PROCESVERSLAG
SPECULATIVE DESIGN

Beeldenscenering en Fotografie

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Debrief

In opdracht van het Amphia ziekenhuis in Breda ontwerpen we een speculatieve verbeelding in de vorm van een geënsceneerd fotografisch beeld die onderbouwd is met tekst in een spread. Als ontwerpers zetten we onze verbeeldingskracht in om nieuwe toekomstige realiteit zintuiglijk af te tasten en de sociale en culturele consequenties van technologische innovaties kritisch te bevragen om zodoende alternatieven ontwerpend te verkennen.

Gedurende de module verkennen we het domein van de zorg. **In duo's creëren we een speculatief ontwerp waarin een door ons gekozen relevante ontwikkeling binnen / voor de bio-medische context van de zorg centraal staat.** Dit ontwerp heeft NIET tot doel een probleem op te lossen maar genereert frictie. Bovendien heeft het speculatief ontwerp tot doel om het publiek aan te zetten tot reflectie en debat over de bedoelde en onbedoelde gevolgen van wetenschappelijke, (bio-)technische en sociaal-maatschappelijke ontwikkelingen voor mens en niet-mens binnen de bio-medische context van de zorg.

Tijdens de module Speculative Design 2021-22 hebben we samen gewerkt in duo's (Nina Korteweg en Joyce Korll) en de workshop Beeldenscenering en Fotografie gevolgd. In dit procesboek onderzoeken we de hedendaagse en toekomstige ontwikkelingen en de actuele vraagstukken, dilemma's en debatten om ons goed te kunnen positioneren binnen dit domein. Daarnaast zetten we strategische theorieën en ontwerpmethodes in om tot relevante inzichten te komen en itereren we meerdere malen op basis van nieuwe inzichten voortgekomen uit het designresearch, prototypes en (user) tests.

RESEARCH
Speculative Design - beeldenscenering en fotografie

Maak 20 What if scenario's binnen elk van de volgende themagebieden (in totaal 120 per duo);
robotisering en zorg, big data / artificiële intelligente systemen en zorg, biotechnologie / genetic engineering en zorg, burgerschap / collectiviteit / solidariteit en zorg, niet-Westerse culturen en zorg, niet-menselijke natuur en zorg.

Robotisering en zorg

- What if healthcare workers lose their jobs due to robotization.
- What if thirty percent of processes within healthcare have potential for automation.
- What if we have robots forcing us to follow the doctors advice.
- What if more care will be provided via video consultation.
- What if we use AR to look inside the bodies of patients.
- What if we robotize ourselves to create better people.
- What if we can create robots of people that have already died.
- What if we don't go to a hospital and we will instead either just do it remotely, or we might go somewhere else than the hospital.
- What if more care will be delivered by entering your vital signs (blood pressure, temperature).
- What if you can get a medical diagnosis without leaving your house. Your couch becomes an examination room, a diagnostic lab, and wellness center.
- What if the elderly could live at home longer due to robotization and therefore not have to go to a nursing home (personal health robot).
- What if robots are used both inside and outside of healthcare (could have a positive or negative impact on public health).
- What if service robots can perform tasks such a opening doors, cleaning up, making coffee or tea, and helping with medication.
- What if surgical robots are used in healthcare. A surgeon does not use the knife himself, but controls a robot, which performs the actual operations with great precision.
- What if social robots are used for sick children, people with dementia or lonely elderly people (human assistance will continue to be needed in healthcare, this has to do with people's wishes and desires, which are not predictable, and with people's unique abilities, such as empathy).
- What if robots in elder care are used for patients with dementia. Robots could serve as memory/reminder, exercise buddies or as interactive hugs.
- What if patients can interact directly with chatbots via their smartphones (home).
- What if Internet of Care (IoT) is able to measure people, compare them and intervene where necessary (a better way of choosing about care: prioritization).
- What if people are biocomputers connected to the Internet to seamlessly regulate and control their bodies (from a distance).
- What if Brain-Computer Interfaces (BCI) are applied: hardware and software that allow the brain to operate computers and equipment.

Big data, artificiële intelligente systemen en zorg

- What if AI starts to recognize illnesses, but messes up.
- What if we have too many medicine options because of AI made it easier to create/develop.
- What if we had an AI that could predict who would live a better life and receive better care.
- What if because of AI bias, only certain people can be helped.
- What if we made healthcare technology available for everyone (like in a supermarket).
- What if we have virtual assistant for analyzing images (an algorithm for radiologists and cardiologists.

With this algorithm, ultrasounds and scans are interpreted more thoroughly and quickly. This allows specialists to spend more time on complicated cases).

- What if we have a virtual nurse (app using machine learning and supports patients in between doctor visits, monitoring the patient's condition and checks whether the treatment is succeeding).
- What if AI could sense and recognize patients in the hospitals (improve the patient's experience of care and foster the relationship between healthcare provider and patient).
- What if based on historical events and supplemented real-time data, people are treated even before they are really sick.
- What if a smart model (based on patterns discovered) is able to predict, for example, the chance of success or the risk of side effects of a particular treatment. Thanks to big data, doctors and patients can make better and more objective decisions about treatments.
- What if big data can create a dichotomy in healthcare (will people without computers or smartphones have less access to healthcare? What about people who don't want to share their data?).
- What if artificial intelligence developed a program that could answer emergency calls that could recognize a heart attack faster and more often through a phone call than the medical dispatcher.
- What if you could use artificial intelligent systems to analyze large amounts of public health data and find patterns that could lead to new discoveries in medicine.
- What if AI systems and big-data could discover new treatments that could develop drugs for dangerous diseases (preventing).
- What if, through the deployment of artificially intelligent systems, patients' private data leaks and that AI systems make wrong decisions, putting human lives at risk.
- What if AI could be used for quick diagnoses, accurate treatments and better informed patients.
- What if big-data can lead to better healthcare by, for example, how do we keep people vital and healthy much longer and how do we keep healthcare affordable.
- What if an AI application can help you by determine for themselves whether a certain spot is skin cancer or not (an app that compares health complaints with conditions).
- What if AI per individual patient to provide lifestyle advice that best suits the patient's personality and circumstances and therefore has the greatest chance of success.
- What if patterns in cancer cells are discovered faster thanks to AI, and it helps doctors make radiation plans (In addition, artificial intelligence can help detect brain hemorrhages, tumors and pneumonia, among other things, more quickly).

Biotechnologie, genetic engineering en zorg

- What if we can engineer a clone for health reasons.
- What if we can genetically "breed" people for medical use only.
- What if modification of hereditable human DNA was widely available.
- What if you could cross human, plant and animal DNA.
- What if, with biotechnology, you could change DNA to cure diseases.
- What if you could use genetic engineering and modify diseases in embryos. To what extent does that change the DNA of the embryo and not affect human dignity.
- What if we could use biotechnology for a more sustainable future
- What if, with new biomedical techniques, we could make artificial organs and tissues.
- What if scientists are able to map and modify the source code of organisms.
- What if we genetically engineer people to excel in specific jobs (they provide those organisms with desirable properties) give rise to "superhumans" who are optimised for certain characteristics (like intelligence or looks) and exacerbate inequalities in society.
- What if biosensors can be used to detect disease. This technology makes it possible to increasingly understand, build and also apply the programming language of life - the genetic code.

RESEARCH
Speculative Design - beeldenscenering en fotografie

- What if people will be able to make decisions about their lives in ways that were impossible in the past, when we relied more on random evolution than deliberation.
- What if biotechnology gives us the ability to extend our lives. To what extent does this change our view of processes of aging.
- What if we engineer animals to grow organs or tissues that could be used for humans needing a transplant (or use their DNA to grow ogans in incubators).
- Bioreactors are used in the production of food and beverages for fermentation purposes, whether to add vitamins, colorings, flavorings, alcohol or antioxidants. What if we use bioreactors in the production of human organs.
- What if we use genetic modification in plants to increase food production and improve the plant product (as the world's population growth continues to increase).
- What if we used genetically modified animals not only for scientific research, but what if we, for example, use stinging insects for spreading vaccines.
- What if biotechnology could help address many global problems, such as climate change, an aging society, food security, energy security and infectious diseases.
- What if biotechnology itself could be used at home. You could ask a machine to make household chemicals you need, instead of going to the supermarket to buy them.
- What if biotechnology becomes the norm in our daily lives (survival tool).

Burgerschap, collectiviteit, solidariteit en zorg
- What if the whole world pays for the elders healthcare.
- What if the royal families payed for the countries healthcare.
- What if different countries pay for other countries healthcare.
- What if people are not willing to pay for care for others (solidarity) and whether they expect others to be willing to pay for it (expected solidarity).
- What if citizens start avoiding care for financial reasons and then they start thinking that their symptoms will go away on their own because they don't have money for care.
- What if there were differences in basic insurance premiums between certain groups of people. For example, should older people pay more premium than younger people?
- What if citizens live in poverty, how will they pay for their care? Will they still have a right to healthcare.
- What if healthcare was always free for everyone (increases pressure on hospitals).
- What if there were no more health insurance and everyone had to pay for their own care.
- What if "unhealthy" people could not access healthcare but "healthy" people can.
- What if "healthy" people could not access healthcare but "unhealthy" people can.
- What if only the elderly or only children get access to healthcare ("children are the future").
- What if people with certain conditions can only access healthcare (people above a average income, a specific age group or people with a certain state of mind).
- What if in the Dutch healthcare system is based on solidarity, then the starting point is that everyone should have equal access to care and that resources are distributed fairly.
- Solidarity is the pillar of our healthcare system. Regardless of whether the costs are your own or those of others. What if the premium is not the same for everyone and is based on individual characteristics.
- What if solidarity requires us to be vaccinated (what does this mean for society).
- What if the opinion about technology changes among citizens (technology becomes unreliable and we can no longer use technology within healthcare).
- What if the rights and obligations of citizens and government change due to alternatives and future developments (different expectations and desires).
- What if people start playing doctor themselves and search for medical information on the Internet and perform surgeries themselves (starter kit).

RESEARCH
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- What if there are no more hospitals and we have to take care of each other (are we able and willing to help others).

Niet-Westerse culturen en zorg

- What if in care we have to deal with people from diverse cultures.
- What if we want to differentiate between non-Western cultures in care.
- What about our care training with regard to the care of non-Western immigrants.
- What if in care we have to deal with the death (for example palliative care) of people from non-Western backgrounds.
- What if in care we do not adapt to western cultures.
- What if we are dealing with non-Western migrants with limited health skills in care.
- What if we are dealing with non-Western diversity and perception.
- What if the population with western immigration background increases.
- What do medical specialists and nurses need if to apply their explanation skills to non-Western immigrants.
- What if we want to encourage migrants' self-direction.
- What and which people (experts, consultants) if we want to provide information to people with a non-Western background.
- What is needed if we want to meet the needs of non-Western migrants.
- What are the consequences for our health care system if our society becomes more and more diverse.
- What if we have to deal with different languages, norms and values and expectations of clients from diverse cultural backgrounds.
- What if we need or want to provide long-term customized care to people with non-Western cultural backgrounds and norms and values.
- What if to also deal with the loved ones of patients with non-Western backgrounds.
- What if we want to provide culturally intensive care.
- What if we want to understand the characteristics of each other's cultural background.
- What to do when the majority will soon be a diverse group of minorities.
- What to do to promote the assimilation (becoming equal) of different cultures.
- What to do if we apply the concept of "culture" to the different groups of non-Western migrants.
- What to do if we want to prevent or eliminate discrimination as much as possible.
- What if we only used non-western healthcare instead of the more widely accepted western healthcare.
- What if we never really die (in robot, AI vorm).
- What if instead of going back to basics, we start offering new drugs in pure form (TMC).
- What if you can make the choice to use Asian (the more alternative route) or Western healthcare.

Niet-menselijke natuur en zorg
- What if we look at our natural environment.
- What if the natural environment could contribute to human health, for example, encouraging exercise.
- What is the impact on human nature if we can transplant the organs of animals to humans.
- What is the influence on human nature if we design and manage green space optimally.
- What is the impact on human nature if we improve the urban environment for social safety.
- What can we improve on human behavior if we study animal behavior.
- What is the impact on human nature if there are more or pollen in the air.
- What if we design schoolyards with more natural elements and materials.
- What measures should or can we take if we want to improve the care of human.

RESEARCH
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- What if we improve our food (organic, less salt, less sugar, meat substitutes).
- What can we get from plants to improve care (plant-based instead of medical drugs).
- What if we harness the knowledge of nature.
- What if the air is increasingly polluted.
- What if we affect natural environment (not or) as little as possible.
- What if we pay more attention to education to influence human nature to improve care.
- What can be the influence on human nature if we take a closer look at the behavior of animals and plants (organism).
- What if they stopped using non-human animals in research (non-human animal studies frequently provides the groundwork to advances in scientific and medical understanding, with potential benefit for human and animal health).
- What happens if we challenge the widely-held view that humans are the supreme species and consider the agency of nonhuman nature in public health and medicine?
- What if healthcare had to take into account considerations between human health, animal well-being and nature.
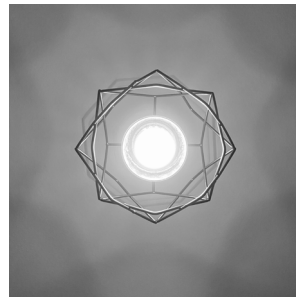
WORKSHOP 07-12-2021
Speculative Design - beeldenscenering en fotografie

WORKSHOP 10-12-2021
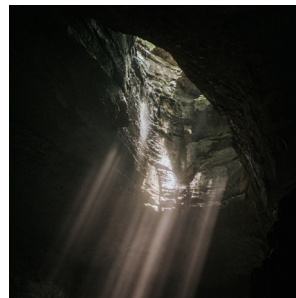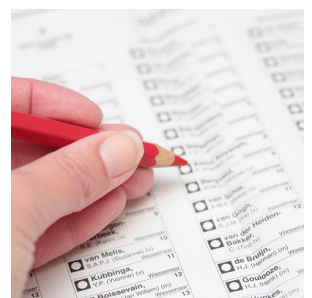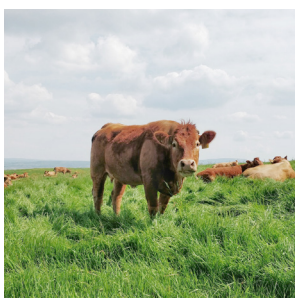Speculative Design - beeldenscenering en fotografie

BORING

FEAR

COMFORT

RURAL   **ANXIETY**   **ENLIGHTENMENT**   **POLITICS**
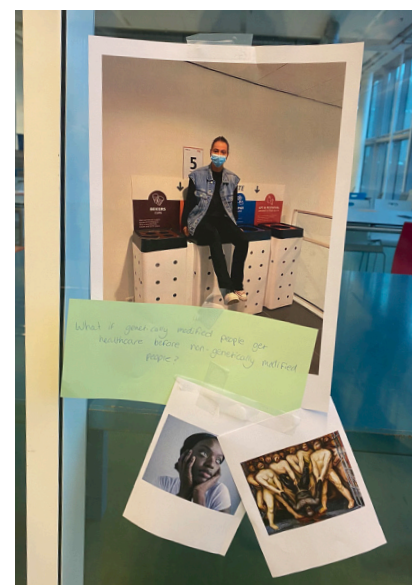
WORKSHOP 10-12-2021
Speculative Design - beeldenscenering en fotografie

"What if we genetically "breed" people for medical use"

"What if we use earth's natural remedies (eastern) before man-made remedies (western)"

"What if genetically modified people get healthcare before non-genetically modified people"
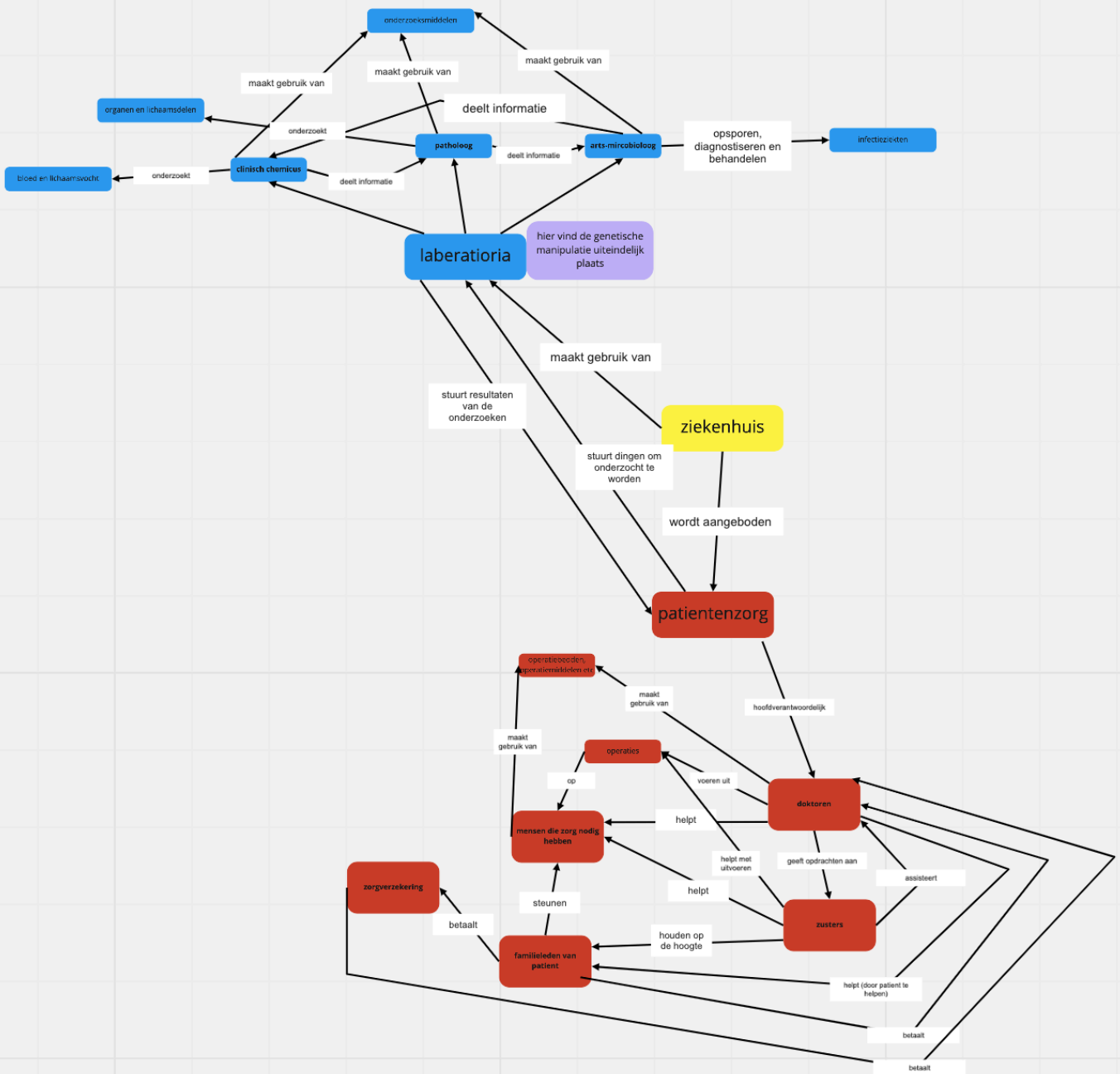
ONDERZOEK - GENETIC ENGINEERING
Speculative Design - beeldenscenering en fotografie

WORKSHOP 17-12-2021 / NINA
Speculative Design - beeldenscenering en fotografie

SYSTEEMANALYSE

WORKSHOP 17-12-2021 / NINA
Speculative Design - beeldenscenering en fotografie

Domein - Economie/medisch-technologisch

What if we can genetically "breed" people to use for their organs

What if you can breed people to be the best possible at their jobs (good at math, stable hands etc)

What if we breed people with specific illnesses to test medicines?

What if we were able to breed organs like plants on people, those organs would be used as payment for healthcare

What if we were able to breed organs and were able to sell them in a supermarket, so people could do the operation themselves?
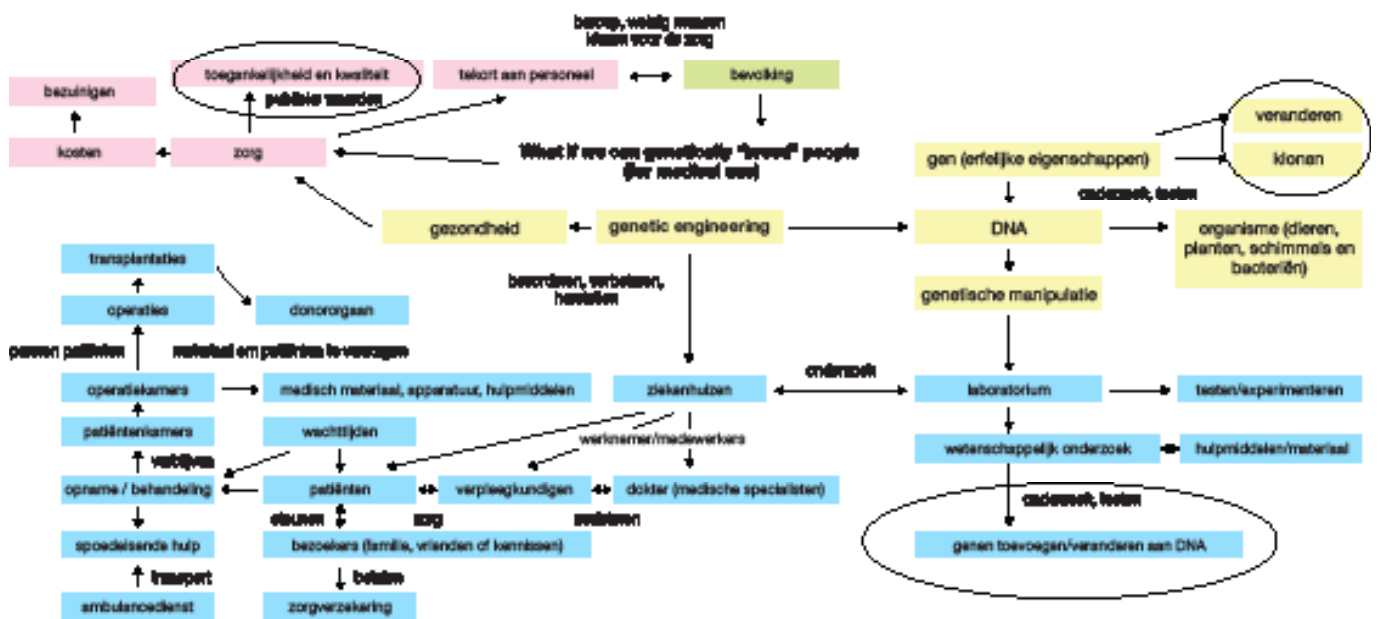
WORKSHOP 17-12-2021 / JOYCE
Speculative Design - beeldenscenering en fotografie

Domein - Medisch-technologisch: genetische manipulatie

• What if we could modify (non)viable human embryos (for example, engineer people to excel
in specific jobs).

• What if scientists could erase inherited disorders from the genes of human embryos. Will we
eradicate all genetic diseases?

• What if we could grow and transplant human organs, just as we grow and harvest plants
and vegetables.

• What if there are genetically modified ingredients in the food (does it say so on the label).

• What if an organism can cause harm to humans or the environment (societal acceptance of genetic
modification in animals, plants, humans, etc.).

WORKSHOP 17-12-2021
Speculative Design - beeldenscenering en fotografie

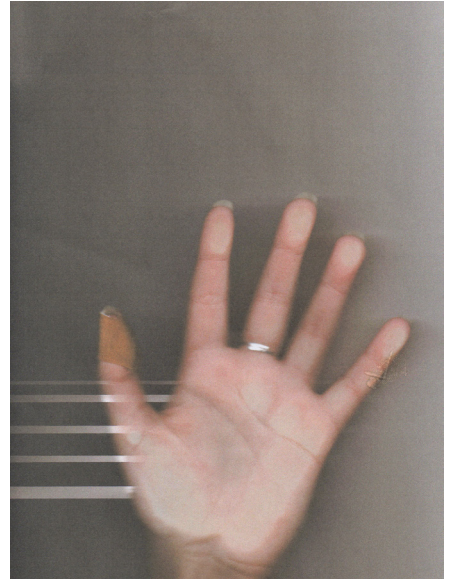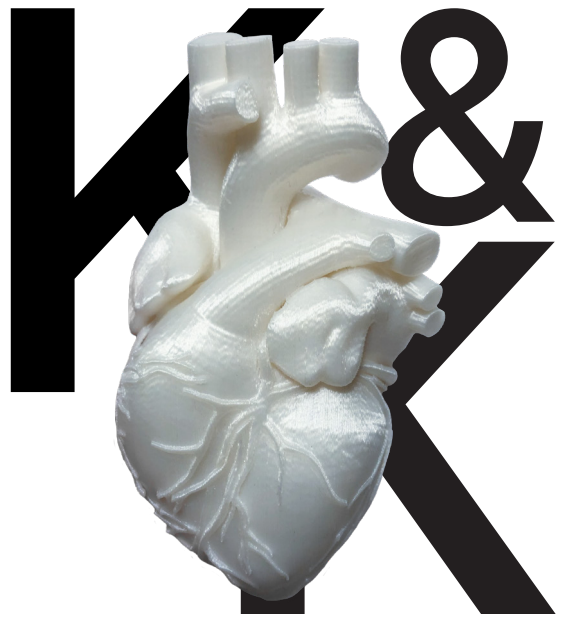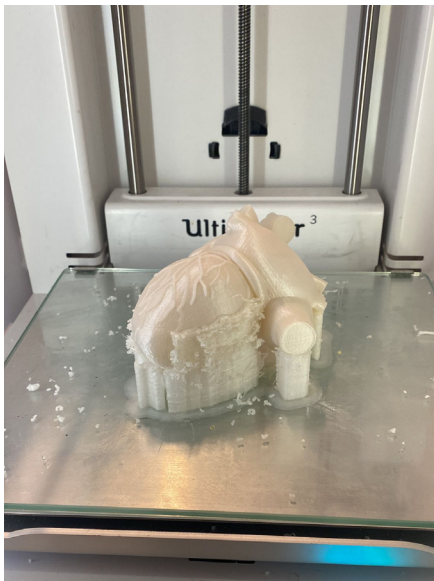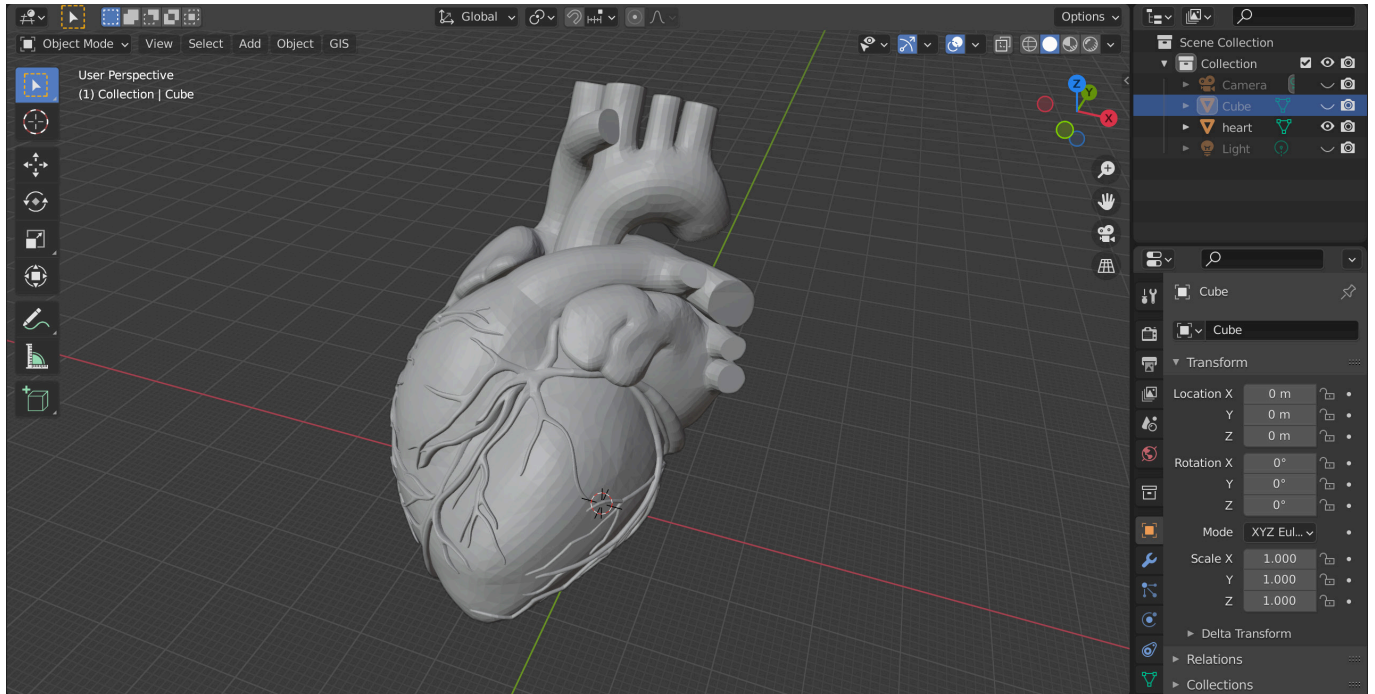**...**
Speculative Design - beeldenscenering en fotografie

What if we can genetically "breed" people (for medical use)

• Then there will be shorter waiting lists for a transplant, because more organs will be available, you'd be helped faster (zorgt voor minder noodzaak aan verpleegkundigen).
• Then that means there's one big space where all the organs are stored.
• Then people can but the organs to operate on themselves.
• Then people would need to be educated on how tot take care of their bodies.
• Then there will be new job opportunities.
• Then the focus in hospitals would be on different operations.
• Then there would be people complaining that it's not ethical to use people as organ farms.
• Then here would be too many organs and they would be used to make people with bad health but enough organs more healthy.
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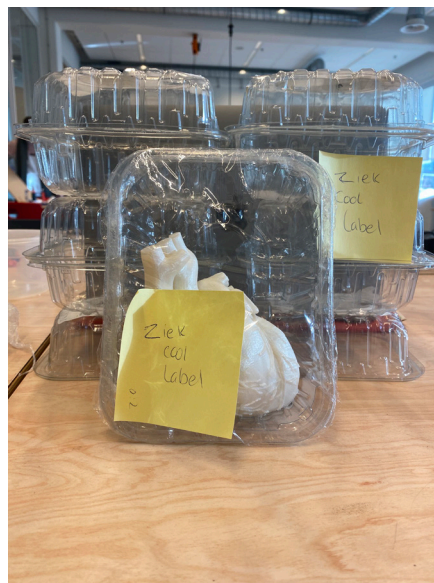• Then that
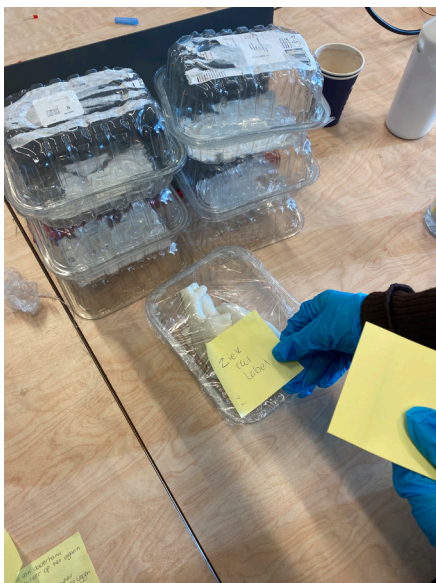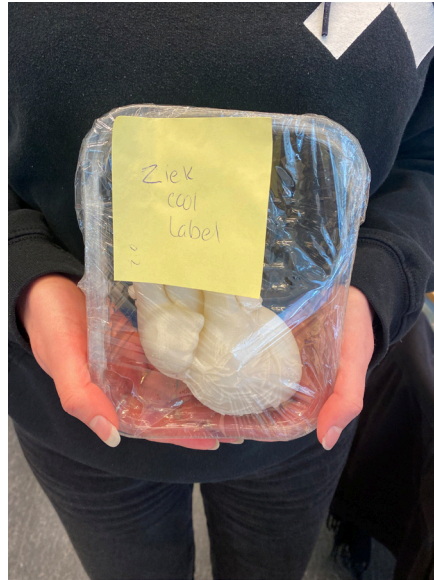
STUDIO

3D-HART PRINTEN
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3D Printen

3D-HART CONCEPT BEELDEN
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Concept beelden > Feedback

ETIKETTEN
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Eerste conept + feedback > uiteindelijke versie

MENSELIJK HART

300 gram

Olive Stone
27 jaar

Type O negatief

Sport 3x per week, goed gevarieerd dieet, niet stressbestendig en werkt als secretaresse.

Leven voor een ander keurmerk staat voor ethisch verkregen organen. Dit keurmerk stelt strenge eisen aan een gezond leven.

LEVEN VOOR EEN ANDER ++++

Voor meer informatie scan de QR-code.

NEDERLANDSE BODEM

FIT HART
300 gram

27 jaar
Type O negatief

Sport 3x per week, goed gevarieerd dieet, niet stressbestendig en werkt als secretaresse.

Te gebruiken tot en met : 15 januari 2022 - 12:00
Mits gekoeld bewaard (max. 2-8 °C)

w0rd-nu-d0n0r

LEVEN VOOR EEN ANDER ++++

NEDERLANDSE BODEM

VITALE LONG
rechterlong - 545 gram

42 jaar
Type A positief

Sport 1x per week, rookt en drinkt alcohol en werkt als communicatie adviseur.

Te gebruiken tot en met : 15 januari 2022 - 12:00
Mits gekoeld bewaard (max. 2-8 °C)

w0rd-nu-d0n0r

LEVEN VOOR EEN ANDER ++

NEDERLANDSE BODEM

ONGESCHONDEN NIER
linker nier - 150 gram

34 jaar
Type B positief

Sport 3x per week, vegetarisch en werkt als een economisch adviseur.

Te gebruiken tot en met : 15 januari 2022 - 12:00
Mits gekoeld bewaard (max. 2-8 °C)

w0rd-nu-d0n0r

LEVEN VOOR EEN ANDER ++++

NEDERLANDSE BODEM

VERANTWOORDE LEVER
1.250 gram

26 jaar
Type AB negatief

Sport 2x per week, drinkt regelmatig, gevarieerd dieet en werkt als een software developer.

Te gebruiken tot en met : 15 januari 2022 - 12:00
Mits gekoeld bewaard (max. 2-8 °C)

w0rd-nu-d0n0r

LEVEN VOOR EEN ANDER +++

NEDERLANDSE BODEM

ONGEDEERDE ALVLEESKLIER
100 gram

22 jaar
Type B negatief

Sport niet, gevarieerd dieet, drinkt geen alcohol en is student.

Te gebruiken tot en met : 15 januari 2022 - 12:00
Mits gekoeld bewaard (max. 2-8 °C)

w0rd-nu-d0n0r

LEVEN VOOR EEN ANDER +++

VERPAKKING
Speculative Design - beeldenscenering en fotografie

12 JANUARI 2022 - FOTOGRAFIE

Speculative Design - beeldenscenering en fotografie

SELECTIE BEELDEN
Speculative Design - beeldenscenering en fotografie

UITEINDELIJKE BEELDEN
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