

**non -
human
centered
design.**



human / user centered design

- coined by Mike Cooley in his 1989 book »Human-Centered Systems«
- designing with and not for the end user
- obsessive focus on understanding the perspective of the person who experiences a problem
- empathy at the start of the design process to ensure the designer understands the needs of the target group
- a process that ensures that the developed products, services and system changes will make life better for those whom the solution is being designed for
- design process that considers the target group/persons feelings

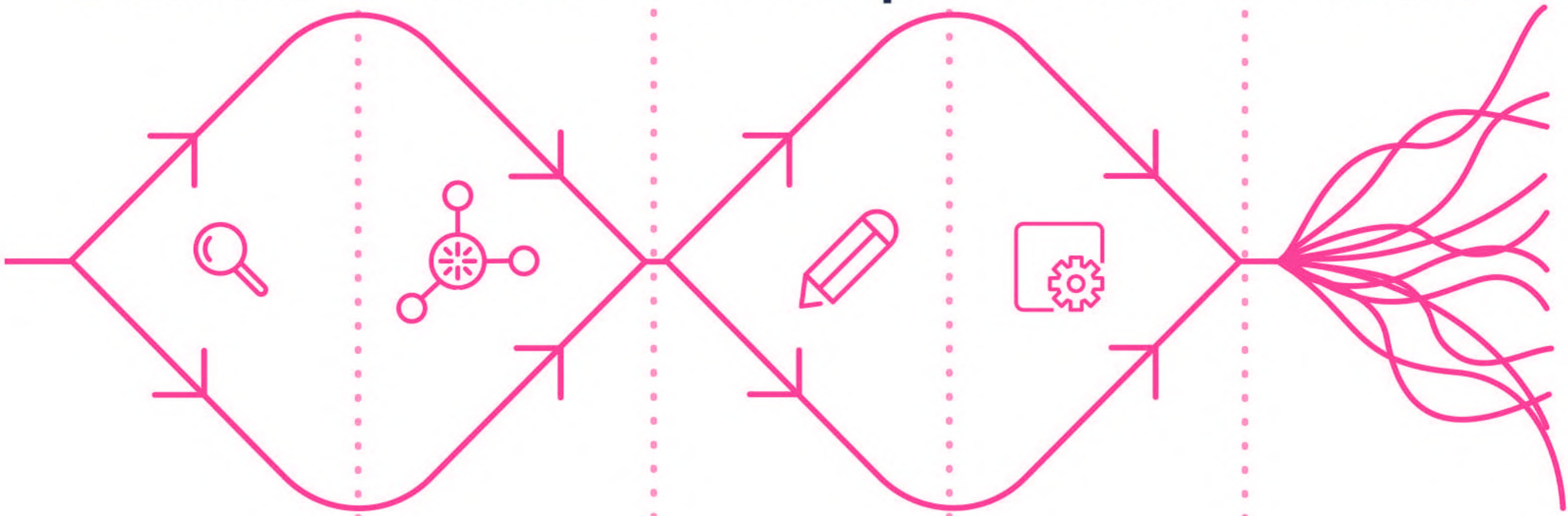
Discover

Define

Develop

Deliver

Evolve



- Immersion
- Questionnaires
- Interviews
- Self-Documentation
- Meetings
- User Experience Observations

- Interpret Your Findings
- Find Meaning
- Identify Themes
- Tell Stories
- Sort + Condense
- Define Insights
- Frame Opportunities
- Set 'Design Challenge'

- Brainstorm
- Jam/Charrette
- Designing
- Visual
- Tactile
- Experiential
- Sketching
- Graphic Recording

- Making + doing
- Role-Play
- Prototyping
- Storytelling
- Pitch Document
- Get Feedback
- Capture Learnings
- Define Success

- Track Learnings
- Celebrate Achievements
- Plan Next Steps
- Building Partnerships
- Engaging Others
- Scale-Up
- Deepen Roots
- Remind People what Changed (even if changes are subtle)
- Build Network

our current age

the anthropocene

- *anthropo* for »man« and *cene* for »new«
- coined by scientists Eugene Stormer and Paul Crutzen around the year 2000
- describes the most recent geological period in Earth's history when human activity began to have a significant impact on our climate and ecosystem; all biophysical and evolutionary processes
- huge shit show



exiting the anthropocene

entering the symbiocene

- essay by Glenn Albrecht from 2015
- capitalist development paradigm at the »dark heart of the maldevelopment«
- concepts for a new and viable society such as *democracy*, *sustainability* and *sustainable development* have long been corrupted by forces determined to incorporate them into the anthropocene
- *sustainability* and *sustainable development* are inadequate concepts, because they do not specify what is to be sustained over what time frame

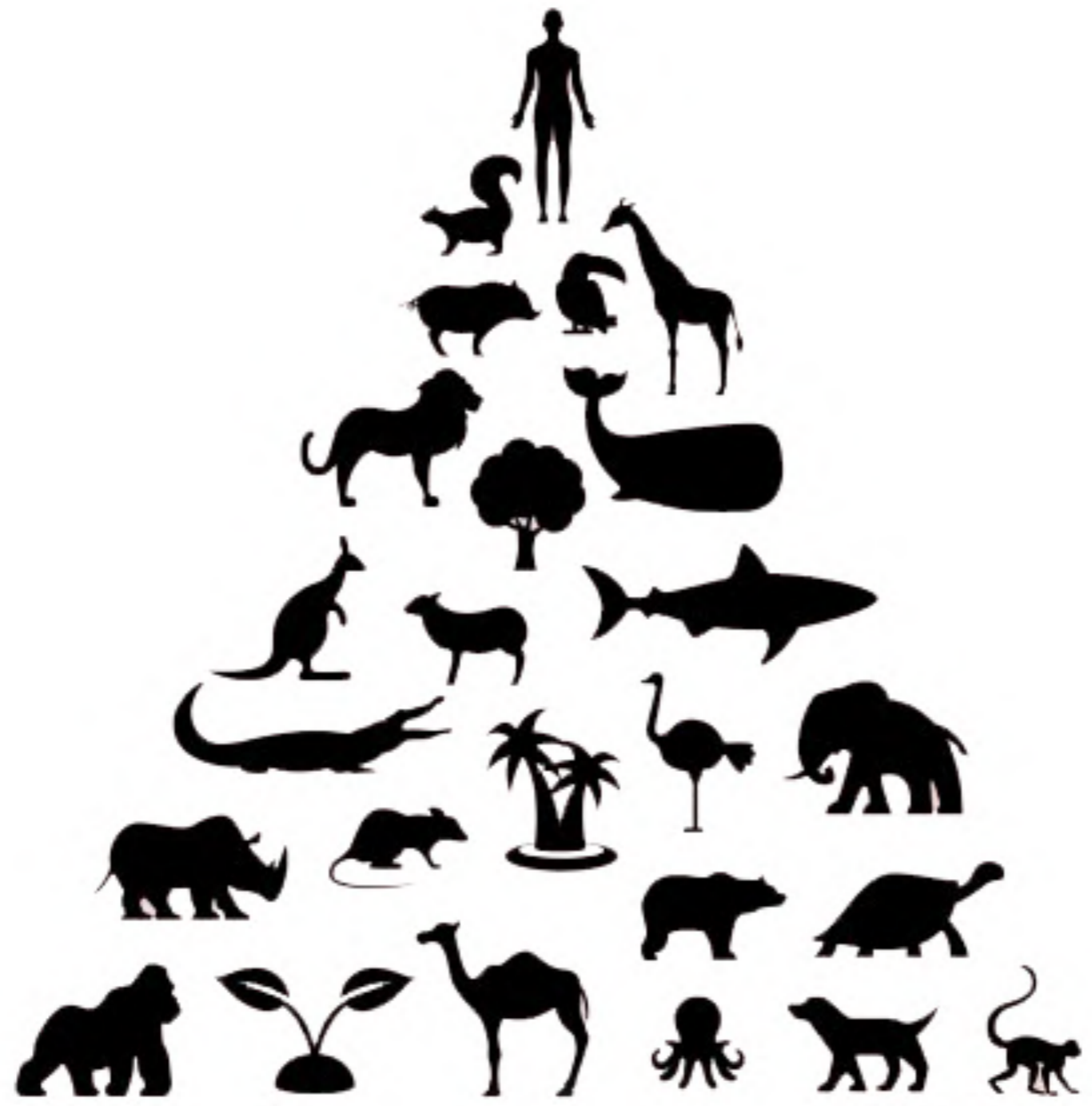
exiting the anthropocene

entering the symbiocene

- „negative/perverse resilience“: complex adaptive systems are justifying their ongoing existence – which is driving humanity to disease and extinction – by promoting sustainability and health (f.e. gas, oil and coal companies)
- pathological social relationships, which are oppressive and exploitative of humans and the ecosystem are rendered resistant to change by economic and political subsidies -> donations, corruption, political support, violence and vested interests
- this dominance has also become characteristic of what we call democracy; capitalism is now basically run by corruption, where corporations and oligarchs use their power and wealth to influence policy, manipulate public officials and minimize regulations
- this political-economy has been called „corruptalism“ and was recently publicly playing out with the Volkswagen scandal, the FIFA scandal or the Olympics drugs scandal

problems with **human centered design**

- can create unsustainable modes of production and consumption
- does not account for ecological and/or non-human perspectives
- focus on the experience of one user group can lead to social inequalities due to limited design considerations
- the consensus driven mechanisms of human centered design can suppress radical or imaginative ideas



exiting the anthropocene

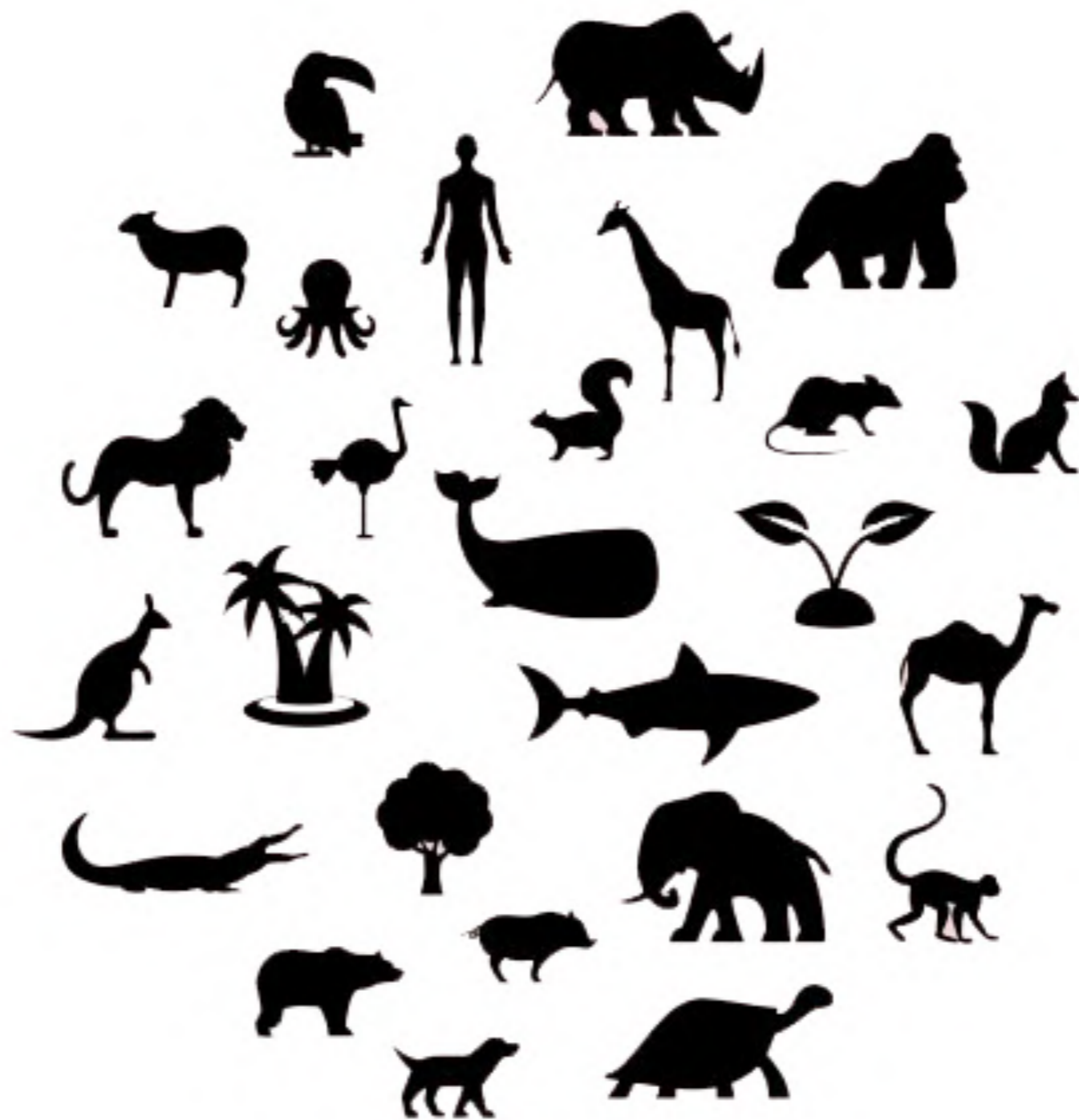
entering the symbiocene

- he argues the next era in human history should be called „symbiocene“ from the word symbiosis (scientifically for: living together in mutual benefits, ecologically for: the interconnectedness of life and all living things)
- the symbiocenetic system puts a human worldview back into the community of life, where conflict between organisms exists, but an overall balance of interests (eco-homeostasis) is in the total interest of all life
- in ecosystems all over the world there are immense mutually beneficial associations of macrofungi with flowering plants in complex, positive, metabolic, symbiotic relationship to each other. these findings have scientifically overturned the view that evolution and life are solely founded on competitive struggle between species

exiting the anthropocene

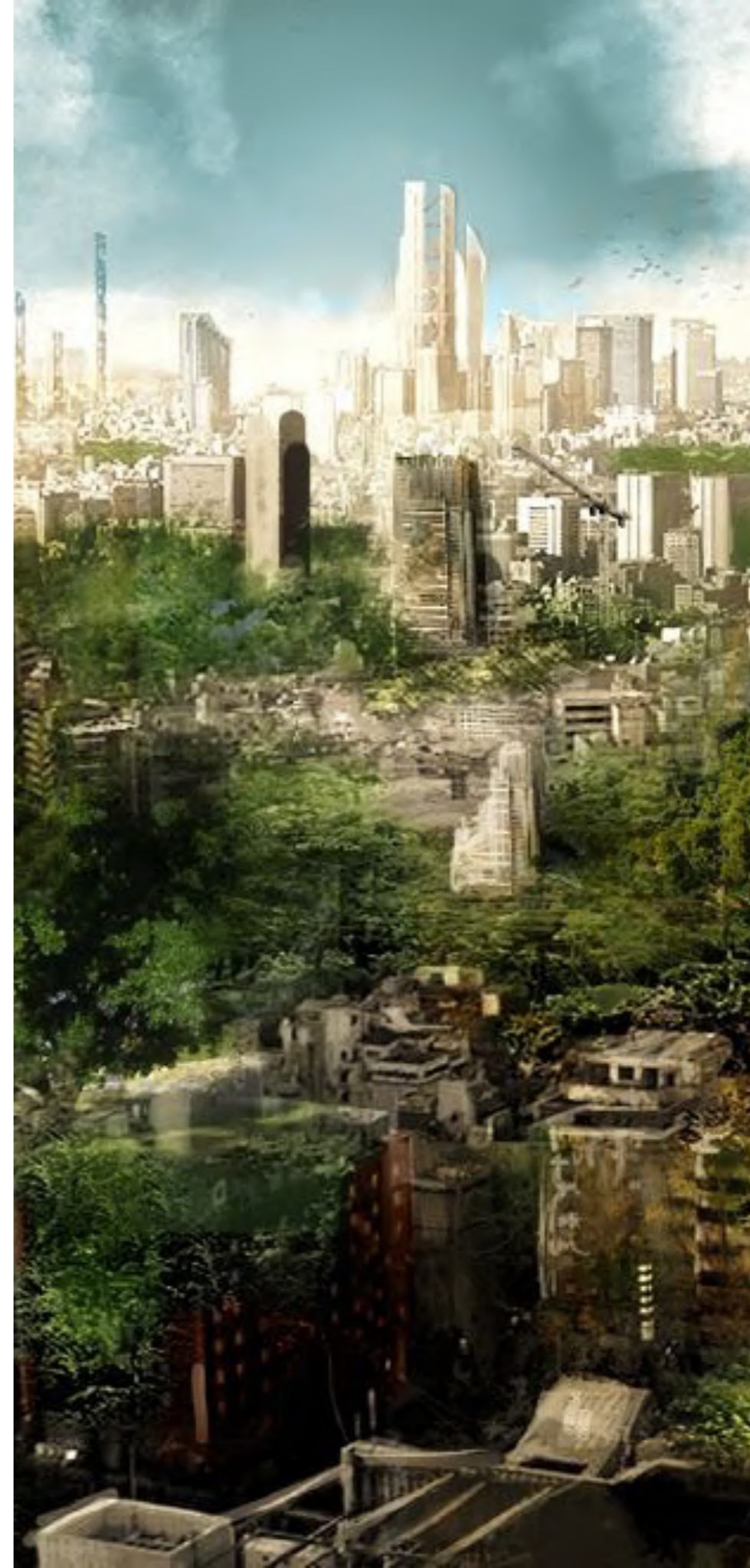
entering the symbiocene

- human action, culture, and enterprise shall be mutually beneficial for all living beings (which is desirable), all species (essential), and the health of all ecosystems (mandatory)
- this new era will be characterized by human intelligence that replicates the symbiotic and mutually reinforcing processes found in living systems
- the elements include full recyclability of all inputs and outputs, the elimination of toxic waste in all aspects of human enterprise, safe renewable energy and a harmonious integration of human industry and technology



non – human centered design

- is on it's way to become a new design method
- school of thought that changes the perspective of the designer
- it asks what we can learn from a multi-species perspective
- by designing environments that can be habitable for humans, animals and plants, and we also find out how we can solve unnecessary animal death and river pollution





<https://www.youtube.com/watch?v=Xcdx2R9iS5M>

pink chicken project

by non human nonsense

- suggests using a “Gene Drive” to change the colour of the entire species *Gallus gallus Domesticus* – the worlds most common bird – to pink, using a gene from the insect *cocchineal* to produce a pigment that will be fossilized when combined with the bones calcium
- the bones of the 60 billion chickens killed every year will leave a distinct trace in the rock strata and act as a marker for the impact of the anthropocene
- pink is a symbolic color; an opposition to the current global power dynamics, that enable the anthropocentric violence forced upon the non-human world
- it therefor asks what future do we really want, and *why* do we want it



pink chicken project

by non human nonsense

- there is an uncomfortably high probability of an uninhabitable planet within the next century, so the traces in the rock strata will leave hints for geologists of the future, similar to plastic pollution or nuclear fallout

” The current devastation of the planet is not the result of activities undertaken by the whole species *Homo Sapiens*: instead it derives from a small group of humans in power, upheld by the injustices of white supremacy, colonialism, patriarchy, heterosexism and ableism. We urge you to fight this oppression. “

**revital
cohen**

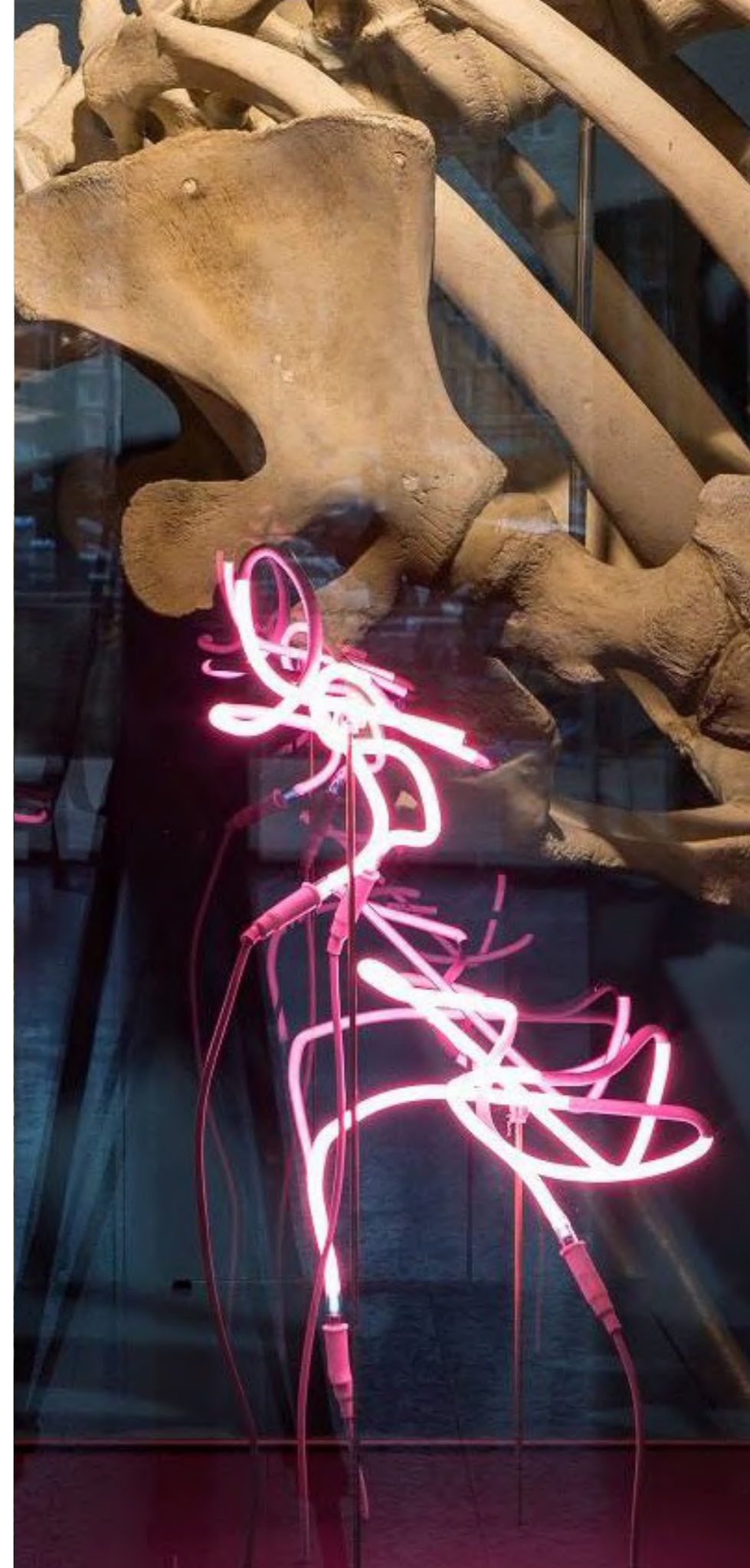
&

**tuur van
baalen**

facts

about

- design/art studio based in london
- working across objects, installation and film
- in their work they explore processes of production as cultural, personal and political practices
- working closely together with scientists of the field of biology, bio-technology and bio-chemistry





pigeon

d'or

- with the use of synthetic biology a bacteria is designed and created that can modify the metabolism of pigeons
- by altering the genetic information of the bacteria *Lactobacillus*, its ph value is lowered and it produces lipase (an enzyme) that acts similar to window soap
- when the pigeons are fed this bacteria, they should produce and defecate biological soap
- the biobricks (DNA sequences) used to alter the bacterias behaviour have been made freely accessible
- the pigeon as the carrier of the synthetic bacteria is considered as the pigeon in the city, an actor in a vast and complex metabolism in which we are also but the tiniest of fractions
- therefor speculative objects were created; f.e. one of them is a contraption allowing the pigeons to become part of your house and the architecture. attached to windowsills it allows to feed the pigeons



<https://vimeo.com/17574292>

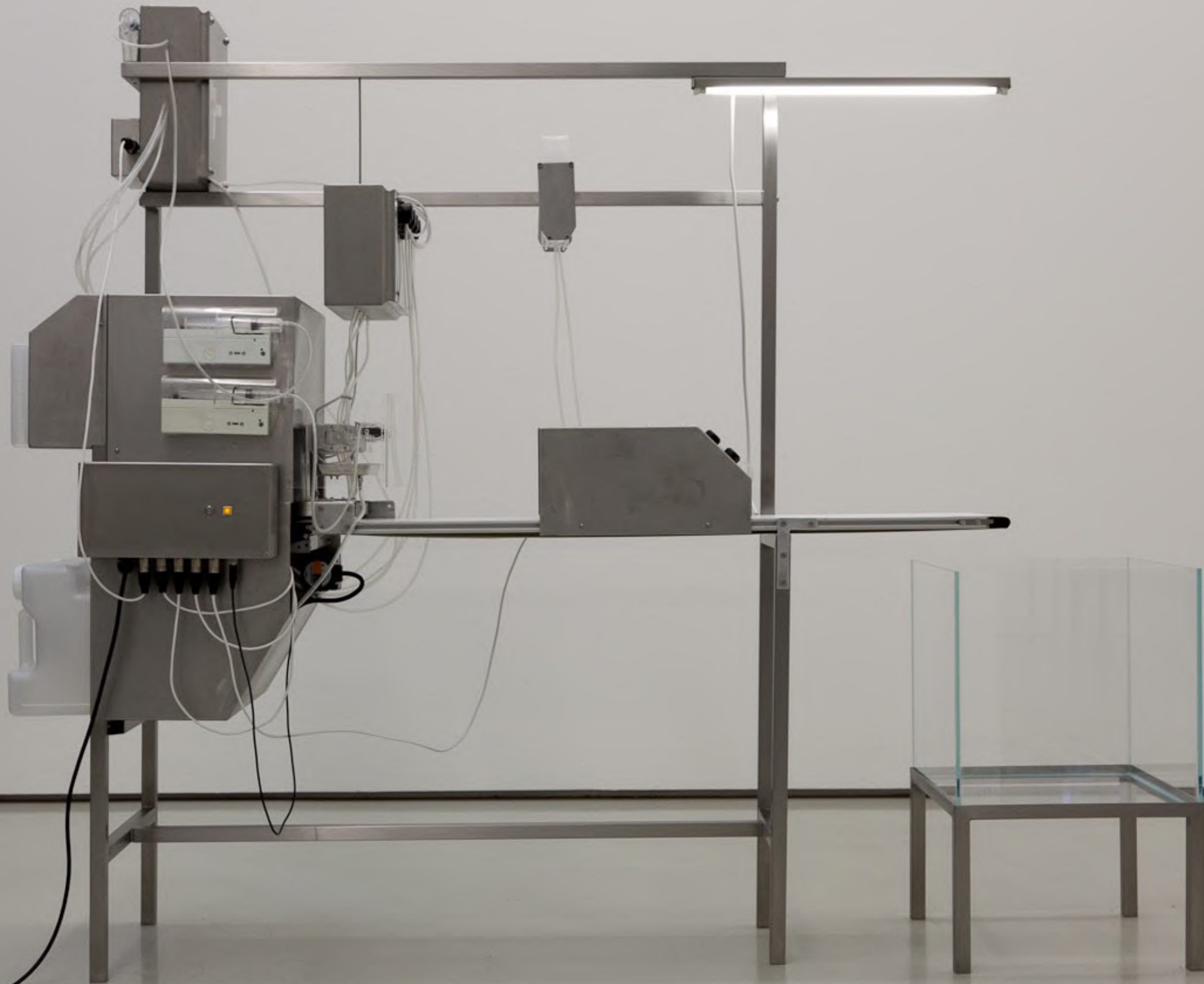
<https://www.cohenvanbalen.com/work/pigeon-dor>

starting at 5:30



sterile & sensei ichi-gō

- albino goldfish were engineered to hatch without reproductive organs
- in this process the fish were not conceived as animals but made as objects, that are unable to partake in the biological cycle
- does the ability to reproduce define your worth? forced hierarchies?
- in *sensei ichi-gō* an automated machine is build that is capable of producing sterile goldfish
- „the machine is an assembly line, a printer, a puppet master, a potential“

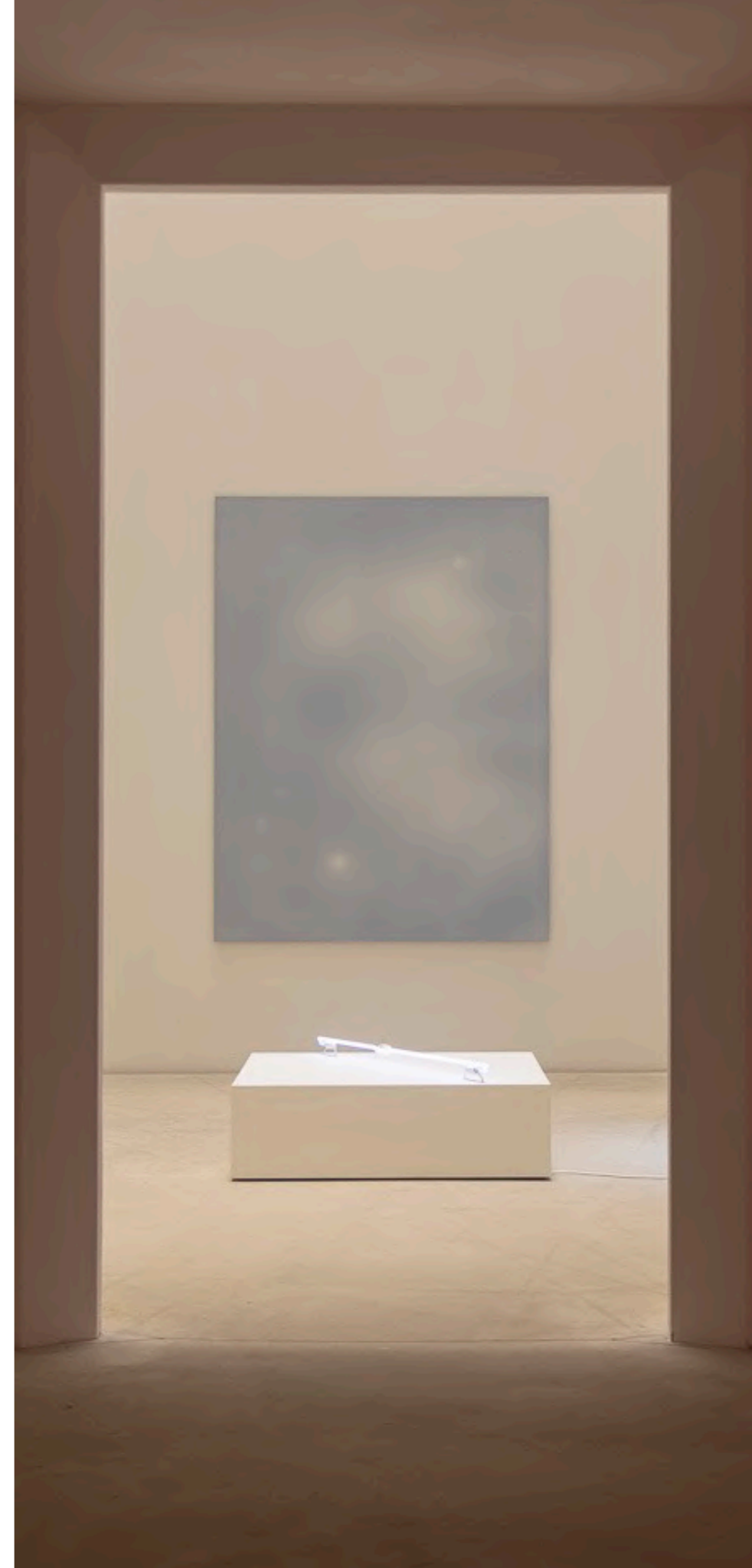


blue

roan

” Ashes of a thoroughbred racehorse were used to make a bespoke powder coat formula. The powder particles are specified to be the thickness of horsehair and the colour is mixed to match a blue roan—a rare colour pattern for horse coats. The powder is then applied unevenly by hand to aluminium and steel sheets in a powder coating factory, proposing a breed of horse painting which is material rather than figurative.

“



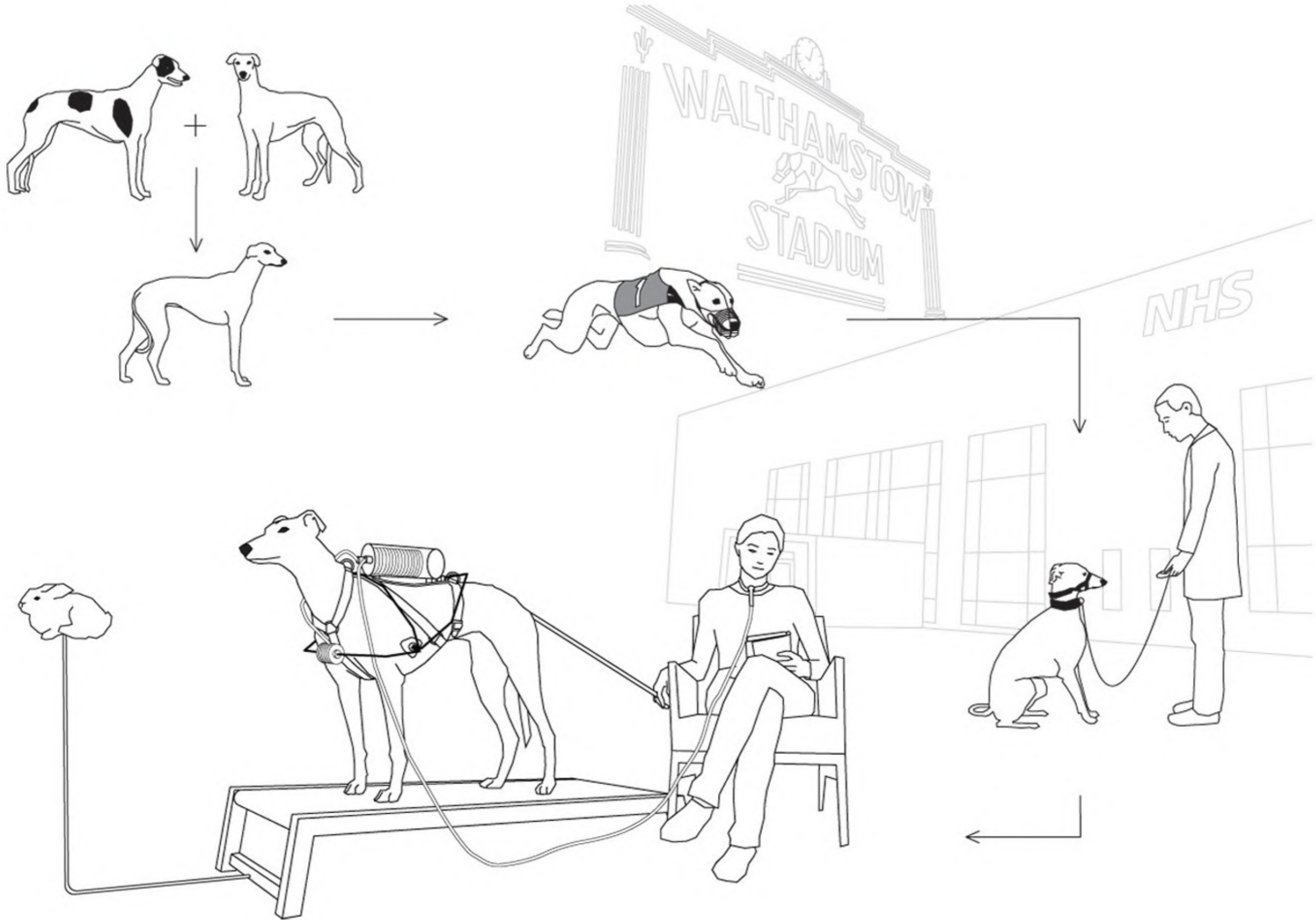




life

support

- could animals be transformed into medical devices that – unlike computerised machines – can establish a natural symbiosis with the patients who rely on them?
- the project proposes using animals bred commercially for consumption or entertainment as companions and providers of external organ replacement
- transgenic farm animals or retired working dogs are proposed as life support ‘devices’ for renal and respiratory patients
- could humans become parasites and live off another organism’s bodily functions?



sketch 1

respiratory dog

- a pedigreed greyhound, that was bred by the racing industry, with his powerful legs, hypoallergenic fur and large chest capacity is used as a respiratory 'device' to mechanically ventilate a human patient
- „the greyhound and its new owner develop a relationship of mutual reliance through keeping each other alive“
- a greyhound brought up in racing kennels usually suffers from separation anxiety after retirement, but as an assistance dog, it is constantly connected to its owner by a trache tube and is never left alone



sketch 1

dialysis sheep

- a patient suffering from kidney failure gives a sample of his blood to a lab, where scientists cut from the genome the regions that code the blood production (bone marrow tissues)
- the patient's extracted genome is inserted into the DNA from a sheep egg cell
- during the day, the dialysis sheep is free to roam in the patient's back garden, graze to cleanse its kidneys, and drink water containing salt minerals, calcium and glucose
- at night, the sheep is placed on a special platform at the patient's bedside and the transgenic sheep's kidneys are connected via blood lines to the patient
- pumps remove waste products from the patient's blood by pumping it out of the body, through the sheep's kidney (a natural, organic filtering system) and returning the cleaned blood to the patient
- the sheep urinates the toxins

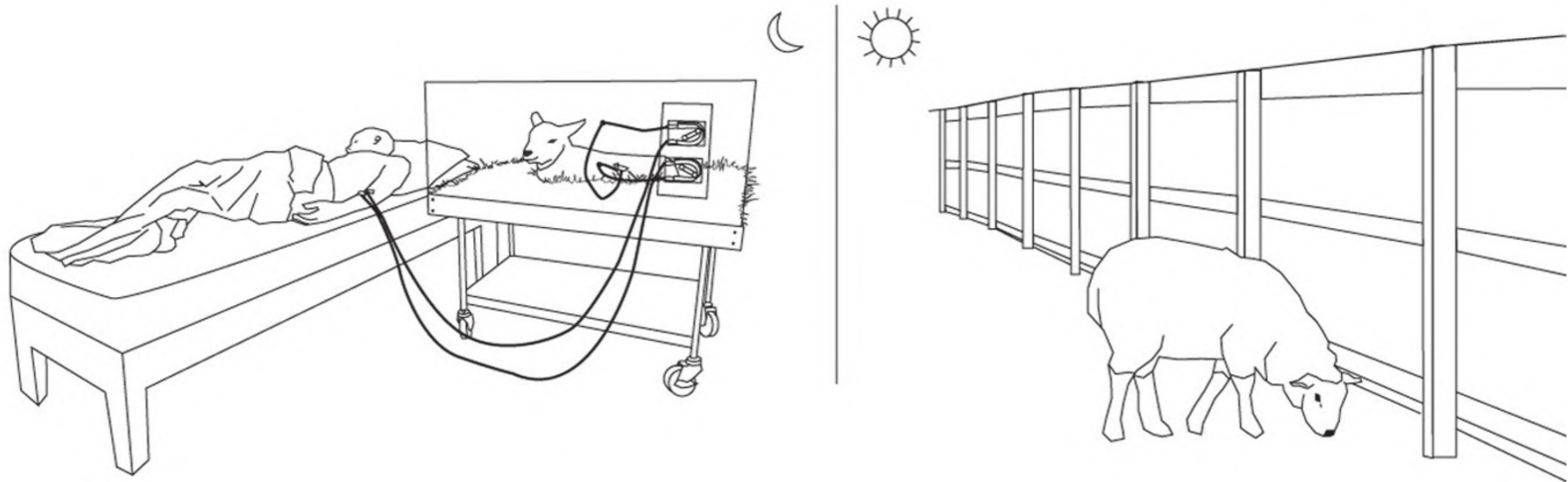
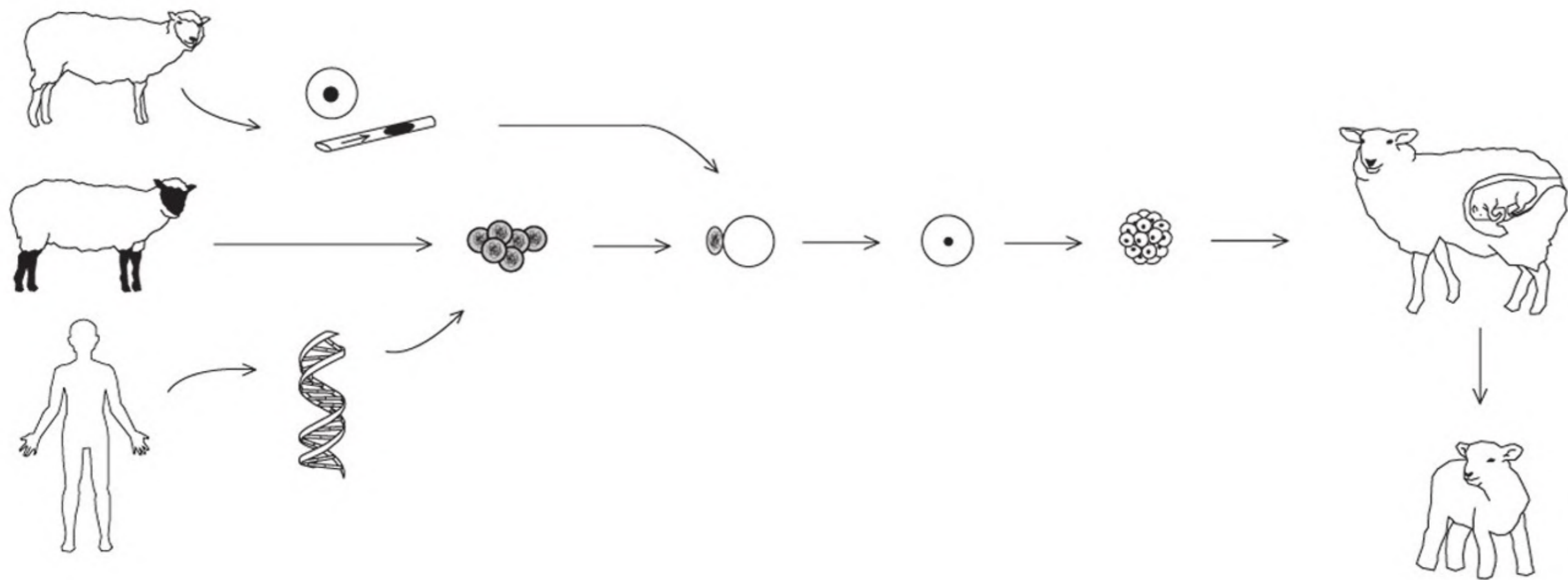


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<https://www.cohenvanbalen.com/work/life-support#>