



Starving
for

Connection

Starving for Connection - Table of Contents

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Starving for Connection - Introduction

Motivation

The loneliness crisis in Denmark has reached unprecedented heights. Between 2010 and 2021, the proportion of people, who often find themselves being undesirably alone, increased by 3.5 percentage points. Youth are particularly affected by this unprecedented trend, with the 16-24 age group experiencing a 5.9 percentage point increase among men and a 6.4 percentage point increase among women between 2017 and 2021. (Sundhedsstyrelsen, 2022).

While this crisis is not unknown, becoming a more prevalent theme in both media and research, it remains highly taboo. The importance of reversing this upward trend and eliminating the taboo surrounding loneliness in our society is pressing. Research indicates that if loneliness takes hold of a person, they may lose up to 10 years of their life and are much more likely to develop severe mental illnesses such as depression (Lasgaard & Friis, 2015).

With my masters project I wish to illustrate the issue of loneliness in the Danish youth – the group most affected – to inspire discussions and bring different perspectives about the subject to life.

Research Question

How can I generate reflection and discussion about loneliness among Danish youth, through data visualization and exhibition design?

In order to achieve this i will take the following steps:

To confidently design the project I aim to obtain the relevant knowledge about loneliness – What causes it? How does it affect people- and how might we fight it once it takes hold?

To collect data for my project, I will be developing and executing a workshop for the students at The Scandinavian Design Højskole.

Finally, I will design a portable exhibition that portrays the nuances of loneliness in today's youth, while providing a space for self-reflection and discussion.

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Problem Definition

This project doesn't aim to solve the loneliness crisis among Danish youth. Rather, it seeks to foster reflection and discussion within existing platforms dedicated to such efforts, aiming to break down the taboo surrounding loneliness. Additionally, it won't offer a comprehensive visual depiction of loneliness among Danish youth. Instead, it focuses on using data visualization as a narrative tool for exhibition display, with a qualitative dataset that doesn't fully represent the loneliness crisis in Danish society.

Context and Target Group

The project is intended for display at public cultural events with an activist focus. Its aim is to create a portable exhibit that can travel across the Danish cultural landscape, engaging diverse audiences in conversation. The exhibition is tailored to fit various settings, from Roskilde Festival to the Danish political festival Folkemødet. While the project's theme centers on loneliness among Danish youth, the exhibition strives to involve people of all ages in the conversation.

Concept Clarification

Dansk Design Center – DDC

Dansk Design Center is a Copenhagen based non-profit foundation devoted to “... *build capacity for innovation and sustainable growth by design*” (DDC – Danish Design Center, n.d.). In this project it will be referred to as DDC.

The Danish Design Højskole

The Danish Design Højskole, located just outside the city of Randers in Jutland, offers courses in graphic communication, architecture, fashion design, furniture design, and industrial design. Many students, typically aged 18-25, attend the school to prepare for admission tests at design and architecture schools (Den Skandinaviske Designhøjskole, n.d.).

Critical Design

Critical design, as articulated by Anthony Dunne and Fiona Raby in “*Speculative Everything*,” uses design to question and challenge societal norms, values, and assumptions. Rather than focusing on practical solutions or aesthetics, it aims to provoke thought, stimulate debate, and inspire reflection on the broader implications of technological, social, and cultural change (Dunne and Raby, 2013).

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Loneliness

To create this exhibition, it was paramount that I understood the concept of loneliness, as it would guide me in both what story I wanted to tell and how it would take shape. The following are the key findings that informed my project.

The importance of relationships and a sense of belonging

In *“The Good Life: Lessons from the World’s Longest Scientific Study of Happiness,”* Robert J. Waldinger and Marc G. Schulz present findings from the Harvard Study of Adult Development, which began in 1938. The study tracked two groups of men, Harvard sophomores and disadvantaged youths from Boston, over more than 80 years, using interviews, surveys, and medical exams to identify factors contributing to a fulfilling life. The key finding is the paramount importance of relationships, with strong, supportive connections being the most significant predictor of happiness and life satisfaction (Waldinger & Schulz, 2023).

Similarly, Roy Baumeister and Mark R. Leary’s 1995 article *“The Need to Belong”* in the *Psychological Bulletin* explores the fundamental human need for relationships. They argue that the need for belonging is as compelling as the need for food, influencing much of human behavior and culture (Baumeister & Leary, 1995).

Loneliness verses being alone

Being alone is often confused with loneliness, but they are distinct. You can be alone without feeling lonely, and vice versa. Loneliness is about the quality of your relationships, not the number of people around you. John Carpaccio, in his book *“Loneliness: Human Nature and the Need for Social Connection,”* defines loneliness as a gap between desired and actual social relationships (Cacioppo, 2008). Mathias Lasgaard similarly describes it as an unpleasant experience due to a mismatch between desired and actual social connections (Lasgaard, 2007). Essentially, loneliness is a subjective feeling of unmet relational needs, while being alone is simply a physical state. This distinction helps us understand that loneliness can occur even when surrounded by others.

Three categories of loneliness

To fully understand loneliness, it’s essential to explore its different types: *emotional, social, and collective* (Cacioppo, 2008). Emotional loneliness arises from a lack of close, intimate relationships, such as those with partners, close friends, or family. Social loneliness involves feelings of disconnection from broader social networks, including classmates, coworkers, and community members. Collective loneliness stems from a sense of alienation from society or cultural groups, leading to feelings of marginalization. These dimensions highlight the

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complexity of loneliness, encompassing both personal isolation and broader social and cultural contexts.

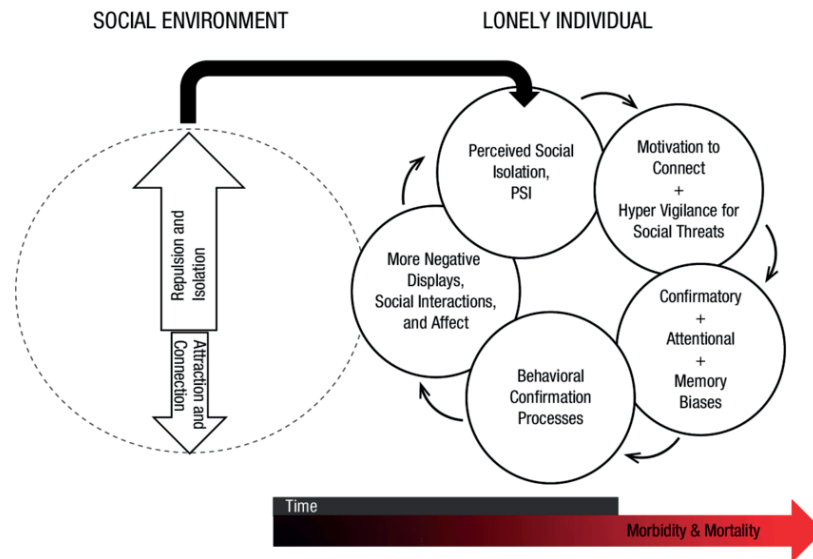
The long term effects of loneliness

The severity of the loneliness epidemic is evident in its impact on long-term health. While everyone experiences loneliness, prolonged loneliness can harm both mental and physical health. Cacioppo (2008) notes that individuals with few social ties face higher mortality risks from conditions like heart disease, stroke and cancer.. Loneliness reduces access to support during illness and often leads to poor mental health, which in turn results in unhealthy lifestyle choices. For young people, developing healthy relationships is crucial for identity formation. Prolonged loneliness can hinder their ability to form friendships and romantic relationships, leading to anxiety, depression, and a self-perpetuating cycle of loneliness (Lasgaard, 2010).

A vicious cycle

Given the harmful effects of prolonged loneliness, why don't lonely people actively seek connections? Cacioppo's "*Loneliness Regulatory Loop*" (2008) explains this cycle. In a social setting, an uncomfortable experience leads to a perception of isolation, triggering loneliness and a desire for connection. However, this also causes hyper-vigilance for social threats. If these fears are confirmed, it creates a memory bias, where negative social

experiences are emphasized over positive ones. This leads to a self-fulfilling prophecy, where the individual appears less approachable, discouraging others from initiating contact. This cycle deepens the sense of loneliness over time.



Loneliness Regulatory Loop (Cacioppo, 2008)

How to escape long term loneliness

While many methods are suggested to break the cycle of long-term loneliness, individual cognitive therapy shows the best results (Cacioppo, 2014). Overcoming loneliness involves changing one's perception of social relationships. The Loneliness

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Regulatory Loop Model shows that extremely lonely individuals often exhibit negative social behavior, discouraging interaction. Expecting positive reactions without changing one's approach is like expecting people to hug a cactus. Although the lonely individual may not initially be at fault, escaping loneliness requires personal effort to change their social perceptions and gradually break down barriers to meaningful connections.



“... as hugging a cactus” (Cacioppo, 2008).

Taboo and current interventions

Various initiatives are underway to alleviate loneliness, supported by researchers like Mathias Lasgaard, who provide new insights. Foundations such as “Mary Fonden,” “Ventilen,” “Ældresagen,”

“*Sammen mod Ensomhed*,” and “*Folkebevægelsen mod Ensomhed*” tackle loneliness through education, awareness, research, and social spaces. However, the stigma around loneliness makes accessing support difficult. To enhance the effectiveness of these initiatives the taboo surrounding loneliness has to be broken.

How to measure loneliness

Since loneliness is subjective, researchers rely on self-reported data, often through questionnaire surveys. These surveys employ direct questions like “*Do you feel lonely?*” or indirect methods, such as the “*UCLA Loneliness Scale*”, which consists of 20 statements like “*my interests and ideas are not shared by those around me*”. Participants rate their agreement on a scale of 1 to 4. The total score indicates the level of loneliness, with higher scores suggesting greater loneliness (Lasgaard & Friis, 2015).

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Data Visualization

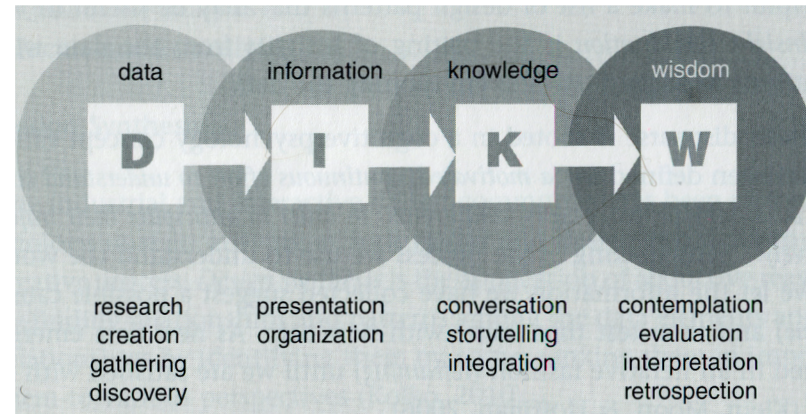
Wanting to use data visualization as a narrative tool in my project, it was important to understand how to work with data and construct impactful visualizations. Given the subjectivity of loneliness, I found it worthwhile to investigate the power of visual portrayal of data.

The fundamentals of data visualization

Data visualization encompasses a diverse array of approaches. Yet, at their core, they all hinge on data and culminate in storytelling. In his book *“Interactive Visualization,”* Bill Ferster introduces *“The Spectrum of Understanding”* model (Ferster, 2013). This model describes the various stages toward crafting impactful data visualization, illustrating how visualization can ultimately provide newfound ‘wisdom’ to its audience. Ferster contends that data *“... the raw material for a visualization (...). They are necessary, but not sufficient, and not meant for direct consumption by a user.”* (Ferster, 2013). Thus, the crux of data visualization lies in devising a framework and language that renders raw data more palatable to the audience, enabling the effective communication of the intended narrative.

Ferster posits that storytelling and narratives serve as fundamental tools for human understanding and memory formation regarding our surroundings (Ferster, 2013). In this manner, data visualization is a powerful tool for conveying

intricate narratives, while enhancing the likelihood of the audience remembering them.



The Spectrum of Understanding (Ferster, 2013)

The power of visualizing data

When working with visual storytelling, it's important to recognize the designer's power over the conveyed message. In *“Graphesis. Visual Forms of Knowledge Production,”* Johanna Drucker explores how visualization shapes understanding and knowledge production, emphasizing that visual representations actively construct meaning (Drucker, 2014).

Similarly, Robin Kinross, in *“The Rhetoric of Neutrality,”* argues that visual representations are inherently subjective, influenced by cultural, social, and personal biases. Even seemingly neutral visuals convey implicit meanings shaped by the designer's perspective, making true neutrality in visual

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communication impossible (Kinross, 1985).

Acknowledging this power and lack of neutrality, designers must recognize the impact of their data curation and visual choices on how information is perceived as 'truth'.

Non-traditional data visualization

This project's data visualization approach is influenced by designers Georgia Lupi and Stefanie Posavec, who use visualization to humanize data and navigate complex information. Georgia Lupi aims "to humanize it, to make it speak our language and represent our human nature" (Lupi, n.d.). This artistic approach, while rooted in classical techniques, allows expressive communication of complex information in non-traditional forms. It is particularly effective in exhibition design, offering a detailed and immersive visual experience.



Selected works by Giorgia Lupi

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Workshop

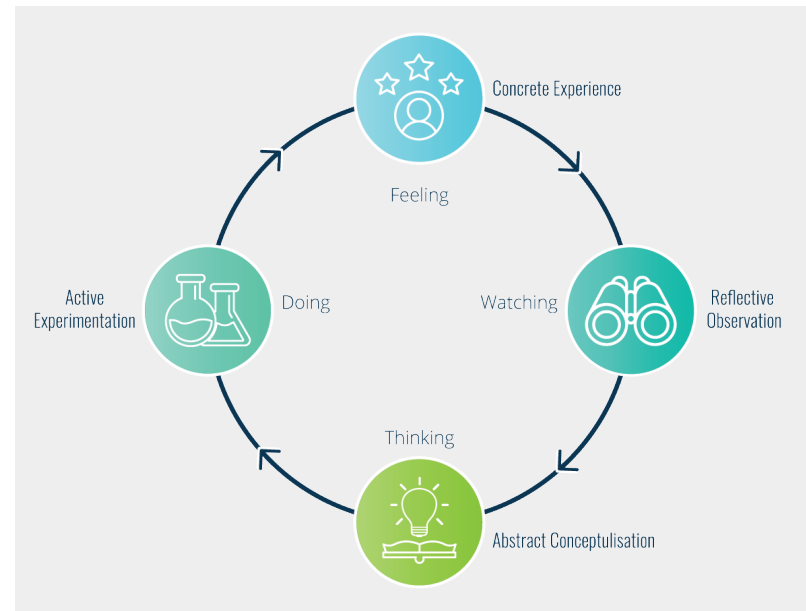
To collect data for my visualization, I hosted a workshop at The Scandinavian Design School. To prepare for this workshop, I sought resources on developing exercises that could both generate data for the project but also ensure learning for the participants.

David Kolb's theory of experiential learning

In 1974, Kolb introduced the “*Experiential Learning Cycle*”, a four-stage model conceptualizing learning as an integrated process. The stages—*experiencing*, *reflecting*, *thinking*, and *acting*—are interrelated and mutually reinforcing. Effective learning, according to Kolb, involves encountering an experience, reflecting on it, and developing abstract concepts, emphasizing that memorization alone isn't learning; transformation is essential for gaining knowledge (Kolb, 2014).

The Business Modelling Lab

In “*The Business Modelling Lab*,” Buur and Mitchell explore co-creation design methods for developing business strategies. A key finding is that involving participants physically reduces the pressure of verbal expression and breaks down hierarchy, enabling discussion of difficult topics (Buur & Mitchell, 2011).



The Experiential Learning Cycle (Kolb, 2014)

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Exhibition Design

To design my exhibition, it has been important to explore exhibition design theory. The following are the findings that have directly informed my project.

Narrative and the Big Picture

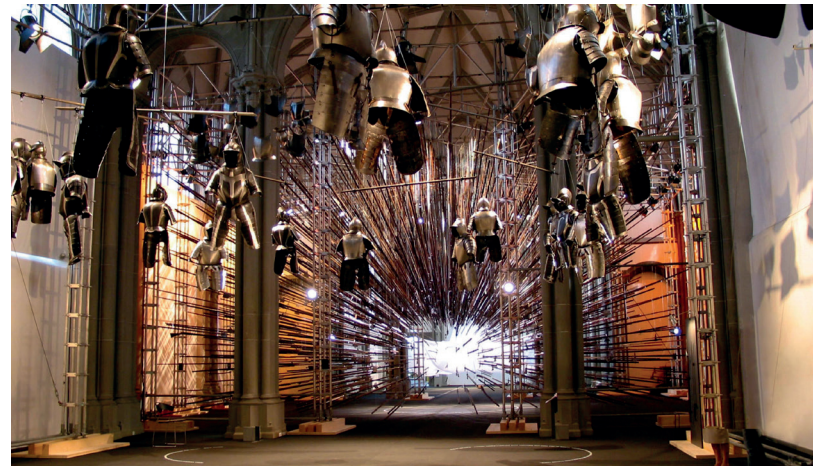
In *“Space. Time. Narrative. The Exhibition as Post-Spectacular Stage,”* Frank den Oudsten, in an interview with Barbara Holzer and Ludwig J. Kobler, highlights the importance of the *“big picture”* in exhibition design. This overarching narrative provides coherence and context, as every element carries meaning: *“Every part of an exhibition, every square inch of it, is a carrier of meaning, regardless of what the curator and the designer have in mind”* (Oudsten, 2012).

While designers strive to control the narrative, visitors’ unique perspectives challenge it, bringing individual knowledge, memories, and expectations. This interaction shapes the experience, highlighting the need for deliberate design considering all elements, space, and visitor impact (Oudsten, 2012).

Studium and Punctum

To design a successful exhibition, one must focus on both the studium (the exhibition’s content) and the punctum (its lingering impact on the spectator). Only with a punctum can the designer

achieve significant change in the visitor. Oudsten explains how this is tricky as it exists in the mysterious and hard-to-define aspects of how the exhibition is presented (Oudsten, 2012). To achieve a successful punctum, it is essential to capture the viewer’s interest in a deeply personal way (Oudsten, 2012).



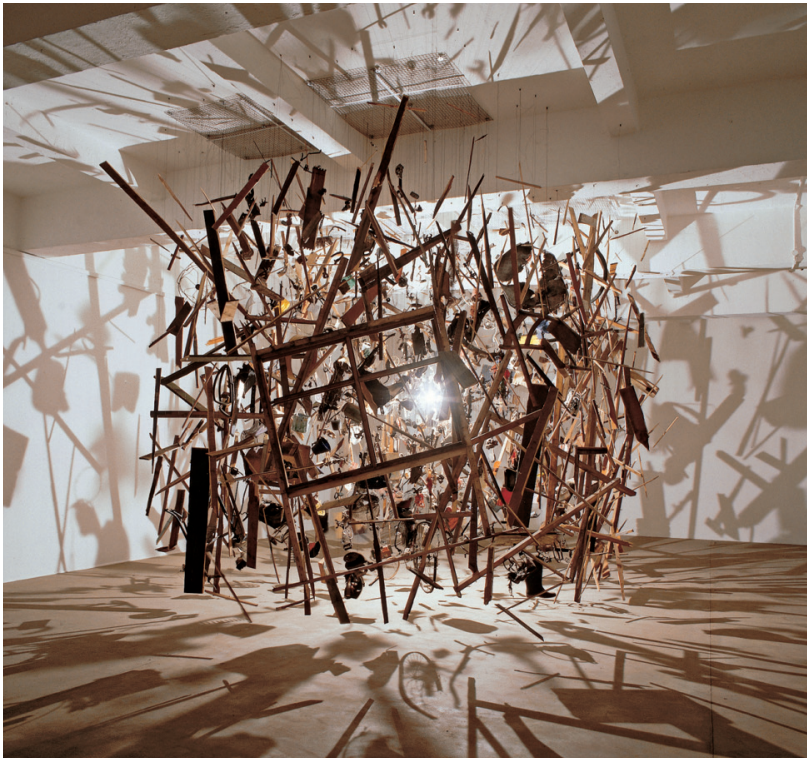
“Waffen Werfen Schatten” by Holzer Kobler

The first impression

According to Oudsten, the importance of the first impression can not be understated. Not only is the first impression pivotal in capturing the audience’s attention it also sets the tone for the entire experience. Not only must the first impression provoke strong emotion it also needs to provide clear navigational cues, assisting the visitor on how to progress. (Oudsten, 2012)

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In the book *“Narrative Spaces. On the Art of Exhibiting.”* Hermann Kossmann also underscores the importance of the first impression *“... needs to be spot-on and arouse curiosity. Like a magnet attracting the audience”* (Kossmann, 2012). While presenting many different takes on the first impression, he refers to the method of a single powerful metaphor or installation, such as *“An exploded view”* by Cornelia Parker and *“Waffen Werfen Schatten”* by Holzer Kobler.



“Waffen Werfen Schatten” by Holzer Kobler

Immersion

Immersion is one of the strongest tools to create a punctum. To create immersion one needs to create an otherness for the visitor to engage in. Kossmann explains: *“... demand a fair amount of deviation. This is crucial for the narrative or the poetry of the place to touch people”* (Kossmann, 2012).

Abstraction and metaphor

By incorporating metaphor into the narrative, the designer can transform complex information into more concrete messages, evoking greater imagination and discussion among the audience. Kossmann explains that metaphor is a powerful way to relate subjects to a wide array of people, unhindered by their individual beliefs (Kossmann, 2012). According to Kossmann, by working with the abstraction level of a metaphor, the designer can influence the degree of the viewer’s personal interpretation: *“... the more abstract the impact of the exhibition, the greater the amplitude of individual reflection and interpretation”* (Kossmann, 2012).

Layers of knowledge

As important as all these matters of experience are, the exhibition must contain knowledge to create lasting impact on the viewer. To successfully achieve this, Kossmann argues for working with layers of knowledge. When designing, we must provide easily

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accessible knowledge initially, followed by additional layers of more complex information for deeper engagement. While providing clear concrete information might seem like the best way to communicate knowledge, true '*knowing*' comes from reflection – best facilitated by more abstract communication (Kossmann, 2012).

Interaction

By directly involving the spectator with the exhibition, whether through physical touch or other forms of personal engagement, they not only connect more easily with the narrative but also retain the new knowledge more effectively: “... *it stimulates the audience to form their own opinions and to bring their own understanding to the narrative*” (Kossmann, 2012).

UN Goal

UN Goal 3 aims to ensure healthy lives and well-being for all ages, emphasizing access to healthcare and disease prevention. Addressing the loneliness pandemic is crucial as it affects health, increasing risks of depression, anxiety, and more. Combating loneliness fosters social connections, resilience, and contributes to overall well-being, aligning with Goal 3's vision (United Nations, n.d.).

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The space

At the project's inception, my goal was to create an exhibition in a museum-like setting. After exploring various options, I settled on the Copenhagen Museum, which features a diverse range of temporary exhibitions, all with themes connected to Copenhagen. However, upon contacting the museum, it became clear that a significant collaboration was unlikely at this time.

Through introspection, I realized that what I truly wanted was for the project to engage with people who weren't necessarily already planning to attend an exhibition. I discovered that activist cultural festival scenes provided a much more engaging environment for conversations and would expose the exhibition to a broader audience, thus more effectively dismantling the taboo necessary for lonely individuals to break free from the aforementioned vicious cycle (Cacioppo, 2008).

Roskilde Festival and Folkemødet

To work within these more dynamic spaces, I decided to focus on two specific institutions: Roskilde Festival and Folkemødet. Roskilde Festival, a non-profit music festival with a vibrant art scene, actively promotes better youth culture by donating profits to relevant organizations and showcasing art and activism that address various issues within youth culture. Combatting the loneliness epidemic has been one of the festival's primary missions in recent years, aligning perfectly with my project's



Roskilde Festival

objectives (Roskilde Festival, n.d.). Although I couldn't participate in this year's festival, the festival has expressed strong interest. I will have a meeting after this year's festival to discuss how we might exhibit, either in Roskilde Festival 2025 or in other spaces provided by Roskilde Festival.

Folkemødet is a festival dedicated to celebrating Danish democracy and community. Held annually on Bornholm, it provides a

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Folkemødet

platform for organizations, associations, political parties, and companies to engage with Danish citizens. The main mission of Folkemødet is to build bridges between decision-makers and the public, thereby strengthening democracy. To engage youth, Folkemødet has created “*Ung Agenda*,” a program dedicated to amplifying young voices. Through this initiative, individuals under 30 can apply for a free space at the festival. I will apply for the 2025 festival when possible. Folkemødet is an ideal venue for my exhibition, as it fosters dialogue between decision-makers and the general public (UnG Agenda | Folkemødet, n.d.).



Viewfinder by Sarah E. Brook, new and recycled wood, cast acrylic, paint, poetry. 2018-2018, New York.

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Designing for dynamic spaces

As previously discussed, Oudsten highlights how the narrative within an exhibition is continually influenced and challenged by the individual flow of visitors. It's essential to acknowledge that attendees at both festivals will likely experience the exhibition in groups, often amidst a festive atmosphere and, in some cases, alcohol consumption. Additionally, the exhibition's narrative will be shaped by its surroundings, resulting in significant variations depending on its placement within these spaces. While envisioning the exhibition set on the grass most likely in both spaces, we're limited in our understanding of the specific environment. To ensure the exhibition's success, we must prioritize the design of our own specific controlled space while remaining



Blue Earth by Maj D, plastic, 2022, Århus

receptive to the impact of the uncontrolled surroundings (Oudsten 2012).

Examples of other exhibition designers creating their own space within outdoor, uncontrolled surroundings include “Viewfinder” by Sarah E. Brook and “Blue Earth” by Maj D. Both exhibitions illustrate how one can create narrative space by visualizing an ‘otherness’ within uncontrolled environments, motivating the spectator to engage.

Prejudice and Narrative

As I began researching loneliness, I was quickly confronted with my own prejudices. In my initial conversations with my tutor, Arthur Steijn, he asked if I had personal experience with loneliness. I said no, believing I had never struggled with maintaining friendships. However, as I delved deeper and learned about the various facets of loneliness and its manifestations, I was profoundly shaken. I realized I had indeed suffered severe loneliness during my formative years due to a lack of close family relationships. This realization led to a long-overdue conversation with my mother, which relieved us both of much pain. This personal experience underscored the importance of understanding the nuances of loneliness, helping us identify painful relationships and work deliberately to alleviate that pain.

Initially, I aimed to create a provocative piece that debated responsibility, portraying the lonely individual in accordance

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with Cacioppo's findings (2008), as an unapproachable cactus requiring a change in their approach to others. While this concept remained valid, I now recognized the need to nuance the portrayal of loneliness to enhance its relatability. Encouraging the personal involvement of spectators in the exhibition would significantly increase the likelihood of delivering a powerful punctum (Oudsten 2012). With this newfound insight, I felt compelled to depict loneliness as a multifaceted spectrum that is constantly active within all of us.

DDC Mentorship

This notion was reinforced during my second meeting at DDC with Oskar Stokholm Østergaard and Kimmie Tentschert. Throughout the project, I sought mentorship at DDC, particularly from Østergaard, due to their expertise in design theory and dedication to addressing the youth mental health crisis. In two meetings, I presented my work and received feedback. Additionally, I've been invited to present the project at a DDC talk in the fall.

This mentorship has been invaluable, particularly the advice to take a more ambiguous approach, encouraging balanced and engaging discussions. Critical design can still be effective simply by highlighting an issue. This project still confronts us with an unpleasant truth – that we all struggle with loneliness to some degree. That is not just them but also ourselves.

Starving for Connection

When researching loneliness I kept stumbling upon hunger (Baumeister & Leary, 1995) or starvation (Cacioppo, 2008) as a way researchers would express the sensation of loneliness. Thus, the title and so-called 'big picture' for the project was born – *Starving for Connection*. I found this metaphor to be powerful, as we have a much better understanding of the need for food than for connection in relation to our health. Additionally, the intense language of starvation conveys a sense of the urgency needed when discussing the loneliness epidemic.



Abundance of Fruit by Severin Roesen, 1860, oil on canvas
New Britain Museum of American Art

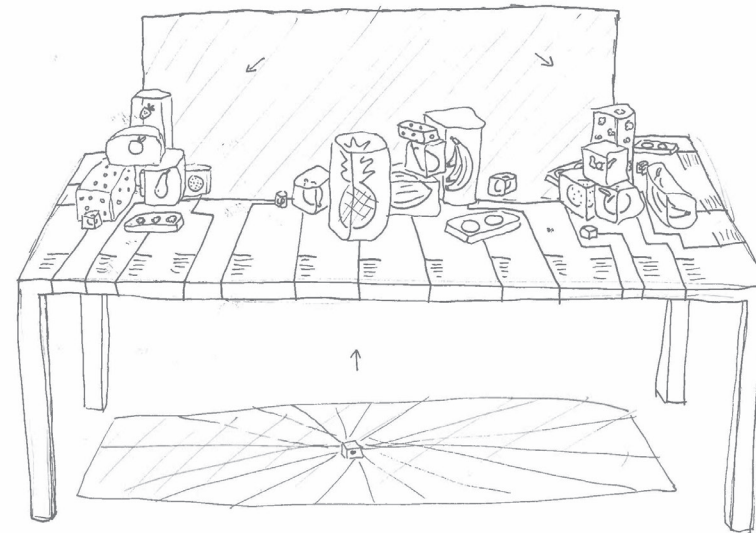
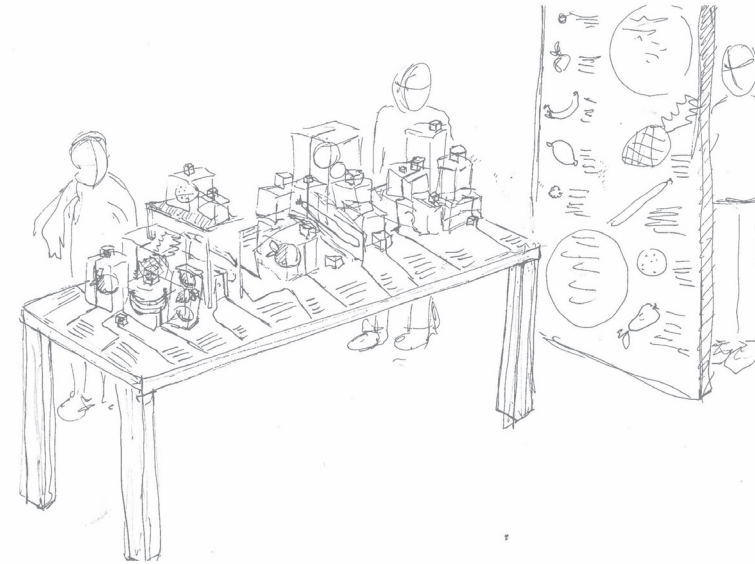
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Siblings Ceremonies by Alonsa Guevara, 2015, Triptych, Oil on canvas.

To depict this sense of starvation, I wanted to highlight the disparity between our perceived loneliness and the numerous potential connections available to us. Drawing from classical art I choose to use fruit as a symbol of the desired connection. According to Matilde Battistini fruit has long been used both as a symbol of abundance but also of desire. (Battistini 2015). By showcasing an abundance of fruit that remains somehow inaccessible, the exhibition prompts us to ponder why these connections elude us.

To further emphasize this metaphor, the inaccessible fruit is presented on a 200 x 90 cm dining table, complete with empty dinner plates, highlighting our simultaneous desire for and denial of the fruit. The metaphor is supported by the brass labels attached to the unavailable food, describing the inaccessible connections in accordance with the three categories of loneliness (Cacioppo 2008), with titles such as “*Father*,” “*Colleagues*,” and “*The Danes*.” To drive home the connection



Process sketches of concept

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between fruit and loneliness, the title “*Starving for Connection*” is presented on the tablecloth, a typographic band connecting all elements on the table. This use of metaphor enables the visitor to reflect individually on the exhibition, forming their own opinions and thus enabling more diverse conversation (Oudsten 2012).

While this metaphor immerses the viewer in a personal sense of abstraction, the imagery of the dining table also distinctly signals otherness. The table, with all its components, clearly distinguishes itself from its surroundings, signaling exhibition and invites the visitor to engage. As a whole, this metaphor establishes the initial layer of understanding in the exhibition and delivers a compelling first impression, motivating the viewer to delve deeper.

Epoxy Resin

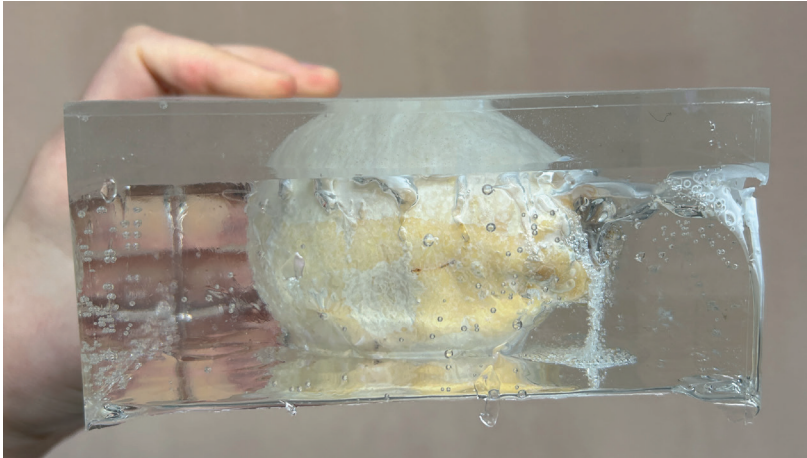
To encase the fruit, I desired a material that I could experiment with and manufacture independently. Aesthetically, I aimed for a transparent substance to portray the fruit as tantalizingly out of reach. While brainstorming materials suitable for enclosing the fruit, I considered various options such as concrete, glass, and silicone. However, upon discovering epoxy resin, I was immediately intrigued. This material not only offered the clarity and density I sought but also possessed an intensely synthetic feel, providing an interesting contrast to the organic fruit. Epoxy



*Passage by Laurits Nymand Svendsen, dead animals in epoxy resin
2015, Deep Forest Art Land*

resin is a two-component mixture, consisting of the resin and a hardener. After mixing these two components, the resin heats up and begins to harden, fully curing after several days, depending on the ambient temperature.

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Epoxy resin experiment - real fruit

Experiments

The first experiment involved encasing gummy bears in plastic shot glasses. After the resin cured, it became apparent that it was completely stuck to the plastic. I then found a silicone baking mold and tried again, this time with strawberries and blueberries. While the resin released from the molds perfectly, the berries reacted strangely to the resin. Typically, when objects are encapsulated in resin, they are made moisture-free—an issue that significantly complicated the process. The heat from the curing resin created moisture around the berries, forming a white, mold-like shell on the fruits. Additionally, the color of the fresh fruit faded, leaving them looking undesirable. From the baking molds experiment, I also discovered that I had to build the blocks in at least two layers, as the fruit would float to



Epoxy resin experiment - artificial fruit

the top before the resin could cure.

After a number of unsuccessful prototypes with real fruit, I decided to try artificial fruit. Initially hesitant about this solution, as I felt much of the piece's poetry would be lost by using artificial fruit, the first test with fake fruit convinced me otherwise. All the aforementioned issues were resolved, and the fruit looked surprisingly real when encased in the resin. A few of the darker counterfeits bled color, but this proved to be a minor problem.

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The making of silicone molds

Production

To produce a great variety of blocks, I made two different plexiglass shapes: one square and one rectangular. These were then covered in silicone, creating a total of six molds. The molds

allowed me to create many variations in block size, depending on how much resin I used, while still providing a clear continuity in the blocks.

Workshop and UCLA test

When developing the workshop at The Danish Design Højskole, my aim was to provide insights for the young participants while gathering data for my exhibition. On the first day I had 30 minutes with the entire school, approximately 80 people. I began with a 15-minute presentation on loneliness and its impact on Danish youth, sharing insights into my project and personal journey. Participants then took the UCLA test, the results of which I would analyze and provide in the voluntary workshop the following day. After filtering out non-Danish participants, I had 41 Danish UCLA results.

The following day, I hosted a voluntary 1.5-hour workshop for 19 students. The workshop was designed using Kolb's theory of experiential learning, shifting between solitary reflective exercises and active group activities (Kolb 2014). The workshop comprised six exercises in total.

To prepare, I set up the stage, visualizing all the exercises to inspire the participants. After a few silly warm-up exercises, we embarked on the first main activity: a polar yes/no exercise where participants ran to either side of the room based on their opinion on a provided statement. This was followed by an indi-

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Pictures from the workshop at The Danish Design Højskole

vidual questionnaire to gather some basic information.

Next, we conducted an object anecdote exercise, inspired by Buur and Mitchell's use of objects to spark conversation (Buur & Mitchell 2011). In groups of three, each participant choose an object and shared a loneliness-related anecdote. We then proceeded to an individual drawing exercise, where participants represented their loneliness. Following this abstract exercise, we transitioned to a spectrum activity. Participants indicated their agreement with statements or counted items, like their



weekly alcohol consumption.

Finally, participants took part in a free writing exercise, receiving a prompt five times and writing continuously for three minutes each time. Afterward, they voted with soda cans on whether they had gained new personal insights, with 75% voting yes. Following the workshop, all results were collected and organized, providing the project with its qualitative dataset.

Tablecloth and embroidery

To visualize and present the data in the exhibition, I decided to create a 200 x 250 cm tablecloth for the table. While the metaphor of the inaccessible fruit in resin served as the main narrative

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element for the exhibition, illustrating the painful sensation of inaccessible relations, I also wanted to illustrate loneliness as a subjective feeling that we all constantly navigate. Using qualitative data sets to represent individuals' relationships with loneliness, I aimed to create an array of 'placemats,' with each individual's data visualized around their respective dinner plates. The index for decoding the visualizations will be presented on two A4 brass menu stands located at opposite corners of the table, matching the labels on the resin.

As previously mentioned, my goal was to create visualizations inspired by the artistic approaches of Giorgia Lupi and Stefanie Posavec. Unlike classical data visualizations that provide an overview, these visualizations demand deep engagement and patience acting as small puzzles, each offering an "aha" moment when deciphered. Approaching visualization in this more abstract manner ensures not depicting a false 'truth', but inviting the spectator to form their own opinions (Drucker, 2014). This would also give spectators the opportunity to dive deeper into new layers of knowledge, creating a stronger punctum for the exhibition (Oudsten 2012).

Providing stools for the individual seatings around the table, the spectator is invited to sit in the place of an anonymous individual. While seated in front of the individual's data and quotes, the spectator is confronted by their own image reflected in the mirror pieces placed among the encapsulated fruit at the center of the table. Thus, the spectator is encouraged to relate to and



Concept sketch

reflect on the individual illustrations of subjective loneliness.

Connecting the individual 'placemats' is the aforementioned text band with the title "Starving for Connection". By depicting the 41 UCLA results as leaves on this band, my aim was to illustrate that the individual 'placemats' represent just a fraction of a broader context, while subtly hinting at our interconnectedness.

Embroidery

To highlight the data with an added layer of tactility, I decided to use embroidery on the tablecloth. Inspired by the imagery and methods of classic historical tablecloth embroidery, I found the art to be the perfect way to illustrate the data while enhancing immersion in the dinner metaphor.

Another reason for including embroidery is my mother's

Starving for Connection - Process

expertise in the craft. Learning from her provided an opportunity to strengthen our bond, while quite literally spending time together embroidering. In this subtle manner, my own reflections on loneliness manifest themselves in the exhibition.

Embroidery is the art or craft of decorating fabric or other materials using a needle to apply thread or yarn. This technique can involve various stitches, patterns, and designs to create decorative motifs, pictures, or embellishments on textiles (Dehn 2023). To experiment with different expressions and try my hand at embroidery for the first time, I tested nine different



Yarnsamples left to right:

Green, cotton DMC 1 thread. Green, cotton DMC 3 threads. Green, cotton DMC 6 threads. Brown, cotton pearl, 1 thread. Blue, cotton flower yarn, 1 thread. White, cotton knitting yarn 50g, 1 thread. Purple, silk, 1 thread. Red, Swedish flax, 1 thread. Pink, flax DMC, 3 threads. Orange, wool Zephyr, 1 thread. Orange, wool Zephyr, 3 thread. Yellow, embroidery wool, 1 thread.

thread types, including variations of cotton, silk, flax, and wool. After considering their qualities, I decided to proceed with cotton, as it proved easier to manage and more durable over time.

Printing on fabric

As part of my trip to Jutland, where I hosted the workshop, I arranged a visit at DP-Textile's workshop in Lystrup where my tablecloth will be produced (DPTextile, n.d.). Meeting with Hans Mikael Uronen I got many technical insights on what to be aware of when printing digitally on fabric, including how to work with matching color swatches and readability in size and detail of typography. We decided to use their ViscoLinen Optic 300gsm fabric, as it provided the needed structure for embroidery.

Around the exhibition

To support the exhibition, I intend to create some signage explaining the issue of loneliness among Danish youth and indicating the source of the presented data. The signage will visually complement the theme of the table.

Starving for Connection - Process

Exhibition overview

Thus, the final exhibition consists of the following layers:

Layer one: The fruit in resin, labeled with relational terms, alongside the empty dinner plates, supported by the text ribbon “Starving for Connection,” creates the initial impression and sets the tone for the exhibition.

Layer two: The visualized data in the tablecloth nuances spectators’ perception of loneliness, illustrating it as a subjective sensation constantly at work within all of us.

Layer three: The stools and mirrors invite spectators to interact and spend time with the piece while reflecting on their own relationship to loneliness.

Support: Signage provides context and explanation to bolster the narrative of the exhibition.

Possible development

To further develop the concept in future, one might explore avenues of interaction, such as organizing events like dinners or workshops within the exhibition setting. Furthermore, one can explore the various settings and specific events where the exhibition might be relevant.

Starving for Connection - Conclusion and Before the Exam

Conclusion

Addressing the stigma surrounding loneliness is imperative, as it can trap individuals in a cycle of loneliness, proving potentially fatal if not escaped. Through the principles of exhibition design, we can create narrative spaces for the public to reflect and discuss the issue of loneliness among Danish youth. These narrative spaces may provide a stronger punctum by providing various layers of knowledge, abstract data visualization providing a strong narrative feature in which to do so. By inviting spectators to engage directly with the exhibition and relate to the individual illustrations of loneliness, they are more likely to reflect on their own relationship with loneliness and participate in discussions on the topic, thereby assisting the dismantlement of the taboo surrounding loneliness.

Before the Exam

I aim to complete the production of all elements for the exhibition, culminating in the presentation of the table with its full-scale components. This includes an ongoing production of fruit in resin, as each block requires time to cure. I anticipate having a diverse selection available by the exam date.

To construct the visual systems for illustration, I must curate the acquired data and choose the individuals to feature on the 'placemats'. Additionally, I need to develop a visual language, experimenting with typography, colors, and symbols. Once the final layout for the tablecloth is designed and its readability is tested, I will proceed to have it printed on fabric.

Upon receiving the printed cloth, I will hem the fabric and embroid the selected data. Lastly, I will arrange the exhibition outdoors, experimenting with different compositions of mirrors and resin blocks, culminating in a photoshoot.

Starving for Connection - References

Concept Clarification and Collaborators

DDC – Danish Design Center | About. (n.d.). DDC – Danish Design Center.

<https://ddc.dk/about/>

Den Skandinaviske Designhøjskole. (n.d.). Den Skandinaviske Designhøjskole. <https://www.designhojskolen.dk/>

<https://www.designhojskolen.dk/>

Dunne, A., & Raby, F. (2013). *Speculative everything: Design, Fiction, and Social Dreaming*. MIT Press.

DPTextile. (n.d.). DPTextile. <https://www.dptextile.eu/>

Roskilde Festival. (n.d.). <https://www.roskilde-festival.dk/>

UnG Agenda | Folkemødet. (n.d.). <https://folkemoedet.dk/ung-agenda/>

Loneliness

Danskernes sundhed – Den Nationale Sundhedsprofil 2021. (2022). Sundhedsstyrelsen.

Waldinger, R., & Schulz, M. (2023). *The good life: Lessons from the World's Longest Scientific Study of Happiness*. Simon and Schuster.

Baumeister, R., & R. Leary, M. (1995). The Need to Belong.

The Psychological Bulletin.

Cacioppo, J. T., & Patrick, W. (2008). *Loneliness: Human Nature and the Need for Social Connection*. W. W. Norton.

Lasgaard, M. (2007). Measuring Loneliness: Validation of the Three-Item UCLA Loneliness Scale in a Large Population-Based Sample. *Journal of Personality Assessment*.

Lasgaard, M., & Friis, K. (2015). *Ensomhed i befolkningen - forekomst og metodiske overvejelser*. Region Midtjylland.

UChicago Social Sciences. (2014, December 9). Harper Lecture with John T. Cacioppo: The Brain, Social Neuroscience, and Loneliness [Video]. YouTube. https://www.youtube.com/watch?v=sasMWyo_TpY

Data Visualization

Ferster, Bill. (2013). *Interactive Visualization*. Massachusetts Institute of Technology.

Giorgialupi. (n.d.). Giorgialupi. <https://giorgialupi.com/>

Lupi, G., & Posavec, S. (2016). *Dear data*. Chronicle Books.

Drucker, J. (2014). *Graphesis: Visual Forms of Knowledge Production*. metaLABprojects.

Kinross, R. (1985). The rhetoric of neutrality.

Design Issues, 2(2), 18. <https://doi.org/10.2307/1511415>

Starving for Connection - References

Workshop design

Kolb, D. A. (2014). *Experiential learning: Experience as the Source of Learning and Development*. FT Press.

Buur, J., & Mitchell, R. (2011). *The Business Modelling Lab*. Participatory Innovation Conference.

Exhibition Design

Oudsten, F. D. (2016). *Space.time.narrative: the exhibition as post-spectacular stage*. Routledge.

Kossmann, H., Mulder, S., & Oudsten, F. D. (2012). *Narrative spaces: On the Art of Exhibiting*. Nai010 Publishers.

Fruit

Battistini, M. (2005). *Symbols and allegories in art*. Getty Publications.

Embroidery

Dehn, K. M. (2024). *BRODERI: På tværs af generationer*. Gyldendal A/S.

Design and art pieces featured

An Exploded View - Cornelia Parker – Chisenhale Gallery. (n.d.). <https://chisenhale.org.uk/exhibition/cornelia-parker/>

Waffen werfen Schatten | Holzer Kobler Architekturen. (n.d.). <https://holzerkobler.com/project/waffen-werfen-schatten>

ViewFinding - Sarah E. Brook. (n.d.). <https://www.sarahebrook.com/View-finding>

BLUE EARTH | Maj-D Art. (n.d.). Maj-D Art. <https://www.maj-d.com/blueearth>

File:Abundance of Fruit by Severin Roesen, 1860, oil on canvas - New Britain Museum of American Art - DSC09427.JPG - Wikimedia Commons. (n.d.). https://commons.wikimedia.org/wiki/File:Abundance_of_Fruit_by_Severin_Roesen,_1860,_oil_on_canvas_-_New_Britain_Museum_of_American_Art_-_DSC09427.JPG

Alonsa Guevara paintings - Alonsa Guevara. (n.d.). Alonsa Guevara. <https://www.alonsaguevara.com/ceremonies>

Laurits Nymand Svendsen – Deep Forrest Art Land. (n.d.). <https://www.deepforestartland.dk/artist/laurits-nymand-svendsen/>