REVEALING THE NATURE OF HUMAN CHARACTERISTICS THROUGH INTERACTION DESIGN

Master’s Thesis in Interaction Design
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How can we design, not to solve problems, but to answer to a more meaningful purpose in life?
ABSTRACT

Everyday we come up with new solutions for our existing problems. But the solutions of today are tomorrow’s problem. The products we create as designers are often bringing more complexity in our society than it is initially intended for.

This thesis aims to give a new perspective on the design practice community. Instead of starting with a problem-solving scope, this thesis intends to find what is truly meaningful for human life, meaning finding, and to propose how we can envision new ways of meaning making within interaction design. The two processes together of meaning finding and meaning making is how we can aim for concrete results that are relevant for our society.

To better understand what truly matters for human life, I collected 14 stories through ethnographic research. These ethnographic stories reveal the nature of human characteristics when people face and overcome big challenges in life. Some of these ethnographic stories highlights the life of a WWII survivor, war refugee, leukaemia child-patient and a widow. Parallel, to the ethnographic work, I explored how I can evoke a deeper connection between people, by making them listen to each other’s heartbeat.

Inevitably, by exploring the fundamental elements of human life and observing the emotions and behaviour of my interviewees and participants, the thesis find itself often on the playground between philosophy and human life. But by taking a strong interaction design perspective, these insights were manifested in the human design manifesto booklet. This booklet proposes six expressions for designers, with the intention to embrace the fundamental elements of human life when we design:

1. Design attitudes, not solutions. 2. Design the medicine of the mind. 3. Design for relationships. 4. Design for our direct senses. 5. Design for the deep human connection. 6. Design the act of kindness

Later on, for the meaning making part: one statement from the Human Design Manifesto was selected to explore in depth: Design the act of kindness. For this expression project Hidden Figures was created. Hidden Figures is a design proposal which demonstrates that a design creation can be driven by the fundamental elements of human life. In this case proposing the act of kindness as a vision on how our society could be.

In overall, this master’s thesis demonstrates how our design proposals can embody and resonate well between the three levels of design philosophy, a designer’s vision and interaction design practice: How we, as designers, can use meaning-making and meaning-finding to create more relevant impact for our society. Last, I hope this work encourages other designers to think deeply about their own creations and its impact. And help designers reflect on why they create and how they could also alternatively practice design.
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Last February I participated in an art performance in Stockholm. For the art performance, I was invited in a church with 150 other people. Before entering the church, I was asked to strip myself from all technology I possessed. In the church there was no room for these gadgets. The moment I entered the church I would be fully disconnected from the outside world. I was also asked not to talk. Apart from this, there was no rule of what I could do inside this space.

Inside the church there were people, music, some carefully placed chairs and performance artists. As I walked into the church, a performance artist took my hand and smiled at me with the kindest smile. I was surprised. We held hands for 5 minutes. She walked with me around the church, while the choir was filling up the whole space with their warm voices. After our walk, she brought me to a group of people who were standing together. She kindly guided my hands to the other strangers hands. She made us hold hands.

There I was standing, holding hands with two strangers. I looked at the young man standing in front of me. I noticed how his unusual glasses were fitting him very well. I looked at the woman next to me. I carefully noticed the nice details on her feet. She had a nice layer of bright red nail polish. She looked in my eyes and smiled at me. As I stood there, holding hands with two strangers, a thought struck me. How often have I opened myself up to another stranger? As I stood there between these strangers, a tear left my eyes.

The pure way of interacting with each other, interacting through a kind smile, through gentle touch, made me reflect on what we as designers are capable of when we create interactions. Marina Abramovic, the performance artist behind the performance I took part in, was once asked if she did not like technology. To that question she answered: ‘there is nothing wrong with technology, our approach to technology is wrong.’

I believe that with every new design solution we create, we also invent new problems. Designers today are eager to come up with problems and design new solutions. But today’s solutions are tomorrow’s problems. Instead we need to look deeply into what is truly meaningful for human beings. We need to look at the bigger scale of how our design proposals are making future change in human lives, and we need to look deeper into each human in order to find out what makes us particular as human beings. What becomes meaningful for a world war II survivor? What is meaningful for a refugee? It is about time that we realize that our design solutions are not going to help the world alone, and instead we should take one step backwards and ask ourselves why we are even creating? We can be better at questioning and understanding what is truly meaningful for human beings, and how we can use design to support and enrich the beautiful stories and experiences of what it means to be human.
Goals
This master's thesis takes on the challenge of finding the meaningful purposes in life. The aim is to deeply analyze the stories of people who have faced and overcome big challenges in their lives. By taking an interaction designer's perspective, I want to deepen my understanding of what it means to be human. By using ethnographic methods, my goal is to find answers that reveals the more meaningful purposes in human life (Blomberg, 1993). Throughout this master’s thesis I call all activity related to this process meaning-finding. Then, the next objective is to explore how we can apply design, therefore to find out why we create, to answer to these meaningful purposes. This process is called meaning-making.
I situate my master’s thesis in the young but rapidly evolving field design anthropology and more specifically in the field design anthropological futures (Smith et al. 2016). Design anthropological futures is an interdisciplinary field that uses design and anthropology to imagine different futures and do this in close collaboration with human and with attention to human values. Whereas anthropology is descriptive and examining the present, design is future-oriented and constructive. I have used ethnographic methods traditionally used in anthropology to get into deep contact with human stories and values, and used design to transform these insights into future change.

At the same time, design, and the methods used in design such as prototyping and user-testing, has also been an important part of my ethnographic studies, when I e.g. asked my participants to listen to their heartbeat.

Apart from design anthropology, I draw on speculative and critical design to look critical at how we design today, and speculate on how this could be done differently (Dunne & Raby 2012). However, it has been important to me not just to imagine and speculate on different futures, but to actually create and try out how this different future might be. With my focus on what is truly meaningful for human, I have looked to performance art, because performance art enables a space for human interaction outside the everyday life. My design practice, including ethnography, critical thinking, design experiments and influence from performance art, has been the main research and knowledge source of this master’s thesis. By this practice-based and artistic design approach (Seago & Dunne 1999), where knowledge has been created through design (Frayling 1993) I have been able to connect with deep human topics, not from a theoretical perspective, but an embodied and constructive design perspective that is deeply rooted in people’s experiences and personal stories.
The Thesis Scope

It is important to ask critical questions about the purpose of our design practice, even if asking these questions could exceed the boundaries of a MFA master's thesis scope. I strongly argue that design needs to change, therefore simply creating a holistic product is not enough. What I have done in this thesis is to move up in the process and I questioned the overall purpose of our design practice. This has consequences for the process and the end-result. Diagram 1 shows an accurate visualization of my thesis scope.

Level 1 describes the purposes of design practice. During this thesis I questioned why we practice design in regards to human life. Every step and activity gave me knowledge that helped me move forward. This resulted in design philosophy. Level 2 is my personal vision and is heavily influenced by level 1. Level 3 is the concrete execution in the form of a tangible artifact, and derives from both level 1 and 2.

By moving up in the structure, I will lose focus and depth in the application-level (3). However, this thesis' result is not a product that is supposedly embody all the richness of all three layers. That would be an impossible challenge for any product. This thesis' proposal finds itself on all three layers, as visualized in diagram 2. Throughout the thesis this proposal has been sketched over and refined.

Diagram 1: Visualization of thesis scope.  
Diagram 2: Visualization of thesis' proposal.
BY ASKING CRITICAL QUESTIONS ABOUT THE STRUCTURE AND INTENT OF THE DESIGN PROCESS, THE DESIGN PROCESS CHANGES. THIS A/B MANIFESTO, INSPIRED BY DUNNE AND RABY IN *SPECULATIVE EVERYTHING* (DUNNE & RABY, 2013), WAS CREATED IN A REFLECTION EXERCISES TO REFLECT UPON THE DESIGN PROCESS. A DESCRIBES HOW I WOULD NORMALLY CONDUCT A DESIGN PROCESS AND B DESCRIBES MY METHODOLOGY FOR THIS DESIGN PROCESS. THIS A/B MANIFESTO WAS INITIALLY USED FOR SELF-REFLECTION, HOWEVER THE PURPOSE OF HAVING THIS MANIFESTO IN THIS REPORT IS TO COMMUNICATE THE INTENT OF MY THESIS, THE ESSENCE OF WHAT I AM DOING, FOR THE PURPOSE OF THE READER.

**MY A/B MANIFESTO**

[A]

- user-centered design
- short timeframe
- problem solving
- finding existing problems
- technical problem
- improving the existing world
- speculating
- imagining by speculating
- business driven
- user-friendly
- critical design
- research through design
- open-end

[B]

- extreme user-centered design
- human-generation timeframe
- envisioning new ways of interaction
- looking for new meaning to implement
- cultural attitude
- envisioning new ideals
- synthesizing speculation in our reality
- imagining by doing
- quality of life driven
- tapping into the unconsciousness and desires
- striving for real impact and implementations
- research and design
- concrete implementation
This section describes the motivation behind the ethnographic research and experiments. It highlights the important findings and insights from the user-centered ethnographic research. It tries to illustrate the richness as clear as possible. It sets the foundation for the thesis by building up a canvas for the later 'meaning making' part of the thesis. This canvas is later presented in the form of a Manifesto. Research was prepared, conducted and synthesized in the first 5 weeks.

The *In-depth Ethnography* and *Ten Strangers, Ten Stories* are research activities for which I interviewed people about stories about their personal lives. The *Heartbeat Syncing* and the *Marina Abramovic: The Cleaner performance* are exploration in which I explored the human connection, by bodily senses and not by words. These four activities have not directly lead up from one to the other, instead they were conducted parallel. Whereas familiar design processes are more grounded chronological, my activities are part of a new learning process. In order to do something differently, you need to let go. As you conduct activities, you build up intuition, sensitivity, interest and the ability to reflect on methods after. Eventually each of the activities contributes together to the *Human Design Manifesto*. 

10 MEANING FINDING
As described in the introduction, we need to look at the bigger scale of how our design proposals are making future change in human lives. Simply creating more solutions for our everyday problems are not meaningful anymore. Design needs to change and we need to find what is truly meaningful for human life. What are the fundamental elements that really matter? For the ethnography research I zoomed out from everyday life, to a human life timeframe, in order to gain a better understanding of it. For this matter I interviewed people who have faced and overcome big challenges in their lives:

1. WWII survivor. 2. A child leukemia patient. 3. A war refugee. 4. A widow.

I wanted to see how people and families behave, reason, and feel at their most vulnerable point. I wanted to ask which things become really important. As an ethnographic researcher, will I be able to see the connections that truly matters in life? What are the things that helped them to overcome their challenge? Which answer will they share with me? How was it meaningful for their lives? Is there something I can find, through ethnographic research, to apply in interaction design?

Each interview session ranged from 1 to 2 hours. There are audio recordings available in Dutch. However on the next page the transcripts have been turned into collages for the purpose of communicating the essence of each interview session. In this way the richness and answers are presented as clean and unfiltered as possible for the purpose of the reader. Each interviewee's collage is illustrated on the following page, followed by a short reflection.
**WWII SURVIVOR**

Love and family is what gives colour to our lives, once it’s taken away

This is the story of a very brave woman. Her name is Noor, but she said I could call her Noortje. She was 11 when WWII arrived. She was still a young girl living in a city called 'S Hertogenbosch. She shared a story with me during the interview, she called it ‘The Worst Day Of Her Life.’
I still remember the night of the war, 23 October 1944.

It was the worst night of my life.

I was playing outside. The Germans warned us that day. We made sandwiches to sit in the basement. Grenades came faster as the evening matured.

50.000 grenades

When we left the basement, the first thing we saw was a sea of fire snowflakes in the sky above our house. That was such a wonderful view. We were standing outside, all looking at our house. And out of nowhere, the whole house collapsed. And nothing was left anymore. It was miserable, but it was wonderful to look at. We were in the basement of the neighbour.

“Shut your mouth, shut your nose, shut your ears!”

We screamed all night long. There was a bed sheet that the neighbour made wet. Everyone was holding the blanket in front of their face and breathing through it, cause the ashes and powder of the explosions and grenades came through the small basement window.

3 Months Underground

The whole neighbourhood was burn down. There was a big bunker close to our neighborhood. We found an empty one and stayed there with 10 people for 3 months long. There was no bed, we had to sit on our knees for 3 months. I kept quiet about the war for many years. And I was too scared to tell the story. I ended up with a depression in the hospital, twice. My body was shaking all the time, it didn't work as it should have. Slowly after many years, it becomes a bit easier to talk about.

We were singing every Sunday after Church. It was so cosy.

We had 8 siblings, and we always came home with the boyfriends and girlfriends. One big happy family. I saw how much happiness these moments created for our family. Every Sunday after church, everyone was here, and we would sit and make music. We were singing. That was so beautiful. My happiest moment was when I met Chef, my love.
Reflection

The war did not bring anything good at all. No one gets stronger after, you don't become wiser. Noor and her family had a lot of fear still haunting them after the war. The only reason why they were able to survive the war was because they had each-other. Noor’s stories shows how extremely important it is to stay together with the family throughout this difficult situation. Having each-other made the situation more bearable. They kept each-other strong, without the brothers and sisters they would not be able to find the strength to move on. After the war they stayed together. Moments like ‘Sunday singing after church’, made the past seem further away. These moments do not only give hope, but they are evidence for their lives entering a new positive chapter.
LEUKEMIA CHILD-PATIENT

It takes a movie per day, to survive 38 weeks in the hospital, 2 times leukaemia and 3 very painful bone marrow punctures

This is a story about an innocent child who was warped into the world of cancer, without really realizing what was going to happen. To continue on chapter 1, which was about family, this story continues on how Tijn’s family influenced Tijn throughout his journey.
I was sitting between my parents at the doctor, and both of them were crying. I had no clue what was going on. The same day I was driven to the hospital, and I had to do so many test. Later that day they figured out I had leukemia.

But I had no clue what leukemia was

I remember I got a book for kids, describing what leukemia is and what it does to you. I told my mom: “Mom this is the wrong book”. So she got another book for me. Again, I went through the book. “This is not the right book, mom.” Mom asked why. “It says cancer.” I replied:

“I don’t have cancer, I have leukemia.”

6 Weeks in the hospital, 3 days home. 5 Weeks in the hospital, 3 days home. 4 Weeks in the hospital, 3 days home. And another 4 weeks in the hospital. Then I was finally cured, they said. But slowly the blood sign shows it went backwards again. My parents went to the hospital again, I stayed home. But when they came home. I knew what was happening. And then everything started again.

And then I had to do another bone marrow puncture

I really hated them. I was so happy I didn't had to do them anymore. And then they wanted to do another one.

When I was in the hospital, I was dreaming for hours about eating gourmet

People say often, that I've been fighting so hard. But to be honest, I just laid in the hospital, felt horrible, and there is nothing I could do, only stay positive. There is nothing else you can do.

The hardest part was the guilt I had towards my parents and my brother and sisters

Their lives changed drastically because of me. My sister visited me every day, and I appreciate it so much. But how many other things she could have done instead of visiting me. My dad just became the CEO of his company, and he had to give that job away for me, to spend everyday with me. My mom slept every night next to me.

The best part of everyday was when dad came at 3

And before his visit I would call him to ask him which movie he would bring. And the best part was to watch the pre-movies before every movie. And I had a pen next to me. I always wrote down which movies we were going to watch the days after.
Reflection
Tijn's childhood story reveals that Leukemia impacted the whole family drastically. It changed the whole course of the family. The daily routine of the lives of Tijn's dad, mom and his 3 sisters were influenced by the visits. For Tijn, the situation gave him a lot of guilt. He felt responsible.

However, the fact that the family decided to put so much effort in taking care of Tijn, gave Tijn the emotional spirit to sit through the complete treatment. It is the compassion of others that gave Tijn a strong mind. It is the attitude of others that gave Tijn strength.
WAR REFUGEE

Attitude is the most important quality in life. You gain strength out of it and you influence the people around you with your attitude.

This is the story of a man, and how he escaped the Vietnam war when he was 16. He never really talked about this with anyone. Whereas the previous two chapters gives a different perspective on family, this story describes the journey of leaving your family behind.
If you sing a song about the freedom in Vietnam, you would be imprisoned. It was a hard life in Vietnam. A poor life. People were so desperate to escape,

I saw a family throwing their newborn baby on the boat when it was too full

When I came to the Netherlands. I felt like a baby, not knowing anything. The two countries were so different. This was so incredibly heavy. I had to leave my family behind.

When I arrived in the Netherlands I was in the hospital for 6 weeks.

I was so much homesick, that it started to hurt and I couldn't function anymore.

The only thing you think of when you are on the boat, is to survive. But when we arrived in the Netherlands and the government offered 400 hours of education to us,

That was the first time I thought about which skills and talents I would liked to learn.

The hardest thing is not having free time. Normally people would relax in the weekend. Me and my brothers we were continuously working. Working for food, to speak the language, to immigrate. We didn't had free time.

The attitude of the Dutch people back in the days. They were so incredible kind. As long as you show you want to work hard, they would support you in everything. And I worked hard. My former boss he paid for my education. There were volunteers who got food, groceries and clothes for me. There were people who drove me around to schools. Wherever I went, people were always helping me. And I really don't know why.

They helped me so much. They were so kind.

When I almost lost everything that I cared about, I started to appreciate the luck I was still alive; life. I start to appreciate everything that people offer you.

This kindness made me a great man.

These days, I help a lot of people around me. I am volunteering to help other people find luck in their life.
Reflection

Quang’s story describes the emotional journey of leaving his country, all his belongings and family behind. The journey starts very frightening. Quang is alone and when he arrives in the Netherlands we see how the journey itself influences his new perspective and attitude on his own life.

Quang explained that he lost everything he had. He did not even master the language. However, he had an attitude that kept him striving forward. The new life was hard work, but he was blessed for the great opportunities the Dutch people offered him. From that moment on, everything that came onto his path, he greeted it with a smile. Eventually this attitude influenced not only him, but also other people around him throughout the trajectory of his life.
This is the story of a woman named Yvon, a wife, a mother of 4, who lost her husband. They met each other 28 years ago when they both started working in the laboratories at school.
Wim died in 2007, the date is 29 November. 2.5 Weeks before that, he woke up at night and he screamed so hard because of the pain. The same night Wim went to the hospital. The problem was diagnosed a week after, and the same day he had an emergency-hospital. They enhanced his aorta in the heart.

Thursday morning. I was already up, early in the morning, 6h30, Wim came home down. Because of the operation, he wasn’t so stable. So I thought it was a good sign he came down. He was about to serve the table for breakfast with his son. My son always had to go early to school. So he walked from the kitchen with a few plates to the table. And that is where he fell backwards.

And with the fall, he was suddenly gone

Ilona, my oldest daughter, didn't live at home anymore. The neighbour went to get her from a town 1.5 hours away. I didn't tell her that her father died over the telephone. The neighbour didn't say anything. She didn't asked anything on the car back home. When she arrived, I walked outside the door. She could see on my face that things were wrong.

This was such a hard moment. I held her tight in my arms, and she just lost everything and just fell on the ground.

This happened after November: Sinterklaas, everyone was getting presents. For Christmas we won a Christmas tree. The 1st of January we had a birthday. And in summer we went on a trip to Brazil with all the children. It is important to move on.

Everything that seemed normal, is gone.

And everything you go through afterwards, your life will always be split in two. Your perspective on time changed drastically. It happened 9 years ago, but it doesn't feel like 9 years. It feels like 1 or 2 years ago.

In the beginning I was always so incredibly happy when the day was over, and I could go back to sleep. The bedroom felt like a safe place, away from everything. My youngest daughter slept next to me, and every morning when we woke up we just held each-other and cried.

I will always carry the loss with me. It feels like someone amputated a part of my own body

It takes time, until you realize with every fiber of your being, that he will never come back.
Reflection

Yvon’s story about the death of her husband shows how much pain it caused the whole family. It has been an incredibly huge challenge for the family to deal with this topic. Nine years later it is still hard. By talking with Yvon and observing her answers, I find it extremely difficult to draw out insights. Yvon has learned to talk openly about this topic: talking with others about her loss helps her to deal with it. However, these insights do not justify the pain and sadness that comes with death.

To put it in the most simplest terms, life is not easy. And when these crucial moments, such as death, happen to us, we have to carry the loss with us for the rest of our lives. Meanwhile we have to keep moving on. This is the complexity in life. We can’t cheat death, and as many more topics, death is a fundamental element in life. We should embrace this complexity as it is part of life.
Conducting this in-depth ethnographic research has been incredibly valuable for the meaning finding part of this project. There are many media to find online that portrays topics such as war, sickness and other traumatizing events. However, being able to talk, listen to and observe these persons and their stories with my own senses helped me to better understand the journey they went through. It helped me to understand how the deep human characteristics came into expression while it was being stretched. My ethnographic skills helped me to steer the conversation and ask the right questions in order to tap into their emotional universe. I first focused on their conscious actions by asking simple questions and let them speak freely. Then I stimulated reflection by often asking ‘why’ and ‘why not’? This helped me to also understand their unconscious intentions.

Ethnography is not only about interview strategies and asking great questions, it is extremely valuable to create new reflection in the moment. Therefore at the end of each session, I listened and I made each participant listen to their own heart. The intention to both listen to their hearts, was to fully grasp the existence of their emotional depth with respect to their incredible stories. This confrontation contributes a lot to the richness, as it helped me to understand how extremely delicate a human life could be.

All the stories collected for this thesis portrays a person and/or family facing and overcoming a big challenge. Throughout these challenges these people are being put under a lot of stress, and within this critical moments the meaningful elements of life are being exposed. Each story covers the fundamental elements such as attitude, compassion, family, and persistent. These elements are further elaborated and expressed as key insights in the Human Design Manifesto.

When we design and put our designs into this world, we should not aim to make life as easy as possible. Because the world is complex and there will always be challenges we have to face. E.g. Death is a fundamental part of life. Instead, we should embrace this complexity in our lives. When we design, we should design to prepare ourselves for the fundamental elements of life. We should embrace the complexity of humans and the world around them. Only then, we can create more meaningful things. This is the starting point that lead to my manifesto:

**It is the complexity and the delicacy of the human condition that makes us so beautiful.**
This short ethnographic activity was conducted parallel to the In-depth Ethnography. Whereas the In-depth Ethnography covers stories of people who faced and overcome big challenges in life, Ten Strangers, Ten Stories covers the stories of ordinary citizens who might or might not have experienced something of that particular same weight. The starting point for this research experiment was my believe that every person has an unique story to tell. It is not necessary to only have experienced massive life events in life: meaning can be found in each life journey and it is for every person unique.

Ten strangers were selected on the central market square of ‘S Hertogenbosch, the Netherlands to be asked one question. These 10 people were not selected by age or any other preferences, they were selected as they passed by the square: the first ten to pass by. I wanted to explore which personal stories people would share with me. Does everyone has a story to tell? Would people share their stories with me?

“I am a design researcher and I would like to ask you a question if you have the time? I believe that everyone has a unique story that made you who you are the day of today. What is your important story in life, something that made you who you are today?”
Man with hat: “The death of my dad, when I was very young. It defined my life. It was a terrible life happening, because I was so young, I was 12. However, he brought me on the right path. His death made me mature very quickly, and I was ready to face certain challenges in life on an early age. And of course, I also missed other important lessons. It takes years to find the right balance for my situation. And that is my story. I adopted two children from China. And it is going incredible great. All in all, I’m a lucky bird.”
**Artist:** “My story starts with my dad. I was only child and he wanted me to be a boy. I was the last in the family-tree. So he decided to make the best out of this situation. He said to me: I’ll teach you how to work with your hands” And so he taught me to ‘build from wood’, and how to paint, and when I was 12 I got a sewing machine, and a painter-box. He said: ‘Well, now you can get started’. And that was incredible, because I became a professional art painter later. And that was because of dad. He saw I was good with my hands. And you can see, today I am making everything myself that I am wearing.

He also taught me to celebrate the day, day by day. And that was incredible powerful for my life. Because I had two times cancer, and other things. Because of his attitude, I was ready to face all these hard challenges; an optimistic view. So when I was in the hospital the doctor said to me, the situation is very terrible. But I said to him: ‘Would it make it better if I start crying now?’ He said no. And I said ‘Well, then it is better to smile.’

And I have one grand-son who is very disabled. The child gave us so much, by just being here in this world. And because all the other little boys and girls are healthy, you start the appreciate the child so much. If he gives me a kiss, and I bite in his ear, and he starts to smile. And you know, the smile feels like a gift from heaven, and that makes me strong.”
**Couple**

**Woman:** "My story is about my parents, they made me and raised me, in a certain life-style.

**Man:** "My story is about meeting my girlfriend, and now wife, 50 years ago. And now we have a family with 4 children, and a lot of grand-children. And we are still incredibly happy, and fortunate that we can be healthy. Happy with everything we have, and don't have."

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**Couple with Dog**

**Woman:** "...it is the foundation of my life. My origin, household, family, how I am raised, my parents. That is where everything took shape, who I am the day of today. .."

**Man:** "When we were going out for the first time (looks at his wife), we were at this square. We just met each-other, and that has been 25 years ago now."
**Austrian Couple**

*Man:* .. I am happy I am born, life is worth living”  
*Woman:* “.. with the war history of Austria, I have seen that people tend not to look further. And I think it is important to always look further than the surface. To hear people’s story. And I’m proud of being a citizen of Europe, that doesn’t put people in boxes.”

**Young man**

This young man, mid twenties, found it hard to answer. He tried and then wished me success with the project.

**Twin Sisters**

Two twin sisters, age 12. They did not know how to respond. They got scared and apologized.
Ten Stranger, Ten Stories shows that everyone has a story to tell. It facilitates the imagination that every person carries a rich universe with their own believes, life insights and personal stories. For some persons, these stories are still shaping as they move on in life. This research experiment changed my own interpretation of public spaces. Rather than seeing the public as a big crowd, I started to appreciate each individual person as a rich person with their own story. To me, this discovery showed me the beauty of strangers in public spaces. For the later meaning making part of this thesis, this research activity forms the foundation to set the context to ‘public spaces’.
Parallel to the in-depth ethnographic work, I found it important to explore and experiment beyond what ethnographic interviews can cover. For the following exploration I focused on the bodily senses rather than collecting stories by words. The participants in the following experiment were coupled with each-other for 40 minutes. During this time frame, they listened to their own heartbeat, their participants’ heartbeat and to silence.

We lack depth and poetic qualities in our daily interaction with people. As phones, tablets and personal computers are becoming more efficient and smaller everyday, we are moving towards a more screen-focused life-style. Most information and communication is perceived with our eyes. Can I re-imagine new ways of connecting with another human being? How can I share the individual richness of each person, found in Ten Strangers, Ten Stories, in different ways than just making people talk?

How often have you listened to someone’s heart for so long and so clear? What does it make you think? How does it make you feel? Which things do you learn? The experiment had the following structure:

1. Listen to your own heart
   6 minutes

2. Listen to someone else’s heart
   6 minutes

3. Listen to nothing
   6 minutes

This experiment was conducted to explore which new social dynamics and depth in the human connection I could reach by offering the participants a new perspective into their own, and their opposing participants’ body and mind. For this to be possible, I prepared an audio-setup that amplified the sound of the heartbeat, and a comfortable space in which the participants could disconnect and feel each-other’s warmth. After the experiment, I held a short reflection session for the participants to talk freely about their thoughts and new reflection that would arise from the experiment. The following collages on the next pages shows a selection of quotes shared by participants in the reflection session.
“The heartbeat is the most purest form of a human, and you can not get any closer.”

“We are always on our own. We have to take care of ourselves, make our own decisions, no matter what. But having someone’s heartbeat so close is almost like you are sharing this burden. I got the feeling that I am not alone anymore. At that moment I had two hearts.”

“When you listen to your heart it becomes your world. And within this world you are disappearing.”

“You are sharing the very essence of you, the most sensitive part of yourself.”

“The heart. It is something we can do nothing about. You can improve your physics, and ability to work to function, but it is always there. We are born with it, and it is so far away, from daily life, from all the stress in the society that we are in. We never stop and listen. And when you are sitting here, even after when you took the headphones away, I could still hear my heartbeat, and that I can never do otherwise.”
“You learn something about a person that you can not explain. I got to know something about you, that you could not have explained to me otherwise”

“It felt safe in there, no one is able to come in here. This is my place. And when you took the headphone away, suddenly reality hits you.”

“This is a person I know so well.”

“When you are diving you can also hear your heart. And the freedom. It wasn’t scary at all, it was calm.”

“After you took the headphone away, it felt empty in the beginning, and you want it back somehow. And everything felt super real. I really like the contrast of it, because you went so deep. It is almost you were not there, and you don’t have anything to grip on anymore.”

“Two hearts trying to find each-other. The perfect harmony. Trying to hold onto each-other, they manage to do it for a short while, and then let go and the process repeats. But every time they succeed the attraction between the two hearts get stronger.”
REFLECTION SYNCING HEARTBEATS

The Syncing Heartbeat experiment reveals it is possible to evoke a deep human connection between two people, by focusing on other bodily senses than we do in our everyday life. It shows that the sound of our hearts mediates very well between two people to stimulate and evoke new reflection and deeper thoughts. As a participant myself, and the interviewer in the other experiment, I observed that the reflection often touches upon their relationship with themselves, with the participant and their place in society (their life-world):

We have our own rhythm, energy, our background and personal relations with the world. But when we connect with someone on a deeper level. We sync our dynamic human pulse to each-other. And within this new dynamic connection comes deep reflection; it gives rise to new meaning about our own presence, to the other person, to society and to our world.

This experiment shows that the sound of our heartbeat stimulates an incredibly rich experiences, and in the later meaning-making part, it is used as the main interaction-principle of the prototype.
The Artist is Present (Marina Abramovic, 2010) art performance at the MoMA has been an inspiration for crafting the brief, the foundational intent and thinking, of this master’s thesis. The performance by Marina Abramovic speculates about the close connection between people that can arise by placing two persons together and pairing them with eye contact. This performance covers similar topics such as human connection and evoking deeper reflections in ourselves.

The intent of art performances are to experience the performance with your own body and senses. These performances reveal new dimensions that can not simply described with words. I could only speculate what it meant to be sitting in front of the artist. In order to experience the power of performance on my own body and self, I participated in the new performance by Marina Abramovic ‘The Cleaner’ (Marina Abramovic, 2017) in the Eric Ericsson Hall Church in Stockholm.

About The Cleaner Performance

Abramovic’s latest work focuses on topics such as disconnecting yourself from the connected world and cleaning your mind from all distractions. Hence, the name the ‘cleaner’. Furthermore, Abramovic’s work explores how we can re-connect with others on the simplest level of human touch and being present for each-other.

The Cleaner performance by Marina Abramovic is an excellent playground to experiment further on evoking the deeper human connection while focusing on our bodily senses. As a participant, I was interested in the artist’s perspective on these human topics. As an interaction designer, I wanted to explore how I could take the learnings and richness of the performance, to the outside world, outside of the church.

The next page gives a short introduction to the performance, followed by two reflection covering some of the topics I experienced during the performance.
As I entered the church I was asked to leave all my electronic belongings and watch behind. In the church I was welcomed by the warm voices of a choir singing. I could not talk and I had no reference of time. There were around 150 persons in the church, performances and participants. I was told I could stay as long as possible. Throughout the performance, the performance artists took me and coupled me with other participants. We shared a shoulder, a long hug, a kind smile and a deep glance in the eyes with each other. Abramovic provided a safe space for intimate encounters between strangers. This space was called the 'here and now' and within this space every person accepted each other. I stayed in the 'here and now' for 4 hours.

Reflection 1

“It has been so long since I noticed such a simple act; a smile of a stranger. I forgot how it felt to receive one, and how affectionate this act could be. It made me first uncomfortable. But I loved it. I kept glancing and looking for the kind eyes. And every time she showed me her kindness. It made me feel welcome, it made me feel like I was wanted here. I am wanted in the here and now. I can be myself and I do not have to worry; no one will judge.”
Reflection 2

“We are all the time surrounded by strangers. Whenever we find ourselves in public spaces, there are strangers around us. But in the quantity of the concept of stranger, the human-element became lost. The element of friend, father, sister, lover; an important person for someone else. It hid away and became invisible. As I stood there, I looked at these strangers carefully. I looked at how carefully the girl in front of me painted her toenails with a deep intense red nail-polish. Or how the young-man right from me expressed his personality by having blond highlights in his haircut, how he shaved the previous day and how his black glasses suited him very well. And I realized; the concept of stranger is what puts so much distances between people. It creates huge walls and it put boundaries between people. It kills the basic feelings of compassion and empathy. As I stood there, I realized, we are all together in this world. And there is no reason at all, why we wouldn’t give each-other, strangers, a hand, a smile or a shoulder to lean on.”
The personal reflection for the Cleaner performance highlights a new perspective on the human connection: the perspective of kindness. Throughout the performance I slowly understood how powerful kindness is. Marina Abramovic and her art performers were trained to provide us with this space. It was fully up to the participants to open up for this kindness. In the beginning it felt frightening to express the act of kindness. (Giving a hand, smile or hug, offering a shoulder to strangers.) However as time passed and other participants showed the way, I experienced and observed how others started to express the act of kindness, including myself.

It is this bigger perspective, envisioning this kindness in our society, that later forms the overall vision in the meaning-making part. Whereas Marina Abramovic’s performance uses performance art, music and a closed space to evoke this kindness and affection: in the meaning-making part I take on the challenge to bring this vision of kindness outside the space of the performance. Together with the Ten Strangers, Ten Stories activity, these two activities formed an important stepping stone that led the project to design for strangers in public spaces.
The following chapter contains the Human Design Manifesto. The Human Design Manifesto is a small booklet which was handed out during the midway presentation which marked the half of this master’s thesis. The manifesto is the result and synthesis of all the ethnographic insights, experiments and thoughts of the first meaning-finding part. It gives a complete overview and proposes six expression on how meaning can be found in design.

Even though each expression can be clearly back-traced to the different research activities, it would be unfair to try to explain how each specific insight resulted in an expression for the manifesto. Reality is that each activity has been conducted parallel and they all have been influencing each-other throughout the whole meaning-finding process.

The six expressions chosen in the manifesto is not a complete list, however it is complete in the perspective of the time-frame of this master’s thesis. There are always more topics to explore, and in that sense one could say that the manifesto is never complete. However at this stage, the Human Design Manifesto is able to convey a bold expression for designers and therefore it serves as a strong foundation for the second part of the thesis; the meaning-making part.

The meaning-making part is about demonstrating how the manifesto calls for change within design practice; how we can design differently.
THE HUMAN DESIGN MANIFESTO

Trieuvy Luu’s Master Thesis
How can we design, not to solve problems, but to answer to a more meaningful purpose in life?
It is the complexity and the delicacy of the human condition that makes us so beautiful. Design should embrace this complexity, address this richness, rather than simplifying the human to a transparent entity. This design manifesto highlights the important elements of human-life in which design can cultivate for more meaningful purposes in our lives.
1. DESIGN ATTITUDES
NOT SOLUTIONS

The problem is not the problem, the problem is our attitude. We can not control what happens to us, but we can control the way we think about all the events. After Quang faced death in the eyes, he smiled to every opportunity that came along on his path.

Attitude is the strongest weapon we have. When everything in life is taken away from us. And we feel exposed, vulnerable and naked. Attitude is the only thing that can keep us striving forward. It is an endless source and we can influence ourselves and our surrounding with it. When we design for people, we should design for attitude.

Photo: Vietnamese Refugees On Sea, 1978
© Trieuvy Luu 2017
Chemotherapy technology saved Tijn’s life. But it took just one rental-movie a day for Tijn and his dad, to survive 38 weeks in the hospital.

Modern medicine saves lives. But in the darker times of our lives, we need the compassion from each-other that we would expect from truly good friends. When we are in pain, the medicine for the mind is the brightest cure there is. When we design for people, we should design for a healthy mind.
3. DESIGN FOR RELATIONSHIPS

The beauty of humans lies in its complexity. Nowhere is that complexity greater and richer when two persons, with their own experiences whose depth and dimension cannot be imagined, meet in the emotional universe of human relationships.

It is in these relationships that we can find new meaning in life: they form the colours to our every day.

Relationships are the fundamental element of human life. When we design for people, we should design for family, friends and love.

Photo: After the interview with Noor, 2017
© Trieuvy Luu 2017
4. DESIGN FOR OUR DIRECT SENSES

“We are always on our own. We have to take care of ourselves, make our own decisions, no matter what. But having someone’s heartbeat so close is almost like you are sharing this burden. I got the feeling that I am not alone anymore. At that moment I had two hearts.”

Too often we underestimate the power of a touch, a smile, a kind word, a glance in the eye, an honest compliment, or the smallest act of caring, all of which have the potential to turn a life around. The human mind and body is complex and in our digital era the mind has never been more separated than it is now from our bodily senses. When we design for people, we should design for the richness perceived by our direct senses.

A simple touch is so rich. With our fingertips and all of our other senses, we should explore the world and people around us.

Photo: Magnetism, Syncing The Hearts, Martijn and Sara, 2017
© Trieuvy Luu 2017
5.

DESIGN FOR THE DEEP HUMAN CONNECTION

“This beating little thing, your heart, reaching everywhere in your body. I looked at you in your eyes. And I realized.. I saw you. Just exactly who you are. Pure. Looking back at me. And you were so exposed at that moment.”

You can talk with someone for years, everyday, and still, it won’t mean as much as what you can have when you sit in front of someone, not saying a word. Yet you feel that person with your heart. You feel like you have known the person for forever.

Humans have dynamic pulses. We all have our own rhythm, energy, our background and personal relations with the world. But when we connect with someone, through conversations or just a simple gaze. We sync our dynamic human pulse to each-other. And within this new dynamic connection comes deep reflection; it gives rise to new meaning about our own presence, to the other person, to society, to our world.

When we design for people, we should design for the deep human connection; the dynamic human pulses.
6. DESIGN THE ACT OF KINDNESS

No matter how beautiful, hidden or damaged the stories are that we carry with us. The act of kindness brings different people together and make us all unite. Simply with a kind word, smile, shoulder or a reaching hand.

Kindness is the most affecting gesture we can express to our surrounding. It makes people feel welcome, takes away judgement and kindness takes down walls between people; for both friends and strangers.

A gentle smile comes more from the heart, than from the mouth. When we design for people, we should design for the act of kindness.
MEANING MAKING

Whereas the section meaning-finding describes the activities that formed the foundation of the manifesto, this section meaning-making describes how we can use the manifesto as a canvas and build on top of the expressions to come up with new creations. Meaning-making is important as it bridges the intention, found in meaning-finding, to concrete results that are relevant for our society.

At the start of the meaning-making part, one expression was selected to build upon. Throughout the whole meaning-making part, each expression has overlapping intentions with each other and therefore they all have contributed to the thinking process. However choosing one expression specifically makes it possible to sharpen the intention and to dive into depth into a particular perspective.

“Design the act of kindness” was chosen based on my personal sensitivity: I believe that the act of kindness together with public spaces could lead to new interesting perspectives. Nevertheless, it is important to mention that each expression could have been picked and developed further in the meaning-making part. This decision is personal and up to the designer’s personal intuition. What is more important, than picking the expression, is the process of meaning-making itself.

This section contains the iterative design process and reasoning that eventually led up to project ‘Hidden Figures’. It contains the reflection, visual mood-boards, initial project frames, the re-framing process and quick video prototypes that are relevant in order to demonstrate how meaning-finding can steer the meaning-making process.

Project Hidden Figures should not be seen as ‘a result of’, but rather it should be seen as a proposal that embodies the intention of envisioning kindness in our society. The tangible garment created at the end is not the result. The results are the different prototypes on the levels from Manifesto (1), to vision (2), to design practice (3) and how they altogether tell the story of kindness in our society.

The making process was done in the last 6 weeks of the thesis. It starts with the focus on public spaces and strangers. This scope was mainly influenced by the Ten Strangers, Ten Stories activity and the Marina Abramovic: The Cleaner performance. Also, during the In-depth Ethnography interview with Quang I touched upon his encounters with strangers, which influenced this scope.
The Human Design Manifesto articulates that by designing for the act of kindness, we can bring people closer together: people with different backgrounds and stories. I wanted to build upon this expression by exploring how I can connect strangers in cities with each other by creating kindness. My first exploration focused on designing for public spaces that would open up new encounters between strangers in cities. Can I re-imagine public spaces? Can I create social platforms for long term behaviour change?

The focus on strangers and cities are grounded in the research. In addition, as I noticed that my sensitivity and interested to speak freely with strangers formed a strong process throughout the thesis, I wanted to focus on the cities close-by: our cities. Therefore I shift focus to the Scandinavian context.

A moodboard was created in order to explore the context of public spaces. The moodboard (image 1) can be viewed on the next page. Making the moodboard helped me to immediately understand the context of designing for public spaces. Each public installation looks enormous: the scale of the installations are of considerable size. I can immediately observe the impact on the city of public installations. Most public space are either re-designed architectural spaces, or the installations are depending on the ‘wow’-effect. This is not what I intent to do: I do not want to design for artworks or interactive city sculptures. It takes a tremendous amount of work and manpower and with public spaces it becomes very limited to focus on the intimate interaction between people.

As an alternative, I would like to focus more on our senses and sensuality. Therefore the project frame shifts from ‘design for public spaces’ to ‘design in public spaces’.
Image 1: A moodboard of existing public spaces, installations and artworks.
Our clothes are the objects we always carry with us in public spaces. We always have it close to our body. Clothes are expressive in the sense that they open up opportunities for intimate interactions. This immediately raised new research questions, such as:

*Can I connect strangers, through intimate garments in our cities? Can I change the way we look at people we don’t know?*

Based on this second frame, a new moodboard was created to explore what already has been done in this area. The focus for this mood board was set on interactive garment and technology. The moodboard can be viewed on the next page. Observing the different projects on the moodboard immediately gave me an in-depth understand of what has been done before. A lot of the projects are focusing on art, fashion, sports and interactivity with microcontrollers. But nothing has been done with the focus on social-interaction between people. Finding this new design opportunity was of great personal interest for me.

With the new focus and framing, it was time to explore the context into depth. A quick idea-generation was conducted, and three short video explorations were created from the ideas in order to explore the context into depth.

**Exploration 1** shows how we can prevent people from leaving empty seats next to strangers, in buses and subways, by sharing music between two persons.
Image 2: A collection of projects related to interactive garments and technology.
Exploration 2 shows how a stranger would react to you in public spaces, if you would open up your feelings to your surrounding by using colored light.

Exploration 3 shows how easy it would be to approach strangers, if our clothes could let people know who is in for a friendly talk, a flirt, or no friendly talk.

The three explorations demonstrates three concrete applications between strangers that would work well for this particular project frame. However, creating a strong connection between manifesto (1), vision (2) and application (3) is the hardest challenge. Without a strong story that would resonate well between the three levels, the complete proposal would be weak. For the following part, I moved up in the design process and explored/prototyped on the vision level. The process of continuously moving up and down from application (3), to vision (2) and manifesto (1) is how I made strong sense across the three levels: the process of meaning-making.

At this stage in the meaning-making part, there is a strong intent to design for the act of kindness. This is further expressed by focusing on intimate encounters between strangers in our cities. We have explored different kinds of interactive garments, but the overall question still remains: What does intimacy mean in the particular context of our public space? Can we only share the richness of encounters by talking, or are there different ways to create intimate connections?

To explore the answers on these questions, a video prototype was created. This video was shot during a single walk downtown Umeå and it features eye-contact encounters with strangers in slow motion. This video shows how incredibly rich public spaces are, as long as we open our minds for it.

The starting point of the video derived from a discussion with my colleague Marie Louise Juul, PhD student. As a PhD student Marie Louise Juul explores the topic of intimacy through the lens of technology.

Marie Louise Juul: “Intimacy is mutual, intimacy is a close connection. You are close to a person, it could be physical but it is more mentally. It is a feel of having something close, or having something you know, you trust, something you can open up towards.”

In the video Encounters With Strangers [4] you can see the richness of each individual encounter. We share the same space, and through eye contact we accept each-other’s presence. It is not a physical connection, rather it is a mental form of intimacy. We don’t need to talk to share this connection. A glance in the eyes, can be more rich, than exchanging words. The screen captures of each individual encounter can be viewed on the next page (image 3).

This reflection resulted in the overall vision for project Hidden Figures. I envision a society, in which we fully accept each-other’s presence and that we have no judgement against each-other at all.

Parallel to the vision-forming: at this stage, the intimate human connection through eye-contact became the fundamental interaction key-element for Hidden Figures.

Image 3: A collection of screen captures from the Encounters With Strangers experiment.
For the last part of the concept creation, I moved from vision (2) back to application (3). With the richness found in the vision (2) it became more clear how this would be translated into application (3) for the meaning-making process. The meaning-making process is a personal artistic process in which decisions are made, elements are combined, based on the designer’s sensitivity, intuition and learnings. I will now articulate the meaning-making process more in depth.

Each person in this world has a story to tell. And it is the act of kindness that brings all these different people together. It makes us reunite. We don’t need to talk with everyone. We just need to accept that there are others around us, and that we share the same space. But how?

The Syncing Heartbeat experiment showed how much reflection is evoked within ourselves and to others as we are confronted with someone’s heart. What if we can use this same poetic quality for the last part of the concept?

Hearing someone’s heartbeat is such a rich experience. The moment you hear someone’s heart, a train of thoughts and reflections are evoked. You realize you are not alone, and we are all in this world together.

Whereas in the The Cleaner performance, Marina Abramovic uses music, in the vision-video prototype I used slowmotion: for the final concept I use the sound of the heart in order to create the intimacy that results in reflection. All three cases lead up to the same experience: ‘awareness and reflection to our surrounding’. To elaborate further, The Cleaner performance takes place in a closed church, slowmotion is a form of storytelling only possible in screens. But hearing someone’s heart is an embodied experience which can be implemented in any context through any garments.

Through the iterative sketching of the meaning-making process, the final concept was shaped. In order to demonstrate how the complete concept proposal resonates well on manifesto (1), vision (2) and application (3), a Verge article was written and published as a teaser. The Verge article (image 4) can be viewed on the next page.
Interactive Garment Connects Strangers By Sharing Their Heartbeat With Each-other

A Master student at Umeå Institute Of Design in Sweden has created an interactive scarf that would create an intimate space between two strangers, when they make eye-contact. The interactive garment is equipped with audio, eye-sensors and heart-microphones.

by Bryan Behlog | @MrBehlog | August 30, 2017, 10:10pm EDT

Two persons sharing each-other's heartbeat

A quick glance in the eyes by two persons, who would wear this interactive garment, is all that needs to create a connection between both wearers. As long as the wearers keep looking into each others eyes, the sound of their hearts are shared. The heartbeat is the actual sound of the heart, and is recorded by an audio recording device strapped to the wearer’s chest. With a bass-speakers and the enhanced acousic shape of the garment, the wearer is being immersed in the rich sound of the other person’s heartbeat.

“We are all the time surrounded by strangers. Whenever we find ourselves in public spaces, there are strangers around us. But in the quantity of the concept of stranger, the human-element became lost,” says Thuy Luu, the designer of the garment. Luu envisions a world in which every persons would wear the interactive garment. For his master thesis project, Luu re-imagines how we encounter strangers in public spaces.

“Even though it could still be a brief encounter, it becomes a more rich experience.”

I have seen a lot of smart textile applications addressing topics such as safety, medical and sports. Textile should be stronger and makes us faster. But never have I seen any garments that would address the real fundamental element of life; relationships and social encounters with people.

“The concept of stranger is what puts so much distances between people. But hearing someone’s heartbeat is such a rich experience. The moment you hear someone’s heart, a train of thoughts and reflections are evoked. You realise you are not alone, and we are all in this world together.”

The interactive garment will be shown at the Stockholm Design Week in September 2018. Visitors are invited to try on the scarf.

- VIA: DIVIIE
- SOURCE: Emily Bieze (Tumblr), Emily Bieze (Behance)

MORE FROM THE VERGE

The Hawaiian volcano that created a spectacular firehose of lava just collapsed
Apple, Facebook, Google, and 94 others file opposition to Trump's immigration ban
Google's Super Bowl ad accidentally set off a lot of Google Homes
Lady Gaga opened her Super Bowl performance with a protest anthem
Trump is turning Elon Musk into a creny capitalist
Why the sounds of eating make some people so angry

Image 4: A Verge article describing the garment was created as a way to prototype and physicalize this thesis’ proposal.
For the next phase the concept was physicalized into two tangible garments. The first piece is a working interactive prototype, it consist of a set of two scarves that are connected to each-other. The wearer of the second scarf will be connected to the heart of the first wearer. The purpose of the first piece is to create the final experience of the concept as realistic as possible and to test the connection with real strangers. It is important to note that the eye-tracking technology does not trigger the connection, the focus of this piece is on the experience of the connection, not the technology.

The second piece is the concept model, it is a full body garment. This model gives an accurate sketch of the form expression, eye-tracking technology and it demonstrates how it is worn on the human body. The purpose of this piece is to invite the audience into the thesis proposal.

**Interactive Prototype (1) - Evaluation with strangers**

For the evaluation of the experience, I approached 8 strangers in the public library of Umeå to experience the interactive scarf. The evaluation focused on:

1. creating a deeper connection between participant and myself with the use of the interactive garment
2. testing the vibration and low-frequency-sound, on the bodily senses of these people

These 8 strangers were given a short explanation of the functions of the scarfs, then they were asked to try out the garment. The reactions are delightful. A short compilation of the evaluation can be viewed on:


Based on the insights that were shared among the 8 participants, the evaluation demonstrates that the connection through the interactive garment is extremely rich: First, the feeling of being connected to someone's heart evoked a strong emotional expression. Second, two participants compared the feeling of holding someone's heart to the beautiful metaphor of cherishing a baby. Third, one participant mentioned the words 'kindness towards people', without me explaining anything about the vision. Fourth, all participants found it extremely comforting wearing the scarf. After I stopped the connection, a few persons mentioned they missed the beating pulse of the heart. They wanted the pulse to continue. Fifth, people started to listen carefully to my heart and they interpreted my emotional state of mind. This interpretation of the heart is extremely rich as it facilitates reflection. Sixth, as a participant myself, I felt the intimate bond that was created on the spot: sharing your heart is an extremely personal gesture you can express to someone.
All in all, I am extremely satisfied with the feedback of the evaluation. The evaluation reveals the intimate dimension that is created between two people when you share the heartbeat. And within this intimate space there is room for new thoughts, feeling and personal interpretation towards the other person. For the thesis, this evaluation marks the last stage.

An explanation for why I believe the results of the evaluation of the interactive prototype are so delightful could be appointed to the results of the overall meaning-making process. Within this process all the elements have been carefully sketched over again until it resonated well together. This was a process of moving up and down between the three levels of design philosophy (1), vision (2) and application (3). The end result is a artifact that embodies a rich part of all three layers. Therefore when the audience interacts with the artifact (3), they are able to grasp the overall intention (1, 2) as well.

**Concept Model (2) - Demonstrative garment**

The concept model, which is a full body garment, was created with the intention to communicate and invite the audience into a near future in which the wearer is able to feel someone’s heart through the garment. Therefore, the garment was equipped with a heartbeat pulse. The garment was used in a photoshoot, concept filming, and as an exhibition artifact. Visitors were able to touch the garment and feel the pulsation of the heartbeat.

Whereas the interactive prototype has the shape of an ordinary scarf, the concept model looks conceptual. With the interactive prototype I mainly focused on user evaluation: a scarf would make it quick and easy to test on people. However, I wanted the concept model to look more inviting and eye-catching in order to evoke curiosity. My aim was to make people curious to touch the garment and then let them imagine a near-future world in which they are walking the streets while wearing this garment in a society driven by only kindness.

The results for the concept model can be viewed on the following 3 pages.
Image 5: The purpose of this garment is to invite the audience into the thesis proposal. The garment was used to make promotional material for the project. Later on, it served as an exhibition artifact.
Image 6: Promotional photographs with the garment were shot. This image was used for websites, booklets and posters.

Image 7: A video explaining the eye-tracking technology was placed next to the garment on the exhibition. This helped the audience to imagine the technology embedded in the concept model. This is a screen capture from the video.
Image 8: The garment served as an exhibition artifact. Visitors were able to touch the garment and feel the vibration of the heartbeat pulse.

Image 9: The garment was also used in the final concept video. This concept video summarizes the overall thesis’ proposal. It does not only show the garment, but it takes the viewer to a more abstract view on kindness, strangers and society. Information on the video is on the next page.
End Result - Thesis' Proposal

A lot of results has been produced as the outcome of this master's thesis. Manifesto booklets, prototypes and artifacts, but also personal reflections, believes and visions. An important question that often arises at the end of the master's thesis is: what is the end result?

A physical artifact could never embody all the richness of the vision and manifesto. Therefore, I see my thesis’ result as a proposal: a story about kindness. A story that resonates well between manifesto, vision and application. A story that has been shaped through the meaning-making process. And this story is not a solution on how to create kindness, but rather it reflects a new perspective for all people. A perspective about how we can be more kind in our everyday life and how we can have more intimate encounters with each-other. A perspective that gives consciousness on a personal level, because kindness comes from within.

A last video communicating my thesis’ proposal was created. This video contains visual footage, reflections and ethnographic insights of the most important activities conducted throughout the complete master's thesis. This video was presented at the end of my thesis examination.

To summarize the intent of this master's thesis in one sentence: I truly believe that it is our responsibility as designers to question the purpose of our creations whenever we have the freedom and the opportunity. With our influential role in the industry and our disciplinary skillset to create societal change, it is important to think critically about the impact of our creations. I do not intend to replace the problem-solving design process. However, I propose there are alternative ways of practicing design. This master's thesis is an example of how you can use design to answer to more meaningful purposes. These meaningful purposes can be different for each designer, however what is important is to always embrace the complexity and delicacy of the human condition. Not everything should be seen as a problem, and it is not only about creating solutions. If we all realize there are more ways to practice design, we can all put our effort in things that truly create meaning.

The processes of meaning-finding and meaning-making has been incredible valuable throughout the complete design process. This way of structuring the overall content has been helpful for me: in terms of communicating the process to my colleagues and tutors, and to structure the massive amount of insights during the ethnographic research. I am sure there are many ways to create meaning, however for anyone who is interested in this process, I would recommend using this structure as it helped me to be critical and reflect on my own work and design process.

A few last words on the Human Design Manifesto. The Human Design Manifesto does not end with this master's thesis. Throughout the master's thesis I realized the manifesto will be an ongoing life project that I will keep crafting throughout my future career. I am extremely satisfied with the Human Design Manifesto as a result of this master's thesis and I look forward to see it change and grow, as I progress throughout my career in the industry.
This master’s thesis could not have come to an ending without critically listening to the valuable feedback of both my two tutors, Søren Rosenbak and Johan Redström, and to all the other great feedback during the three major presentations during this master’s thesis. Taking each critique by heart was my way to move forward throughout this massive scope. Each presentation was a challenge to present it as clear as possible, and each critique was a call for action to make it more clear. The major feedback that kept returning throughout each tutor-session and presentation was the feedback to deeply reflect on the process to be able to explain it to myself, and to others. Therefore my weekly reflections helped me to not get lost in the amount of insights and data.

Further, I would like to mention that choosing such a broad thesis scope took some focus away from the application (3) level. In other words, if this master’s thesis had a smaller scope, I would be able to put more time into crafting the final product. This is something important to mention for other students who want to challenge themselves with taking on a bigger scope. In my particular situation, I decided to ask these critical questions. You will lose some focus on the product level, but you will gain a lot on the overall depth of the thesis’ proposal.

This master’s thesis is an individual project and therefore I was able to move independently, explore more deeply and make fast decisions. In order to come up with a new process, you have to try something new. And if you try something new, you will always walk against walls. But if you don’t try new things, you will never come up with new methodologies. This leaves me with the question how we can apply the meaning-finding and meaning-making when working in bigger teams. I do not have an answer right now, and perhaps this thesis was only possible because I was able to move quickly and independently. However, this is a question I would like to figure out in the near future.

At last, I would like to share a final note with the reader. The Human Design Manifesto argues to design for more meaningful purposes. Each expression is based on people who went through massive life events. It is in these massive events that people are exposed to the most important things in life that matter. So, why don’t we design for imperfection? Why don’t we design to make life more difficult instead of better? When we say everything designed around us should make us feel happy and good, we are just designing for the smallest part of our emotional range. It is like looking through a tiny hole at our universe. In a personal reflection I wrote for this thesis, I wrote: ‘the most beautiful books are the ones that have scars and marks’. In this metaphor, the book represents the human. Humans are complex, and we have such a wide range of emotions. Perhaps the time has come to design for imperfections. Because there is no such thing as perfection, instead it is the imperfect journey that makes us perfect.
I wish to express my sincere gratitude to my tutor Søren Rosenbak, who tutored me during the first part of my master’s thesis. Without your critical support and guidance, I would not have been able to complete this work.

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