If you care... ...You repair

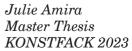
The backstage of repairability

Master Thesis

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KONSTFACK 2023 Individual Study Plan in Design

IF YOU CARE... ... YOU REPAIR



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I found myself a passion for tinkering when I was young. I always appreciated disassembling things, putting them back together, fixing, and learning. This dedication comes from my grandfather, who has a profound esteem for all kinds of screws, hammers, and screwdrivers that he keeps well organized in his tool cellar. Therefore, repairation has always been part of his job and his passion.

A few years ago, my pair of headphones broke. I expected the repair journey to be challenging, but I did not anticipate not being able to access the damaged components at all. I had discovered a true facet of repairation. I then decided to start an investigation on repairation and I began to disassemble broken objects with the sole purpose in mind to get to know what was hidden inside. Some objects were especially hard to disassemble and then essentially a struggle to repair. Making it hard for the user to repair means making it easy for them to throw it away.

It became clear to me that if we want to live in a more sustainable world, the first and easiest step to take is to make sure that the products we are producing now are made to be repaired and have an extended life.

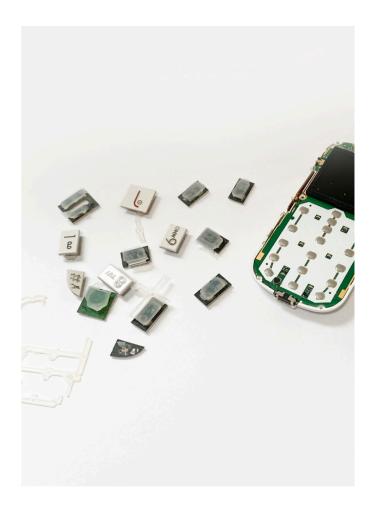
What does sustainability mean today? What will it mean in 10 years? Designing for sustainability doesn't only signify using new recyclable materials and switching plastic for bioplastic. For me, sustainability also means rethinking and creating a durable system of scaled production. Envisioning

INTRODUCTION INTRODUCTION

a well-balanced model seeking profitability and constantly striving for innovation, while simultaneously conveying realistic ideas and remaining feasible, is challenging. Realistically, we live in a throwaway society. Improving the system from the core would take years before showing any slight improvement.

Repairability and object care seem to be options to favor even more in order to avoid waste of material that could be reused. The issue is that most objects are not made to be fully repaired and thus need to be thrown away as soon as they stop working. Repairability has also become a political topic since companies started using irreparability and planned obsolescence as a livelihood. If all our items were indestructible, unbreakable, or fully repairable, firms would not be able to sell as many new products and would not make this much profit.

Projecting that objects would be made to be repairable and repaired, how can we, as designers, finally give users the confidence to repair objects they own? This project aims to show the backstage of repairability by confronting two objects, two examples showcasing solutions on how to work with repairability by disassembling and avoiding tools. In other words, how to make objects more durable by integrating simple assembling solutions.



I PARALLEL NOTIONS

[A] SIMPLICITY/ COMPLEXIT	[A]	SIMPLICITY/	COMPLEXITY
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- [B] COMPLEXITY LINKED TO REPAIRABILITY
- [C] EMOTIONAL REPAIRABILITY, EMOTIONALLY SUSTAINABLE
- [D] HOW TO OVERCOME WEARINESS
- [E] PLANNED OBSOLESCENCE

[A] SIMPLICITY/ COMPLEXITY

Dealing with complexity and uncertainty is a big part of the repair journey, and it takes some effort to deal with it. However, simplicity is actually a complex process. Invoking simplicity in the design world has become a general trend. Apple has been one of the first companies to bet on a simple aesthetic, hiding the complexity of the system as a trademark. By removing all unnecessary features or buttons, the product instantly becomes sharper. One way to measure simplicity is how readable the product is. Do we need to think to understand, or is it intuitive? According to John Maeda in his book Laws of Simplicity, 1 complexity and simplicity are relative to each other in importance, and their rivalry is necessary. The hardest part is finding the balance between complexity and simplicity.

In his book *Living with Complexity*², Donald A. Norman claims that simplicity relies on the "underlying structure." He takes the example of his own desk's chaos. According to him, if his desk looks chaotic and incomprehensible to anyone, once the structure is revealed, the complexity fades away. It is similar to learning a new language. After some years, we tend to find it easy and forget how much effort we put into learning how to read, write, and speak. The real problem is that we need to have some sort of complexity in our lives to reach a balance with simplicity, and vice versa.



1. A messy but well organized desk

Often, a product becomes simple only because the complexity is hidden from the user. Once we finally confront ourselves with the true reality of the inside of things, we eventually get scared of having to deal with the unknown. Are technological objects the hardest to handle by everyone in general? According to Donald A. Norman in *The Design of Everyday Things*³ "Technology offers the potential to make your life easier and more enjoyable; each new technology provides increased benefits. At the same time, added complexities arise to increase our difficulty and frustration. The principle of good design is to make complexity manageable."

- 1. Laws of Simplicity, John Maeda, 2006
- 2. Living with Complexity, Donald A Norman 2010
- 3. The Design of Everyday Things Donald A Norman 2013

[B] COMPLEXITY LINKED TO REPAIRABILITY

Some objects are more complex to disassemble than others. Sometimes, you have to admit defeat as the disassembly is meant to be impossible or requires a bunch of special tools. The idea was, on top of that, to understand if we should repair everything that breaks.

A design that favors disassembly, reassembling, or repairability will then allow either a specialized company or the user to repair, transform, and recycle the object to optimize reuse. After trying to disassemble many different objects, the conclusion I got from it was that you need to know how to be patient and have a strong desire to learn. You then need to use a bit of common sense and try using a bit of force and a flat screwdriver instead of the triangle one if that is the only thing you can provide.

Three years ago, I conducted a small research design-based project on the emotions we feel regarding the complexity of technical components placed inside our objects. The intention behind this project was to explore what kinds of different emotions people feel and how to translate them into a design proposal.

Based on several interviews and taking the example of the inside of a coffee machine, I concluded that the main problem was that users are not confident enough to repair their appliances. They feel left alone. They are often unsure of the result and





2. Having to break parts to progress

imagine making it worse than it already is. We often think that it is reserved for engineers and programmers and it appears to us as unknown simply because we are rarely confronted with it. There is thus the idea of visual education on the technique so that it becomes real and commonplace.

The evolution of technology surpasses us as soon as we lose track. Suddenly, a logical machine becomes incomprehensible and a black box. Having wires of different colors reminds the beginner that they do not understand anything, and technical drawings can also impress. Also, what caught my attention is that the newer a product is, the harder it is to repair. Some components are indeed designed to be impossible to disassemble and are welded underneath the screw.

Last year, during the In-Depth course led by designers Leif Thies and Maria Von Euler, I reached out to Electrolux and conducted a project on Emotional Durability entitled *Technical Happiness*. According to definition, emotionally durable design reduces the consumption and waste of natural resources by increasing the resilience of relationships established between consumers and products. When Electrolux handed me a working air purifier, even though not in perfect condition, I believed that with some experience I would manage to unscrew it and at least disassemble it. This experience uncovered the true reality of the appliances we own.

The air purifier is a rather simple object: only a fan, a motor, sensors, and a filter could break. The filter is the part that is most likely to be damaged since it needs to be cleaned frequently to perform at its highest capacity. During my study, I found out that the visual sense was most receptive to detecting a change. To convey this in my prototype, I decided to work with lights that would turn on. In this sense, several lights would turn on one at a time like pimples. When all the lights would be turned on, the air purifier would signal to the user that the filter needs to be cleaned or changed.

In order to understand how users feel about repairing their objects themselves, I conducted several interviews. The aim was, among others, to create a map of all emotions felt toward reparation. From happiness to unhappiness, stress to anger, doubts of the unknown may be the most suggested feeling.





4. Technical Happiness, Konstfack 2022

"If I know it won't work, I don't even bother trying," said Nathalie, 53.

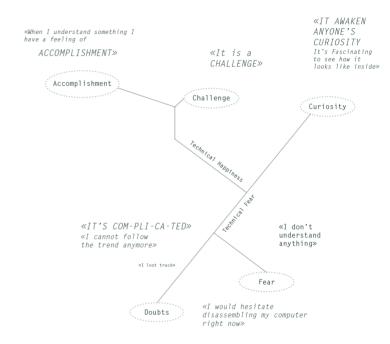
Some other interviewees were a bit more optimistic and see reparation as fun and challenging. It is also a different way to awaken curiosity.

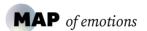
"I like to see what is inside even if I know I won't be capable of putting it back together," said Huguette, 76.

"We try to repair what we messed up so that we learn," said Leo, 24.

PARALLEL NOTIONS

After repairing a computer for 3 hours, combining stress and happiness to succeed, these emotions, even negative ones, tend to build memories. Memories create emotional attachment. Indeed, even a bad memory is a memory because they take part in the object-user bond. Creating a story with the object contributes to emotional durability.





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I PARALLEL NOTIONS

[C] Emotional repairability, emotionally sustainable

As previously mentioned, emotionally durable design is a design strategy that makes it possible to extend the life of a product by "strengthening the user-product relationship" (Norman, 2007; Chapman, 2009; Cooper, 2016).

I tend to think that if you care, you repair. The only thing is that it is hard to diagnose whether or not we can fix the product by ourselves without creating even more damage. We often tend not to care about how a product works unless it is brand new or it breaks. How can we shape a deeper bond between objects and users that would enable users to continuously understand their products?

Emotional durability is a concept envisioned by Jonathan Chapman. He defines emotional durability as the idea of designing products that people want to keep. Where physical durability resists wear and damage, emotional durability resists our natural tendency to want the next new thing.

How can we increase the sentimental value through our design? Even though caring for an object is strictly personal, some points could still impact the bond between users and products. For sure, some objects are too stiff and don't help with inciting any kind of feelings.

Most people I interviewed since I started with this project told me that they would do a lot to repair the objects they value the most. For instance, they

would either put a lot of effort and patience into it or they would pay the needed price for reparation. Sometimes the reality is a bit cruel since repairing costs more than buying a new item.

The objects we value the most are, in general, the ones we place in front of us or are the least easy to access. In his book *Comment L'esprit vient aux objet*⁴, Serge Tisseron declares that objects have different memories. Those that have an active memory are those that we love and care about. They are often physically close to us, unlike those that have a sleepy memory and are linked to common or bad memories.

We can then say that each object is a storyteller. According to D. Norman, emotional design, "these objects are more than utilitarian. As art, they brighten up my day. Perhaps more importantly, each conveys a personal meaning: each has its own story." On January 19th, 2023, I conducted a workshop with fellow design students to test my assumptions. In the first step, they were asked to draw their favorite objects and explain why inside the card. Here are some of their answers.

^{4.} Comment L'esprit vient aux objets, Serge Tisseron, 1999

"I have a lot of instruments, and I always get extra attached to these objects. I think it is because I spend a lot of time with them and 'we' create something together. The same goes with tools. I bought a new guitar this summer, and it is my first proper one. It is an object I can have and use for the rest of my life."

""I bought this lamp from an old man in my neighborhood when I was 12. It is made of blue glass and has these strong faces going around the lamp. I like it because it is powerful, a statement piece, and when I was 12, I dreamt of having it in my own home, and now it is in my living room."

"I drew a porcelain horse that I found in the garbage room. I like it because it is cute and fat and has four very stable legs. It leans a bit backward and has a rocky name."

"It is a headlamp. I got it as a gift from someone who is close to my heart, and we used it on all of our adventures. I also got a lot of use out of it on a daily basis. It is easy to use, has sentimental value, and is practical."



5. A surprise from the workshop

I deduced from these interviews that in most cases. the monetary value doesn't prevail over the emotional value. We would rather find value in the uniqueness provided. The first instances we share with an object will determine how we will perceive it. The object can be bought but could also be gifted, found, or inherited. Objects are often linked to memories. For instance, it could be where, how, and from whom we received it or the time spent together. Through these interviews, I also realized that we tend to value a lot more objects that are gifted. How does it become our favorite object?

We can't appreciate the true value of things unless they disappear. Because objects are part of our identity, when they get lost, memories disappear. They could be broken, could be lost. What happens when we realize we won't have this feeling any longer?

[D] HOW TO OVERCOME WEARINESS

Is monotony fatal in our relationship with certain objects?

How not to get bored? How can we keep objects that are not to our taste in terms of aesthetics without getting tired of them? Weariness is often due to a visual impact, like an overdose that can be generated by the presence of a color or a shape in the space. Fast fashion is a caricature of our current lifestyle, but the reality is sometimes striking. Indeed, the price of the object is also a variable that will affect our appreciation of the object in question. Generally speaking, the less expensive an object is, the less importance it will have in the long term. On the other hand, we can say that a sentimental object is not necessarily an object that has a strong monetary value, as I discovered in some interviews.

Which objects do we keep, and which ones do we throw away? How do we explain that there are some that we throw away even when new and others that we keep even when broken? An in-between: the just-in-case? What is the difference between a lucky object and an object that we just threw away?

"Have nothing in your house that you do not know to be useful, or believe to be beautiful"

- William Morris.





6. When objects become boring, picture by Marie Vincent

Overcoming weariness is associated with the notion of change. Maybe there is, in the end, no easy way out. In this sense, our belongings are maybe destined to go from one hand to another. Potentially, some should have the possibility to be upgraded, moved around, transforming into something else.

[E] PLANNED OBSOLESCENCE

Weariness is unfortunately not the only reason why so many objects are thrown away. In his book *Meaningful Stuff: Design That Lasts*⁵, Jonathan Chapman declares, "Obsolescence is an economically driven design decision a plan to hasten a product's functional or psychological undesirability."

Planned obsolescence is not new. In fact, this well-oiled technique to increase sales appeared in the 1920s when General Motors' CEO, Alfred P. Sloan, elaborated a strategy to compete with his principal rival, Henry Ford. His strategy was to launch new models to attract new customers. These new customers would then entertain the envy of the former customers, getting jealous of the newest features and expressing "a certain dissatisfaction with past models compared with the new one."

This phenomenon expanded to the point of no This phenomenon expanded to the point of no return when brands designed their objects to break in a shorter term. Planned obsolescence became unbearable considering the ecological and waste crisis we are currently facing.

France has recently issued a law making planned obsolescence a criminal offense. The European Union followed the movement and proposed on March 30, 2022, to update the EU consumer rules to empower consumers for the green transition.

^{5.} Meaningful Stuff: Design That Lasts, Jonathan Chapman, 2021

II LAYERS OF REPAIRABILITY: TOWARD THE PROJECT



- [A] CAN WE MARKET AN OBJECT AS REPAIRABLE FOR LIFE?
- [B] SHOULD WE GO BACK TO LOW-TECH?
- [C] THE BACKSTAGES OF DESIGNING FOR REPAIRABILITY

[A] CAN WE MARKET AN OBJECT AS REPAIRABLE FOR LIFE?

Where is the border between the dream of every customer and the market's reality? How can we sell and promote a product that will undoubtedly break after a few years, simply because no company would ever be authorized to sell an unbreakable object?

It is for this reason, among others, that the project of the $Increvable^6$ washing machine carried by Christopher Santerre and Julien Phedyaeff did not find an investor. The project is certainly "too perfect" and unfortunately considered utopian to be profitable in the long term. The Increvable is a repairable, durable, and scalable washing machine that brings a new vision of household appliances: more durable because it is more easily repairable. This means a greater investment at the beginning, but it is largely profitable in the long term because the product guarantees its durability.

Is it considered a perfect object/concept when the entire potential market delimited by the object's utility is filled? Even if the ethical approach is commendable, a finished market is not a profitable market in the long term for a company because once it has reached all its targets, sales will inevitably drop.



7. L'increvable by C.Santerre and J.Phedyaeff

Most companies design non-repairable objects for one reason only, and that is economical. Not making an object repairable encourages a new purchase. And the advantage is twofold when we know that unfortunately, throwing away objects is often cheaper than repairing them. So, today, we think less and less about this aspect since we often prioritize the price over the quality and durability of the product.

In this sense, if all our items were indestructible, unbreakable, or fully repairable, firms would not be able to sell new products and would not make any profit. Putting an end to the competitive market would lead to the monopolization of an object for a brand, and we would have unique objects. The only parameter that could still generate a competitive effect is the aesthetic aspect and the innovative character, even if for some products the margin of innovation is low.

^{6.} L'increvable, project by Christopher Santerre and Julien Phedyaeff, 2013

How can we then find an objective balance between the eagerness of making our system more sustainable and the reality of the market?

Laws are being voted and fines are being given away. According to Right to Repair, a non-profit organization, "the EU Commission finally published on August 31, 2022, its long-awaited draft ecodesign and energy labeling requirements for phones and tablets." "This regulation has the potential to ensure that phones and tablets used by Europeans are designed sustainably, thereby slowing the avalanche of electronic waste that has been caused by hardto-repair devices." However, the most significant measure formulated by the European Commission would hopefully be making batteries and displays for smartphones end-user replaceable with commercially available tools and applicable to all devices. The failing batteries are the number one cause of phone renewing.

Electronic components are by far the most polluting ones; however, the next big step might be to apply this requirement to the entire range of products that we conceive. In this sense, we should design with the understanding that long-lasting design should be the number one priority in the near future. In other words, a design that will allow refurbishment, recycling, and upgrading.

Many companies, especially larger ones, seem to be a bit more concerned and are starting to develop strategies. You can easily find on most websites of big firms a sustainability policy and sometimes even a repairability policy. The sustainability policy is often a chart used by many firms that show their concerns and goals for the future.

[B] SHOULD WE GO BACK TO LOW-TECH?

As previously mentioned, technological objects are more likely to malfunction and be thrown away. One goal of reverting to low-tech would be to enhance people's understanding of their objects. Since low-tech objects are less reliant on technology, they are easier to comprehend and less prone to breakage or damage. In this context, we can consider incorporating interchangeable spare parts that can be replaced and reassembled as needed.

However, a remaining issue is that people are still hesitant to repair their products, fearing that they may end up worsening the situation. It is both a matter of reluctance and lack of ease. As a result, they perceive repairability as unattainable. Changing this perception and raising awareness that repairs are eco-friendly and can significantly reduce waste would be one of the greatest challenges.

[C] THE BACKSTAGES OF DESIGNING FOR REPAIRABILITY

Repairability is a crucial factor in increasing the lifespan of a product. Unfortunately, most products are not designed to be repaired, which is a consequence of today's capitalist society. Designing for repairability requires adhering to a human-centered design process. Throughout the creative process, I will allow myself to think critically and outside the box. The objective of this project is to analyze all the necessary parameters to make any object repairable and empower users to perform repairs, minimizing stress and frustration at every stage.

There is no universal recipe for all objects, unfortunately. However, I aim to demonstrate that depending on the type of object, certain parameters can be implemented to facilitate easy and enjoyable repairs. Repairing a toaster is vastly different from repairing a desk, for example.

A desk is less likely to break compared to a toaster. Repairing a desk is more straightforward as the problem can often be identified with a single look. Spotting malfunctions in a toaster might be more challenging since we may not know how or what to look for. Regardless of the product type, the first golden rule is to enable complete disassembly and ensure the separation of all materials. This prioritizes disassembly over assembly since allowing disassembly promotes component recyclability. A simple disassembly process facilitates the separation of different components. It is crucial to minimize the use of final assemblies, such as glue, that impede disassembly and instead favor simple

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methods like nesting that do not introduce additional parts.

The second rule is to provide solutions that empower users to comfortably repair objects themselves. Playfulness can be considered as a means to motivate users not to give up. One approach could be to provide clear and easily accessible instructions. For instance, IKEA instructions do not include text for a valid reason they are sold worldwide, and translations could introduce ambiguity in technical terms. The company relies solely on visuals to ensure understanding and to facilitate the assembly process as much as possible.

To broaden the scope of my research and the project's outcomes, I have developed a method to guide me. Regardless of the product type, I began by listing parameters that could enhance the repairability of an object. These parameters are linked to technical aspects or centered around user experience. For example, creating a clear and playful path, making the process appear easy, and enabling disassembly and reassembly without tools.

This project explores the differences in repairing high-tech and low-tech products and aims to draw conclusions about how the technological level of a product correlates with its repairability. Designing for repairability in a piece of furniture versus a toaster would require significantly different approaches. The goal of this project is to compare two objects that differ in terms of production scale, production process, function, and materials, to demonstrate

that common or distinct parameters can make them both repairable in different ways.

What if both objects were aesthetically pleasing, so it would be obvious to repair them whenever they break? Emotional design is a part of designing for the long term. The shared aspect of these two projects is the method. Starting from parameters that can link a toaster to a desk or distinguish them, while reevaluating the repairability journey from a user-centered perspective. Both objects are specifically designed to be repairable, repaired, and rebuilt. The project's goal is to explore and compare design solutions for objects that embrace different levels of technology.

How do we design for industrial design?

I disassembled a toaster and examined all of its components. How does it function? Why do we require these numerous small components? And why so many tiny screws?

Based on this experience, I concluded that if I were a user, I would have given up after fifteen minutes of attempting. I conducted this experiment on a second toaster, thinking that an older one would be easier to dismantle, but I quickly became disappointed. Several minor difficulties discourage the user. Firstly, the screws were concealed within the small base. Figuring out and not knowing this step can be discouraging. As I progressed, I realized that proper tools were essential.

A regular screwdriver wouldn't suffice. Some screws with triangular heads were challenging to remove due to the tight gap between the walls and the screwdriver. Some were even glued beneath, making them impossible to extract.

From this experiment, I reconstructed it, designing a toaster that is intended to have longevity, with each part easily repairable.

The toaster I imagined is constructed from metal, a material that we tend to value more than plastics. It includes several functions such as a timer, an on-off button, and a reheat option. Additionally, there is a crumb drawer located on the base. This toaster consists of three parts: the top, body, and base. These parts can be disassembled without the need for any tools, simply by twisting the locks. The locks can't be twisted if the power is off. This is also a safety feature for children to prevent anyone from accessing the core of the toaster while it's on. While a toaster is not likely to break down, when it does after two years of great service, it can still be quite annoying.

The aim of the project is, before anything else, to raise awareness about our consumption, especially when buying new products. That's why I decided to combine a service with the product. Once the user gains access to the interior of the toaster, they can scan a QR code that assists in establishing a diagnosis. The accompanying app is designed to instill confidence, provide learning, and enhance user competence in the future. The user can select their skill level to adjust the task difficulty and level of explanation accordingly. If the problem can't be

fixed by the user themselves, the app helps them locate the problem and send the damaged part to the repair center. After a few days, the user receives the repaired part back and can easily rebuild the toaster without any trouble.

Although it is still optimistic to think that 100% of toaster owners would care this much about their appliance, it would still be an opportunity for users to think twice before throwing away their objects and, in the best case, to avoid some toasters being discarded.



8. Final proposal for the toaster.





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How do we design furniture?

For analog objects like furniture, the issue lies not so much in their potential to break down, but rather in the quality that may impede users from building, deconstructing, and rebuilding them as many times as they desire. Cheap materials, in particular, tend to be porous, and the use of screws and nails can easily damage the material from within.

To illustrate this concept, I collaborated with designer Jonathan Berglund, who is also part of the Individual Study Plan in the Design Master's course. Our concept revolves around expanding upon the theory of tool-less assembly to create a desk that can be disassembled without causing any harm, eliminating the need for screws, nails, or any joinery that might compromise the wood when reassembling. The prevailing challenge in today's society is finding the balance between affordability and quality. The lack of quality not only affects the repair process but also impacts the way objects are initially built and later reconstructed.

The desk we designed is crafted from alder wood, and the legs are securely joined to the tabletop using hemp rope, which is then fastened with a knot. We also placed great emphasis on incorporating intricate details that not only enhance the overall aesthetic of the product but also guide users through the building experience, ensuring a more satisfying result.

By focusing on high-quality materials and innovative construction techniques, we aim to address the



9. Assembling detail from the backside of the tabletop

common problems faced in contemporary society. Our approach emphasizes sustainability, longevity, and the empowerment of users to engage in the creative process of building and rebuilding their furniture. With our desk design, we strive to provide a practical solution that encourages users to cherish their possessions, reduce waste, and foster a sense of connection with the objects they interact with daily.





 $10.\ Desk's\ final\ proposal$

Whether it is disassembling a toaster, or designing a repairable desk that can be easily built and rebuilt, the act of repairing and engaging with objects on a personal level cultivates a deeper attachment and appreciation for them.

By understanding the inner workings of technological and analog objects, we gain insights into their functionality, components, and repairability. This knowledge empowers us to tackle repairs confidently and reduces the fear of making things worse. Additionally, designing products with repairability in mind and utilizing high-quality materials can prolong their lifespan and minimize waste.

Moreover, the act of repairing objects oneself not only contributes to environmental sustainability by reducing waste but also establishes a sense of personal responsibility and connection to the items we own.

Ultimately, the notion of sustainability goes beyond just environmental concerns; it encompasses a more holistic approach that involves nurturing a sustainable relationship with the objects we interact with daily. By actively engaging in repairs and valuing the longevity of our belongings, we foster a sustainable mindset that extends beyond the act of fixing and towards a more conscious and responsible consumption pattern.

In order to preserve memories and continue my research, I made the decision to launch a podcast called "Overthinker," which aims to delve into significant topics within the design field. One of the

initial episodes, scheduled for release in the near future, will focus on repairability and sustainability. As the podcast evolves, my intention is to invite a wide range of guests to contribute their insights and perspectives.

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48 49 APPENDIX

Arranging the exhibition for this project posed a challenge due to the contrast between the two presented objects. My main focus was to create a cohesive whole and ensure the concept was understandable without excessive explanation.

To achieve this, I divided the exhibition into three parts, each section delineated by a wall. The standing walls helped enclose the space, creating an intimate atmosphere and preventing people from passing behind the corner.

The first wall was dedicated to the desk, while the toaster was presented in front of the second wall, establishing a sense of duality. I introduced the podcast as a link between these two objects, aiming to convey the concept without overwhelming the visitor.

The exhibition was designed in layers, with the intention of highlighting the two presented objects as the stars of the show. Since the objects themselves were small or visually lightweight, I utilized the walls strategically to leave an impression and engage the visitors.

To accomplish this, I chose to ask a question on the wall, a question loosely related to the theme of repairability, intended to challenge the viewers and provoke a reactions. This constituted the first layer of intricacy.

The second layer involved listening to the podcast and establishing connections between reparation, challenge, and complexity.



11. Exhibition in perspective

The final layer was dedicated to enabling people to comprehend the objects themselves. For the desk, I displayed the various parts of the legs and the necessary rope for attaching the legs to the tabletop on a workshop board. Initially intended to be informative, the board's aesthetic took over its utility. This taught me that subtlety is not always the best approach when conveying information. Instead, being straightforward can be more effective. As for the toaster, I adopted a pragmatic approach, providing information through technical drawings. Based on feedback received during the exhibition, people found it comprehensible and understood that disassembling the cover of the toaster would reveal a QR code, allowing them to repair the toaster independently.

Listening to people's feedback during the exhibition provided valuable insights. Firstly, I realized that visitors don't need to fully comprehend the project to appreciate it, and it is acceptable if their interest is not as high as expected.

Secondly, people show diverse interest when it comes to experiencing an exhibition. A lot of visitors are initially attracted by aesthetics, while the remaining minority is more interested in the content itself, seeking a deeper understanding of the project. I was happily surprised by the number of people who listened to the teaser of the podcast. Moreover, they dedicated more than a minute to listening, despite the teaser's short length. To make the desk looks more like a desk,

I also included a small notebook. The notebook was there for two purposes: firstly, it made the desk appear more realistic, resembling an actual workspace rather than a table; secondly, it provided an alternative way to interact with the visitors. I wanted to encourage them to share their thoughts and engage in deeper conversations. As expected, the notebook contained some small drawings and short notes, such as "Great podcast teaser" or "Bra färg." However, I also received a couple of longer notes, which I truly appreciated.

Overall, the feedback on the chosen context and concept was positive. People expressed a strong appreciation for the project's emphasis on repairability in today's throwaway society. While the desk garnered more curiosity than the toaster in general, creating the impression that the focus was more on the desk, visitors were also interested in the toaster, attempting to disassemble and reassemble it. This surprised me, as I had always been taught not to touch anything at exhibitions, even when it was not explicitly mentioned. I thought about putting up a not but then I realized that it was going against my project so I decided to take the risk.

I felt also lucky regarding the exhibition's location, considering the considerable amount of work presented. Being placed at the beginning of the exhibition allowed visitors to approach with a fresh and focused mindset.

I was also very pleased about the feedback I got from the presentation The feedback was generally positive, with appreciation for the familiarity and reference to Jonathan's work. This is exactly what we wanted since we wanted to have two distinct spaces while wanting people to make the link between the two projects. The table aspect of my concept was highlighted as being easily understandable and likely to attract a lot of attention. The quality of my drawings was also praised.

One suggestion that stood out was the incorporation of a QR code to make it easier for visitors to understand my concept or access additional visuals. There was also a suggestion to showcase both high-tech and low-tech options with a QR code for the table as well for a more sensitive experience, as well as to explore aspects related to reparability, disassembling, and recycling. Finally, there was an interesting idea of connecting the concept to a podcast, which could add another layer of engagement and interest. Taking care of the execution of the exhibition and paying attention to details was emphasized to maintain a high-quality experience.

Overall, I found the feedback to be valuable, and I will consider these suggestions as I continue refining my concept. This exhibition taught me numerous technical and mental lessons, reminding me that things never go as planned, and it is always better to have a plan B.

I am satisfied with how the exhibition turned out and that people generally understood the project. If given the opportunity to redo it, I would likely invest more effort into the toaster wall to make it more appealing and detailed. I would also pay more attention to the last details.



12. The desk's wall

IF YOU CARE... ... YOU REPAIR

