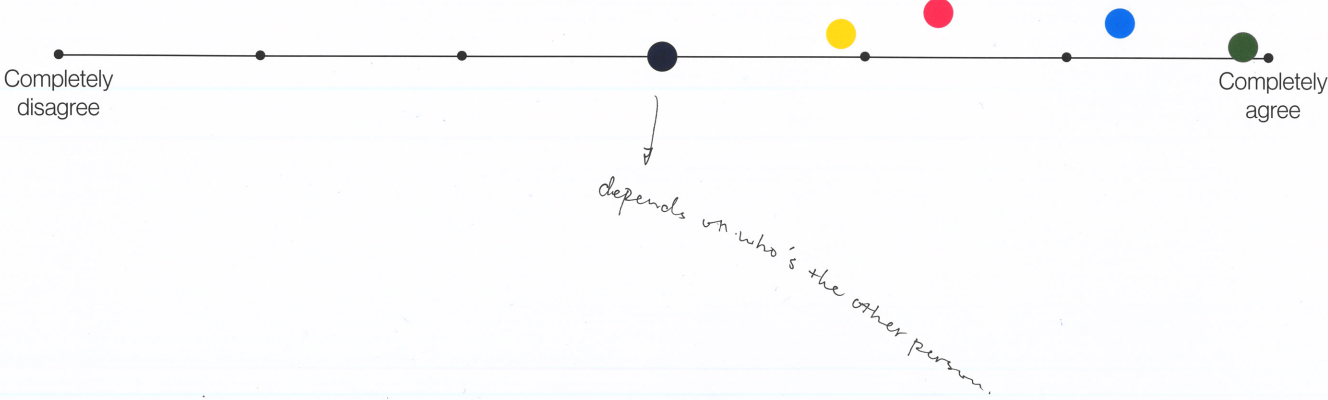
Sometimes the most disrespectful side only shows to the closest people around us. But we never recognize that.

How can individuals navigate situations where their values of respect conflict with societal norms or expectations?

When I was very young, my mom brought me to visit one of her colleague. The lady gave me a chocolate. When we were leaving, I said to the lady, "Please give me some other snacks when we meet next time!" At that time, I didn't mean to ask for snacks, but to hope meet with her again. But later, my mom ~~h~~itted me for my disrespect 😞

How much do you agree with the following statement:

"You must be respectful towards one another"



What does respect mean to you?

mensen in hun waarde
understanding
thinking twice
listening
not overtalking
be open to another's feelings
taking them seriously
agree to disagree
attention to somebody
giving space
time
physical
civility
argue on the content but not the person
romb

What is a positive experience with respect you've had lately?

frisian politician being discriminated
↳ his colleagues stood up for him
free day for children for suikerfeest
admiring the person giving a concert
admitting your fault
returning heritage to their home country
somebody making a nice post about work
Holding open the door
being on time

What is a *negative* experience with respect you've had lately?

not giving any space to someone in a meeting

Talking in the silent part in the train

doing something else when someone is talking to you

oud en nieuw
↳ troep

Looking down on someone

manspreading
loud music in metro/
tram

somebody not helping with the kinderwagen in the train

somebody forcing you to some kind of task

In what ways do you think respect contributes to a harmonious and inclusive society?

public holidays

autonomous people
↳ respect for law

trust in authority has led to a decline in respect

dislike paying taxes

doing things for the greater good

→ solidarity

How can you make good policy if you don't get out of your bubble?

being less segregated
↳ nobody talks to each other anymore

How do you believe respect influences relationships?

it improves relationships
- listening to each other

trust

open mindedness

private relationships
↳ crucial

interest in each other

learning something about the other

giving up something
sacrificing

How can individuals navigate situations where their values of respect conflict with societal norms or expectations?

silence

explaining

adaptation

advocacy

flexibility

accepting multiple truths

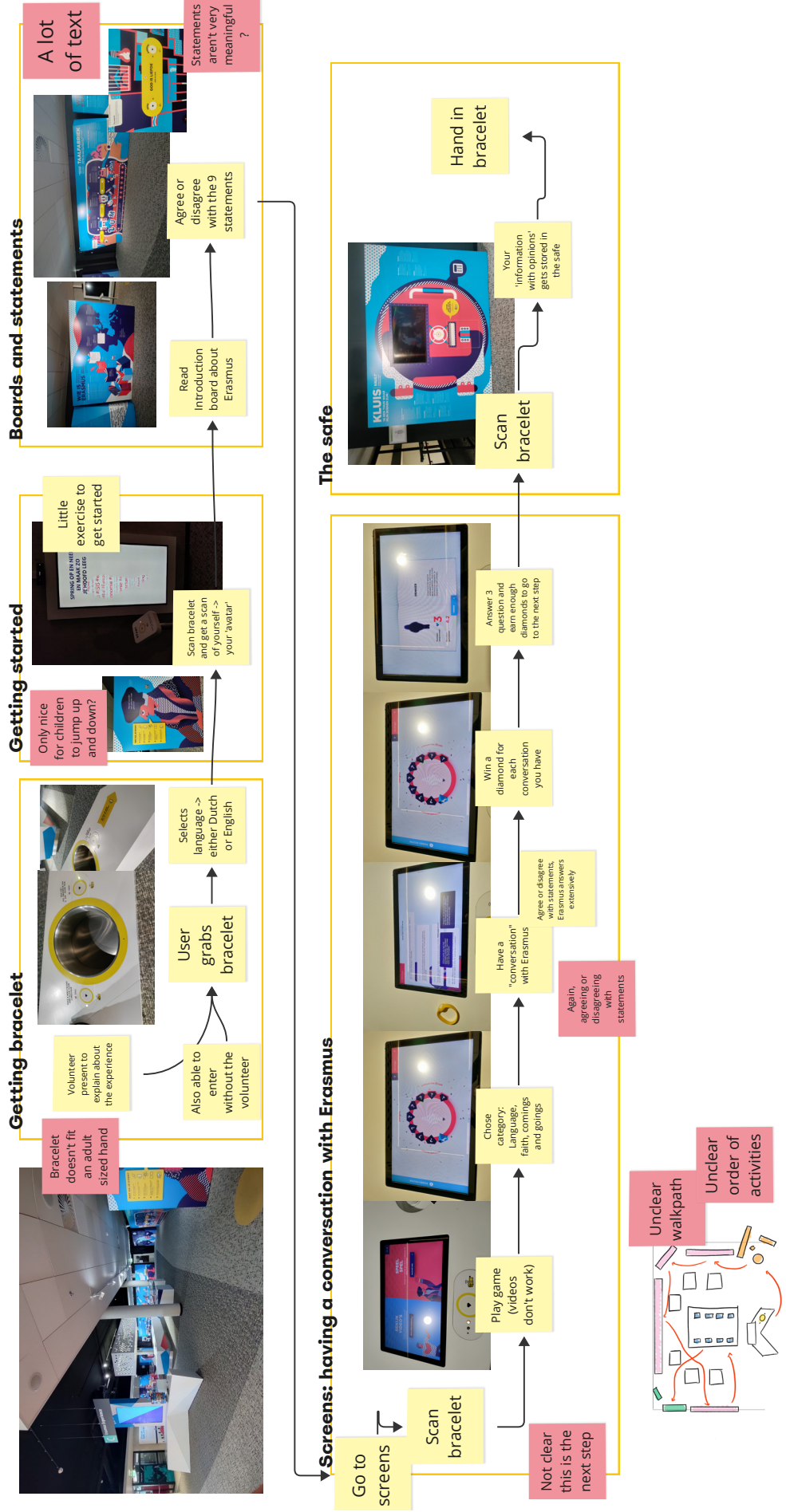
come up with new norms

comedy

starts with people opening your eyes in blind spots

D

Evaluation current Erasmus Experience



Evaluation

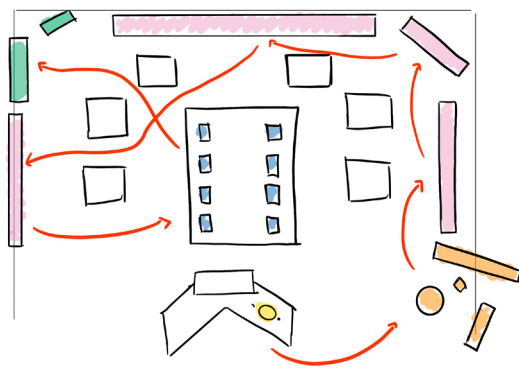
Evaluation based on cognitive walkthrough.
Some adjustments made that were necessary.
Conversations with people who completed the experience.

Aim is to find different pain points in the usability, but also in the content. Different pain points are divided into categories.

N=3 visitors were interviewed.

Unclear walkway

The Experience consists of different steps that are all in a different location. It is therefore unclear where to go without previous guidance.



Duration

The total Experience takes around 20 minutes or more if all the steps are completed. This is a long time, especially considering that a considerable amount of people visiting the library are only there for a short amount of time. For a school trip this is fine, it could fill an hour if the steps are done thoroughly. However, for the 'unaware visitors' this might take too long. A number of factors contribute to this:

- Firstly, as mentioned before, the Experience consists of several different steps. All the steps must be completed in order to finish the Experience. Considering each step takes a few minutes, the Experience ends up taking a lot of time to complete.
- Additionally, the boards are filled with text. Being able to read through all the text takes a considerable amount of time. The visitor is of course able to skim read the text. However, important information might get overlooked and the message might not come across. Not to mention that the amount of text feels overwhelming when glanced at first.

Feeling forced

- It makes it hard to say no when being approached by a volunteer. The volunteers are there to explain the Experience and give some background information. However, some visitors have mentioned that the volunteer

"I didn't want to do it at first because I had little time but I felt almost forced to participate because the kind volunteer approached me and would not stop talking" - anonymous visitor

- As mentioned before, the Experience consists of several different steps that need to be completed in order to finish. This makes it hard for the visitor to only participate in parts of the experience.

Unclear target group

Throughout the Experience, it is unclear who the main target group is supposed to be. As discussed before, the main target groups of the Experience are both school groups of children and the unaware visitor. These groups vary a lot in needs and wants, making this Experience not suitable for both.

Not suitable for children/ teens:

- The images on the boards and style seem to be aimed at younger children, due to the use of colour and the abstract way of drawing
"Teenagers often find the visualisation not appealing, like it's made for little children" - employee of library
- The text on the boards are difficult for children or young teens to understand.
"We sometimes have difficulty targeting the younger children, because the concepts on the boards are difficult for these younger kids to understand" - employee of library

Not suitable for adults

- The exercises throughout the Experience, like jumping up and down at the beginning of the experience would not be suitable for adults.
- The bracelet doesn't fit an adult sized hand.
- Content of the board lacks depth to suit adults.

Visitors of library were often not aware of the existence of the Erasmus Experience

E

Pilot study Design Fiction

Pilot session

Method

N=3. Booklet gets handed out.
Participants are given the time to read the booklet and are then asked to discuss. Let a natural discussion commence, without a lot of input from me. Goal is to see whether natural discussion would occur or if there should be more guidance from me to lead the group. Also see whether the stories are good, or whether I should go for a different aim

Results

- Natural discussion did emerge from the group without any given input. The booklet seemed to be enough. Though, important to note these were friends, so it might be different for other groups
- The stories were based on AI. However, the stories were too similar and therefore the discussion become focused and one-sided. More differing stories might be in preference



Pilot session booklet



Worklife



The Hidden Toll of AI in the Workplace: Boredom and Stagnation

The integration of artificial intelligence into the office environment, initially celebrated as a breakthrough in efficiency, has revealed a troubling downside. As AI systems take over routine tasks, employees are left grappling with profound boredom and a lack of creative engagement.

With AI handling everything from data entry to report generation, the daily workload for many office workers has significantly decreased. Yet, employees are still expected to be present for the traditional 40-hour workweek, leading to an environment of enforced idleness. The absence of meaningful tasks leaves workers feeling disengaged and unfulfilled.

"AI has made my job almost redundant," says Lisa Turner, a financial analyst. "I spend most of my day trying to look busy, but there's nothing to challenge me or let me use my skills."

This stagnation is taking a psychological toll. The lack of stimulating work has led to decreased job satisfaction and a sense of purposelessness among employees. The office, once a place of collaboration and innovation, now feels like a waiting room where creativity goes to die.

Companies face the difficult task of redefining roles and finding ways to harness their employees' potential in this new AI-driven landscape. Without addressing these issues, the promise of AI may be overshadowed by the reality of a disengaged and demoralized workforce.

Celebrities



"The Rise of Digital Stars: How Deepfakes and AI are Changing Hollywood"

In a groundbreaking shift, the glittering world of Hollywood is witnessing a revolution unlike any before. The era of human movie stars is fading as deepfakes and artificial intelligence (AI) take center stage, reshaping the landscape of cinema.

With advancements in deepfake technology and AI algorithms, filmmakers now have the power to craft entirely digital actors with stunning realism. These virtual performers, devoid of human flaws and limitations, are captivating audiences worldwide.

Gone are the days of relying solely on human talent. Directors and producers are embracing this new era of filmmaking, where digital stars can be tailored to fit any role, from historical figures to fantastical creatures.

"The possibilities are endless," says renowned director Ava Chen.

"With deepfakes and AI, we can bring to life characters and stories that were once unimaginable. It's a game-changer for the industry."

While this technological leap offers unprecedented creative freedom, it also raises ethical questions and challenges. Critics argue that the proliferation of digital actors could jeopardize job opportunities for human performers and erode the authenticity of storytelling.

Nevertheless, the allure of digital stars continues to grow, with audiences eagerly embracing these mesmerizing creations. As Hollywood navigates this new frontier, one thing is certain: the age of digital actors has arrived, forever altering the landscape of cinema as we know it.

Personal relations



The Silence of Society: The Decline of Unprompted Conversations in a Digital World

The dominance of online communication has profoundly altered the way we interact. Most conversations now occur through digital platforms, rendering spontaneous, unprompted dialogue in real life almost extinct.

Public spaces once filled with the buzz of casual chatter are now eerily quiet. People, absorbed in their digital devices, rarely engage in impromptu conversations with strangers or even acquaintances. The natural flow of spontaneous dialogue has been replaced by the structured nature of online messaging and social media interactions.

"People just don't talk to each other anymore," observes Dr. Elena Vasquez, a sociologist studying the impact of digital communication. "The convenience and immediacy of online platforms have made face-to-face interactions seem almost redundant."

This shift has profound implications for society. The decline of spontaneous conversation is eroding our ability to connect on a personal level, reducing opportunities for serendipitous encounters and the rich, unpredictable exchanges that come with them. Social skills, empathy, and the ability to read body language are all in decline as digital interfaces mediate more of our interactions.

The psychological impact is significant as well. Many report feeling more isolated despite being constantly "connected." The depth and quality of relationships suffer when real-life interactions are minimal and conversations are premeditated rather than organic.

As we navigate this digital landscape, the challenge lies in balancing the efficiency of online communication with the irreplaceable value of genuine, spontaneous human connection.

Students



AI Overdependence: The Decline of Essay Writing Skills in 2035

A troubling trend is emerging in education: students are increasingly unable to write proper essays, a skill once fundamental to academic success. The culprit? Overdependence on artificial intelligence.

For years, AI-powered tools have assisted students with writing tasks, offering everything from grammar checks to full-fledged essay generation. While these technologies were initially intended to aid learning, they've inadvertently created a generation of students who struggle to compose coherent and original written works without digital assistance.

"Students now rely heavily on AI to write their essays," says Dr. Sarah Mitchell, an education expert. "Many can't structure a proper argument or develop their own ideas independently. It's a serious issue."

Teachers report a noticeable decline in writing quality and critical thinking skills. Assignments that once required deep analysis and thoughtful composition are now often outsourced to AI, leaving students ill-prepared for higher education and professional environments where original writing is essential.

As educators and policymakers seek solutions, there's a growing call to integrate more traditional writing exercises into curricula and reduce dependence on AI tools. The goal is to ensure that while students can leverage technology, they must also retain the ability to think and write independently.

The challenge is clear: in an age dominated by artificial intelligence, how do we preserve the essential human skill of writing? The future of education may hinge on finding the right balance between technological assistance and genuine skill development.

F Signals

Society

“Segregation of society is on the rise. Algorithms, gentrification and other factors have lead to people only interacting and seeing things they agree with”



"Racisme, pesten en seksisme binnen politie Rotterdam-Centrum"
Zes agenten van de politie in Rotterdam-Centrum zijn gearrestueerd na een razzia op een woning. De politie heeft daar een groot aantal racistische en seksistische voorwerpen gevonden.



Nieuw Nederland
Het is een organisatie die zich inzet voor de integratie van vluchtelingen in de Nederlandse samenleving. Ze organiseren taallessen en andere activiteiten om de integratie te vergemakkelijken.



"Veel jonge kiezers willen radicalere keuzes dan de democratie toelaat"
Een onderzoek heeft uitgewezen dat een groot aantal jonge Nederlanders voorstander is van radicale politieke keuzes, zoals een meer autoritaire regering.

Environment

“The only cars that are allowed in the city centre of Rotterdam are self-driving taxis like Waymo”



Minder auto's, meer fietsen
In Rotterdam wordt er steeds meer op de fiets gereden. Dit heeft geleid tot een afname van het aantal auto's op de weg.



EU-janten stemmen voor meer natuur
Burgemeester van Rotterdam heeft aangekondigd dat er meer natuur wordt gecreëerd in de stad.



Mileuzone Stad
Rotterdam heeft een 'Mileuzone' gecreëerd, een gebied waar er veel meer planten en dieren worden geteeld.



Uber, Lyft shares soar as ridership sets records
De populariteit van de deelserviceauto's Uber en Lyft is toegenomen, wat heeft geleid tot een stijging van de aandelenkoersen.



Rotterdam Future
Rotterdam heeft een toekomstvisie ontwikkeld, waarin wordt beschreven hoe de stad er in 2040 moet uitzien.

Safety

“To keep people safe with all the ongoing violence, the municipality is keeping constant watch via new surveillance technology”



Man beschiet op straat in Rotterdam
Een man is gearrestueerd na een schietpartij op straat in Rotterdam. De politie is op zoek naar de dader.



Politie Rotterdam
De politie in Rotterdam heeft aangekondigd dat er meer surveillance wordt ingezet om de veiligheid te verbeteren.



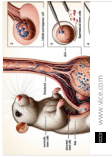
'Zorgen om oorlog bij die hele buurt raakt'
Burgemeester van Rotterdam heeft aangekondigd dat er zorgen zijn over de veiligheid in de stad.



'Aanslag is laffe daad'
Een aanslag op een politievoerster is veroordeeld tot een levenslange gevangenisstraf.

Personal relations

“Most communication happens online, therefore people don't speak to each other unprompted in real life anymore”



Public Genital Incident
Een man is gearrestueerd na een openbaar genitaal incident in Rotterdam.



Wie kan en wil er nog sociaal zijn?
Een artikel over de toename van sociale isolatie in Nederland.



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Breedste zorgen om gebruik
Een artikel over de zorgen van Nederlanders over het gebruik van sociale media.

Society

"Segregation of society is on the rise. Algorithms, gentrification and other factors have lead to people only interacting and seeing things they agree with"

Articles



 nos.nl

'Racisme, pesten en seksisme binnen politie Rotterdam-Centrum'

Zes agenten die werken in Rotterdam-centrum hebben anoniem hun verhaal gedaan bij de NRC.



 nos.nl

'Veel jonge kiezers willen radicalere keuzes dan de democratie toelaat'

Uit onderzoeken blijkt dat jonge Europeanen niet per se vertrouwen hebben in de democratie.

Signals

- Many young voters want more radical choices than democracy allows
- A large majority of Dutch people are concerned about polarisation. They think of deteriorating manners and hardening in political and public debate
- Increasing racism and discrimination police department Rotterdam



 www.scp.nl

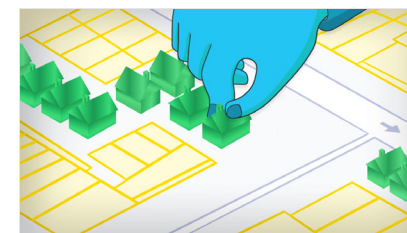
Driekwart van de Nederlanders denkt dat polarisatie toeneemt

Ergernis over harde toon en extreme uitingen in politieke en publieke debat Een ruime meerderheid van de Nederlanders maakt zich zorgen over polarisatie. Ze denken daarbij aan verslechterde omgangsvormen en verharding in het politieke en publieke debat....

Environment

"Segregation of society is on the rise. Algorithms, gentrification and other factors have lead to people only interacting and seeing things they agree with"

Articles



 www.vpro.nl

Minder auto's, meer inwoners: de Nederlandse stad anno 2050

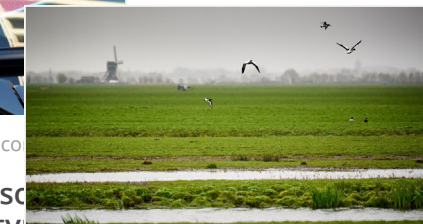
Hoe slagen we erin om er in 2050 bijna twee miljoen woningen bij te bouwen? Door de grote steden uit te breiden, te verdichten én te vergroenen, zegt Carolien Gehrels. En daar moet de auto voor wijken.



 www.washingtonpost.com

Uber, Lyft shares soar despite earnings ty as ridership sets records

Uber and Lyft saw their stock val soar Wednesday as both compar signaled that they are finally mak money amid a surge in ridership



 nos.nl

EU-landen stemmen toch in met fel bediscussieerde natuurherstelwet

Met de wet wil de Europese Commissie de natuurgebieden in Europa herstellen.



 www.binnenlandsbestuur.nl

Rotterdam wil veel luchtstraatjes

Rotterdam onderzoekt of met een aangepaste ontheffingsvergoeding het optoppen kan worden gestimuleerd.



 urban-future.org

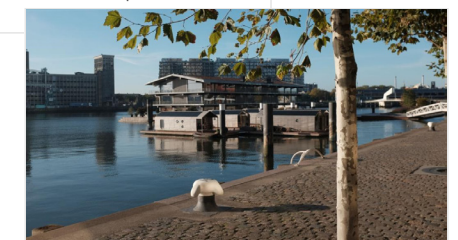
Rotterdam - Urban Future

June 5-7, 2024 Rotterdam growth and sustainability hand. With over 170 nati city has a diverse, unique long history as a pioneer transformations. In Rotte government, business i...

Rotterdam plans to be a fully circular society and climate-neutral city by 2050. The city has more than 50 new measures to reduce greenhouse gases and stimulate a CO2-free economy. It prioritizes projects that reduce energy consumption in households. Rotterdam promotes urban greening to mitigate heat island effects.

Signals

- Stricter environmet laws for cars inner city Rotterdam 2025
- Rottedam plan to be a fully circular society and climate neutral-city by 2050
- Uber, lyft and bolt are soaring in stock values
- Self driving taxi Waymo is on the rise



 www.rotterdam.nl

Milieuzone Stad Rotterdam

Officiële website van gemeente Rotterdam. Hier vindt u alle informatie, nieuwsberichten en dienstverlening van gemeente Rotterdam.

Safety

“To keep people safe with all the ongoing violence, the municipality is keeping constant watch via new surveillance technology”

Articles



Man beschoten op straat in Rotterdam-Noord, verdachte nog spoorloos

Op de Freslastraat in Rotterdam-Noord is dinsdagavond laat een man beschoten. Hij raakte daarbij niet gewond. Er is nog niemand aangehouden.

Redactie Rotterdam 19-05-24, 10:07



Politiechef Rotterdam geschokt door uitkomsten onderzoek

Fred Westerbeke zegt dat er geen ruimte meer is voor pesterijen, vrouwenvriendelijk gedrag en racisme.

Signals

- Worries about war among Dutch increased
- Man shot in street Rotterdam-Noord
- Rotterdam has 42 camera's per every square kilometer, more are coming
- Sense of safety in Rotterdam declines

Relations

“Most communication happens online, therefore people don't speak to each other unprompted in real life anymore”

Articles

Hoe afzondering je sociale vaardigheden kan beïnvloeden

Artikel door Stars Insider • 2 w



Hoe afzondering je sociale vaardigheden kan beïnvloeden

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www.msn.com



Groeiende zorgen om gebruik sociale media tieners: 'Moet weer normaal worden om niet bereikbaar te zijn'

Het aantal jongeren dat problemen ervaart door het gebruik van sociale media neemt snel toe. Maar liefst een op de acht komt slaap tekort of raffelt huiswerk af. Velen vinden het moeilijk met sociale media te stoppen en zeggen er zelfs afspraken met vrienden voor af.

Ellen van Gaalen 28-05-24, 06:00 Laatste update: 28-05-24, 09:41

AD **www.ad.nl**

DPG Media Privacy Gate

Signals

- Influenced by years of neoliberal rule, everyone has been thrown back on themselves
- Growing concerns over social media use teenagers: 'must become normal again to be inaccessible'
- With the advent of dating apps, people are meeting fewer and fewer people in real life



www.bnnvara.nl

Wie kan en wil er nog sociaal zijn? - Joop - BNNVARA

Onder invloed van jarenlang neoliberal bewind is iedereen teruggeworpen op zichzelf.



Session Design Fiction

Guide

Co creation session

Practicalities

- Make sure everyone signs consent form
- Make sure everyone grabs lunch
- Let people shortly introduce themselves

Introduction

Voor mijn master eindproject van mijn master Design for Interaction ben ik bezig om de Erasmus Experience in Rotterdam te herontwerpen. Dit is een experience in de Centrale Bibliotheek in Rotterdam die gaat over Erasmus.

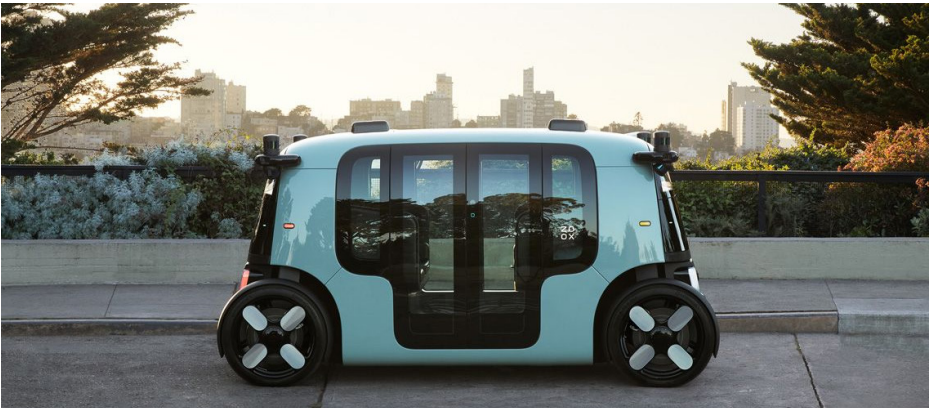
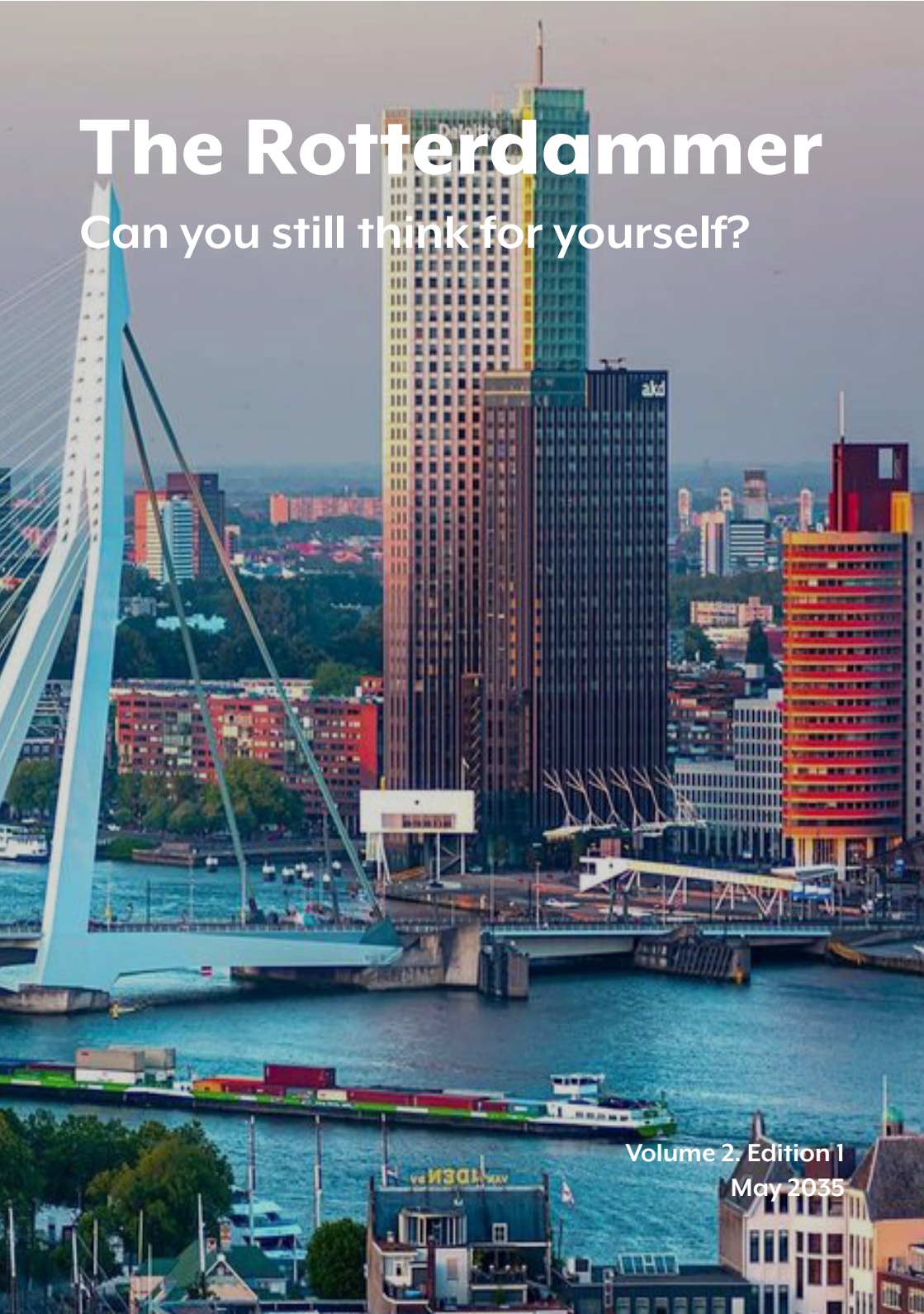
Voor mijn nieuwe experience wil ik de waarden van Erasmus gebruiken om toekomstscenario's te creëren om zo mensen aan het denken te zetten over hun eigen waarden en wat ze belangrijk vinden. Voor deze sessie is voor mij discussie belangrijk. Ik wil jullie vragen om met elkaar in gesprek te gaan aan de hand van het magazine. Alles mag je zeggen en niks is fout.

In front of you there's a magazine from 2035. As you can see in the magazine, the date of the magazine is May 2035. I want you to look at the magazine and read some of the stories. Are there any stories you would like to discuss? Things that stick out to you? Things that you agree with/ or disagree with?

Let people have a look and see where the discussion leads. The main incentive is to keep an open discussion between people. People are allowed to have disagreeing opinions, but make sure it stays respectful.

Main goals of the session

- How are these articles perceived by people? Are they believable?
- What in these magazines do they get triggered by?
 - Pictures?
 - Text?
 - Headers?
 - Subjects?
 - What about the subjects?
- What do they agree or disagree with? And why?
- What leads to discussion and reflection?
- What speaks to people? What do they like? What intrigues them?



City Center Reserved Sofor Self-Driving Taxis

Rotterdam has taken a bold step towards a futuristic, eco-friendly urban environment by exclusively allowing self-driving taxis, such as those operated by Waymo, to navigate its city center. This pioneering move aims to reduce traffic congestion, lower emissions, and enhance safety for pedestrians and cyclists.

The transformation has been dramatic. The bustling heart of Rotterdam is now dominated by sleek, autonomous vehicles efficiently ferrying passengers to their destinations. These self-driving taxis, powered by cutting-edge AI and electric propulsion, operate seamlessly, providing a reliable and eco-friendly alternative to private car ownership.

“Restricting the city center to self-driving taxis has revolutionized urban mobility,” says Mayor Laura van Dijk. “We’ve seen a significant drop in traffic accidents and pollution levels, making Rotterdam a cleaner and safer place to live and work.”

Residents and visitors alike have praised the convenience and efficiency of the system. With fewer vehicles on the road, public spaces have been reclaimed for parks, pedestrian zones, and bike lanes, fostering a more vibrant and livable city center.

However, the transition has not been without challenges. Traditional taxi drivers and car owners have had to adapt to new regulations and find alternative routes or modes of transport. The city has implemented comprehensive retraining programs to support those affected by the shift.

As Rotterdam leads the way in autonomous urban transportation, other cities around the world are watching closely, considering similar measures to create smarter, more sustainable urban environments.



Enhanced Surveillance Ensures Safety Amid Rising Violence

Advanced surveillance network deployed

A new extensive surveillance network to counteract increasing violence and ensure public safety has been implemented. The municipality has deployed advanced AI-powered cameras and drones across the city, capable of real-time monitoring and rapid response to incidents.

Prioritizing Public Security

These state-of-the-art systems are strategically placed in high-risk areas and public spaces, providing continuous oversight. The AI technology can identify suspicious behavior and potential threats, alerting authorities instantly.

"Ensuring the safety of our residents is our top priority," says Mayor Laura van Dijk. "Our advanced surveillance network allows us to respond quickly and effectively to any situation,

detering crime and enhancing public security."

Balancing security and privacy

While the increased surveillance has led to a notable reduction in violent incidents and quicker resolution of crimes, it has also sparked debates about privacy and civil liberties. Many residents appreciate the heightened security, but some express concerns over constant monitoring and potential misuse of data.

The municipality has pledged to maintain transparency and strict regulations to address these concerns, ensuring that the surveillance measures are used responsibly and ethically.

As Rotterdam pioneers this high-tech approach to urban safety, other cities facing similar challenges are looking to its model as a potential solution for maintaining public order in an increasingly volatile world.



Digital Echo Chambers And Gentrification Responsible For The Rise Of Societal Segregation

A new form of societal segregation is grappling Rotterdam driven by advanced algorithms, gentrification, and digital echo chambers. These forces have created pockets of homogeneity where residents increasingly interact only with those who share similar backgrounds, beliefs, and economic statuses.

Algorithms designed to personalize content and services have inadvertently isolated individuals into digital bubbles, reinforcing existing biases and limiting exposure to diverse perspectives. Social media platforms and tailored news feeds ensure that people see and hear only what aligns with their preexisting views.

"Gentrification has further deepened this divide," says urban planner Marieke Jansen. "As affluent areas flourish, lower-income residents are pushed to the outskirts, reducing opportunities for

meaningful cross-cultural interactions."

This growing separation is evident in daily life. **Neighborhoods once known for their vibrant, multicultural fabric are becoming increasingly insular.** Schools, workplaces, and social venues reflect these divides, with limited interaction across different social strata.

The municipality is aware of the issue and is exploring initiatives to foster inclusivity, such as mixed-income housing projects and community events aimed at bridging gaps. However, reversing the trend is challenging in a city increasingly shaped by technology and economic forces.

As Rotterdam faces this modern segregation, the challenge lies in finding ways to restore social cohesion and ensure that its diverse population can once again connect and thrive together.

Personal relations



The Silence of Society: The Decline of Unprompted Conversations in a Digital World

The dominance of online communication has profoundly altered the way we interact. Most conversations now occur through digital platforms, rendering spontaneous, unprompted dialogue in real life almost extinct.

Public spaces once filled with the buzz of casual chatter are now eerily quiet. People, absorbed in their digital devices, rarely engage in impromptu conversations with strangers or even acquaintances. The natural flow of spontaneous dialogue has been replaced by the structured nature of online messaging and social media interactions.

"People just don't talk to each other anymore," observes Dr. Elena Vasquez, a sociologist studying the impact of digital communication. "The convenience and immediacy of online platforms have made face-to-face interactions seem almost redundant."

This shift has profound implications for society. The decline of spontaneous conversation is eroding our ability to connect on a personal level, reducing opportunities for serendipitous encounters and the rich, unpredictable exchanges that come with them. Social skills, empathy, and the ability to read body language are all in decline as digital interfaces mediate more of our interactions.

The psychological impact is significant as well. Many report feeling more isolated despite being constantly "connected." The depth and quality of relationships suffer when real-life interactions are minimal and conversations are premeditated rather than organic.

As we navigate this digital landscape, the challenge lies in balancing the efficiency of online communication with the irreplaceable value of genuine, spontaneous human connection.

H

Iterations

Iteration 1

Method

N=3. Paper prototype including the reflection moments. Goal is to see whether the reflection moments work and what improvemets can be made to be made into the Figma prototype

Results

- Needs to be more visually appealing
- Article needs to be presented in another way, this way it's overwhelming
- Too much text presented in one go
- Opinion of others should present opposing view
- Different order of reflection moments

Prototype



Let's begin by answering a statement.
Do you agree or disagree?

Digital communication is just as effective as face-to-face interactions for building deep and meaningful relationships

AGREE DISAGREE

Take some time to read the article



NEXT

Did your opinion about the statement change?



Digital communication is just as effective as face-to-face interactions for building deep and meaningful relationships

YES DISAGREE

This is what others think:

Digital communication is just as effective as face-to-face interactions for building deep and meaningful relationships



Did you think critically about your opinion?

That's what Erasmus did too!

Find out more about Erasmus at the Erasmus Experience on the 3rd floor!



Iteration 2

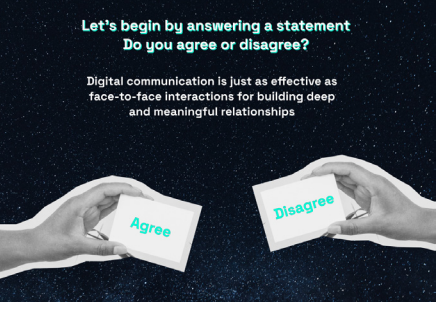
Method

N=3. Figma prototype implementing the comments from previous iteration and the visual style

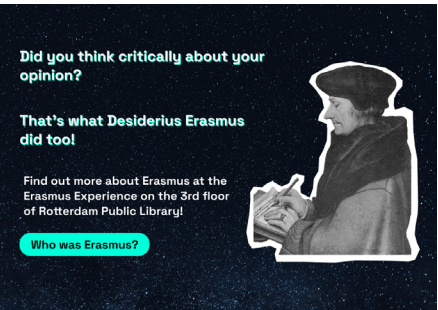
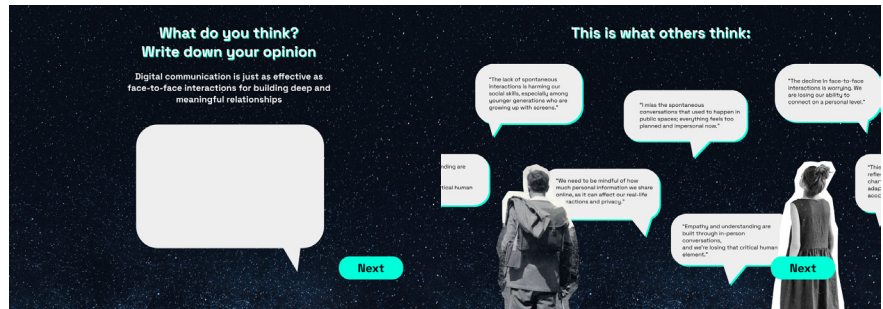
Results

- Adding of scroll function to the article and comments
- Interaction went well
- Different way of portraying the article

Prototype



Next



Iteration 3

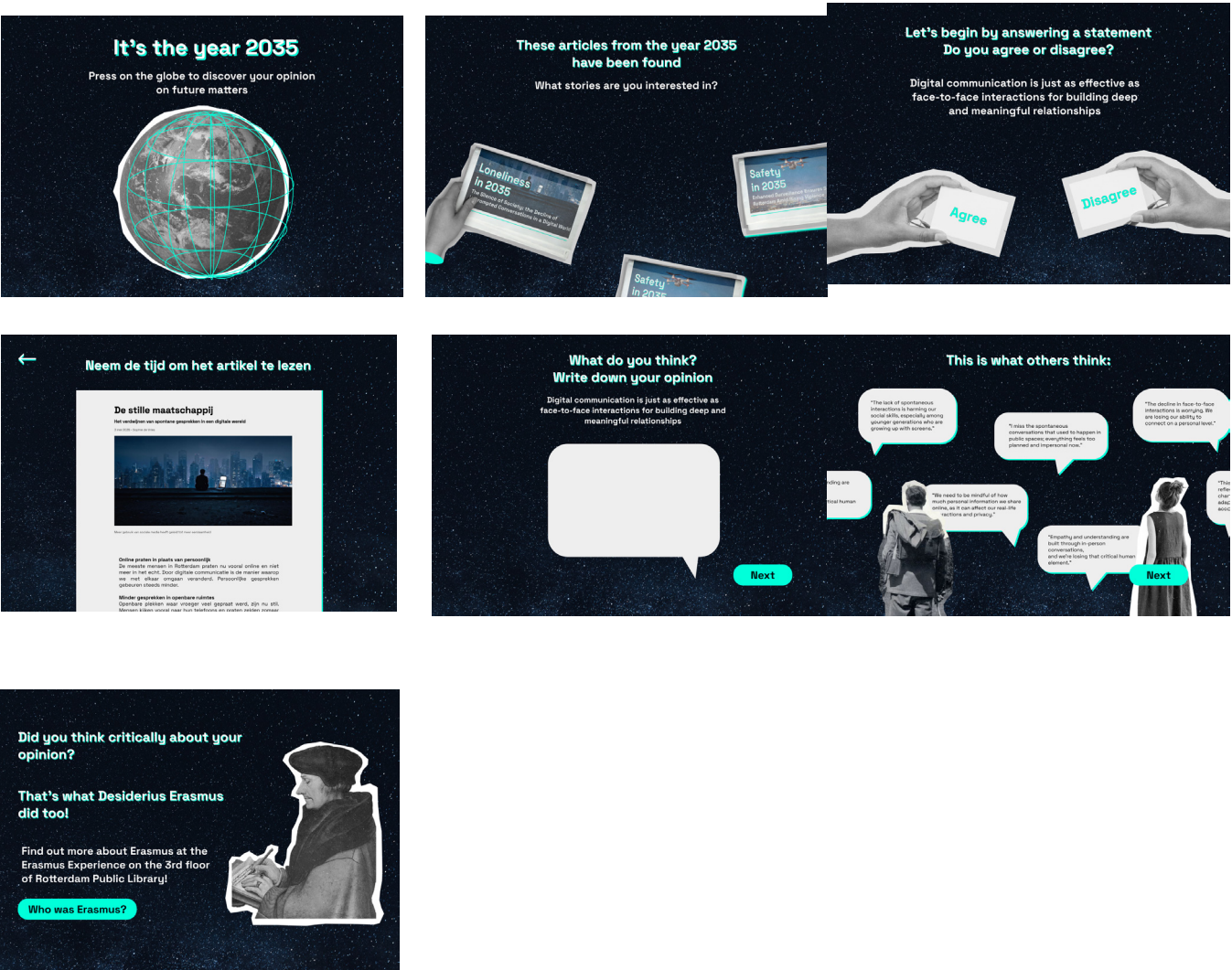
Method

N=4, 2 individual users, one duo.
Goal was to test whether intended inter-
action was clear and if design goal had
potential to be met.

Results

- Adding a final page to indicate a clear
end
- Participants were able to think criti-
cally
- Participants went intuitively through
the interaction
- Add a slider to the final reflection
moment
- Also worked for a duo

Prototype



Evaluation plan

Two parts:

Part 1 - Evaluation of the prototype in the room. Based on observation. Seated away from the prototype, observing people who might interact with it. Gets the most authentic reaction from people.

- Do visitors of RPL interact with my prototype?
- Does it draw attention?
- Do people finish the experience? Do they walk away halfway?

Walking up to them at the end of the experience to ask what they think. Interview questions:

- Heeft de Experience je aandacht vast weten te houden? Waren er momenten waarop je je niet aangesproken of bij de les voelde? Waarom?
- Is dit een plek waar je normaal gesproken de tijd zou nemen voor een experience of tentoonstelling? Waarom wel of niet?
 - Zou je het op een andere plek in de bibliotheek wel of ook interessant vinden?

Part 2 - Evaluation of the design goal.

Doel hiervan is te proberen om te zien of mensen hebben gereflecteerd op hun eigen mening. Hebben ze het idee dat door de verschillende reflectiemomenten zich beter een mening kunnen laten vormen?

Interviewvragen

- Vond je het leuk om dit te doen?
 - Waarom wel/ niet
 - Wat waren aspecten die je leuk vond?
- Vond je het leuk om bezig te zijn met de toekomst? Ben je zelf weleens bezig met de toekomst?

Reflectievragen:

- Hoe liet het scenario over eenzaamheid je voelen?
 - Welke emoties voelde je bij de interactie met dit verhaal?
- Heeft deze opdracht je anders naar dingen laten kijken?
- Ben je anders gaan denken over eenzaamheid?

Contentvragen:

- Spreekt het onderwerp eenzaamheid je aan?
 - Denk je dat dit een probleem zou kunnen zijn in de toekomst?
 - Welke andere problemen zie je voor je in de toekomst?
- Was er een punt in de opdracht waarin je dacht aan je eigen ervaringen?
 - Waren er dingen die je deden denken aan een bepaalde waarde of andere ideeën die belangrijk zijn voor jou

Navragen:

- Zou je het hier thuis over willen hebben?
- Spreekt een sticker je aan? Zou een sticker werken als discussiepunt? Of iets anders, zoals een flyer of QR code?
- Zou je naar aanleiding van deze opdracht de Erasmus Experience willen bezoeken?
 - Waarom wel of niet?
 - Is de link naar Erasmus duidelijk?