

# HEALTH



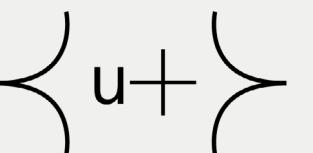
U+ZINE

U+ Zine is a cycle of short thematic explorations for alternative presents, futures and change, through the lens of arts and fiction developed by the Plurality University Network. It is a microscopic but collective look into the complexity of a subject.

How does it work?

Every month, we send out a call around a subject and gather a small curatorial committee to exchange around the contributions received.

A theme makes you want to participate? Get in touch! Send us examples of your work and join the conversation!

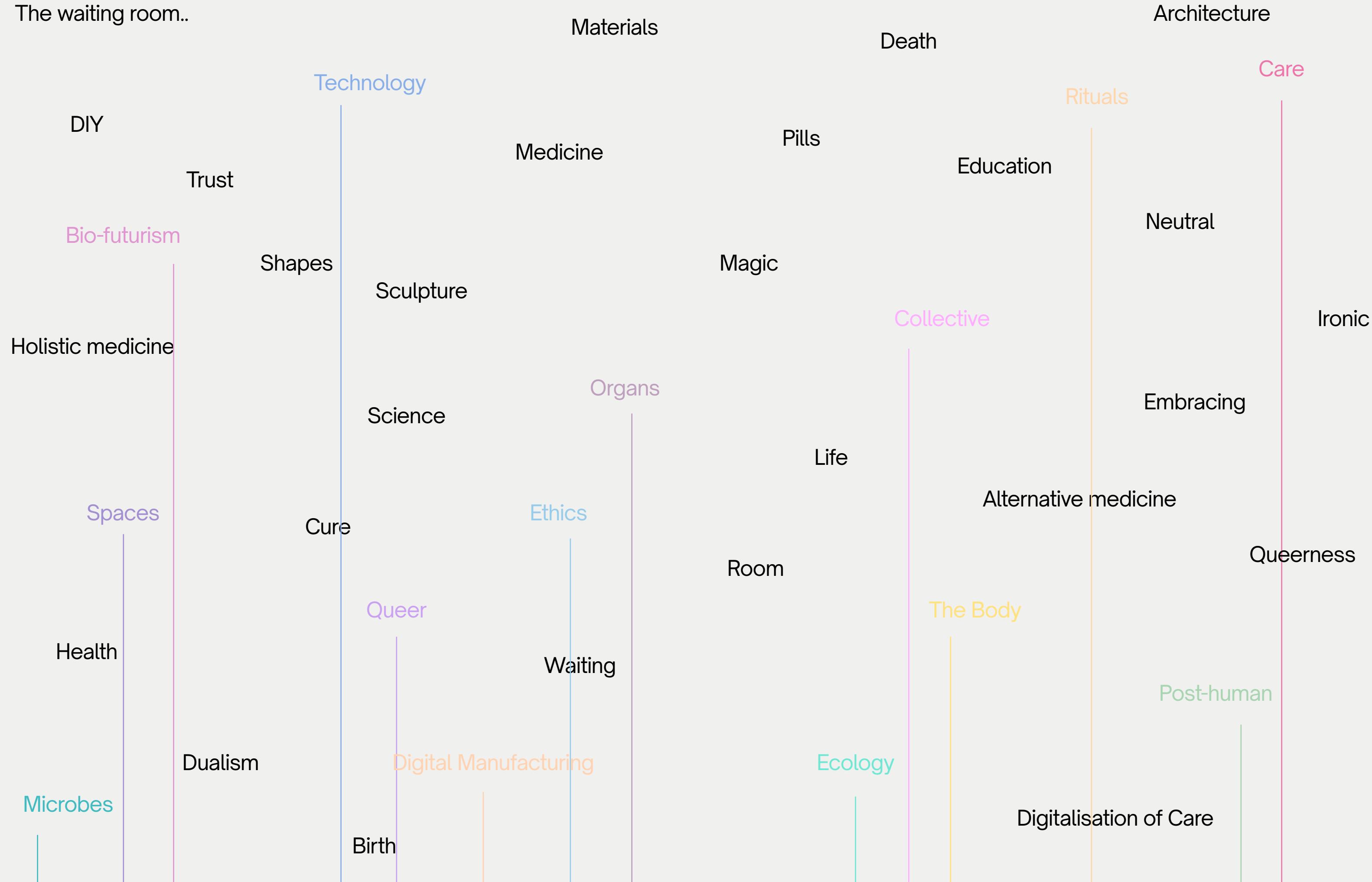


The curatorial committee is composed by U+'s interested members and public. During these sessions we exchange ideas and abstractions around the topic and propose ways to read and spatialize the diversity of contributions received. We do this in order to interrogate the complexity surrounding the word health and put forward speculation on what it could look like, how it could function as well as what it could become.

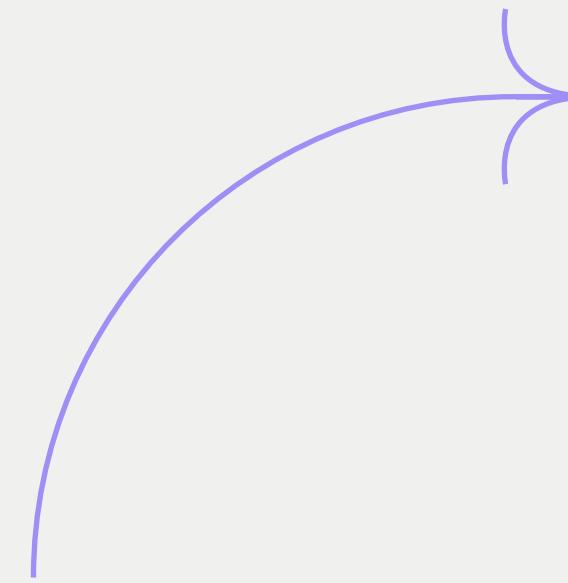
This curatorial committee was formed at a difficult time, during the third wave of the COVID pandemic which probably had an impact on our individual and collective experiences on the significance of “health”.

Thank you Camila Andino, Molly Bonnell, Ralph Borland, Phoebe Eustance and Aissa Nem.

The waiting room..



# Table of contents



Queering the Waiting Room - Phoebe Eustance	
10	
Reborn - Pleun Van Dijk	
12	
After Life - Mario Mimoso	
14	
The Ritual of Prescription - Molly Bonnell	
16	
Parahuman Health - Tom Bieling	
18	
FaveSana: Self-managed health platform for favelas - Adriana Hernandez & Marcela Machuca	
20	
Design diseases, Disease designs - Camila Andino	
24	
Co-Healing - Serina Tarkhanian	
26	
Going Inwards & Epic love Story - Adwaita Dias	
28	
An 'ART' Revolution: Procreation and Kinship in a Gestational Care Facility in the Netherlands - Alita Reznik Teeuwe & Oshin Siao Bhatt	
30	
Living longer by 2035 - Lina Jiménez & Lina Antolinez & Cristian Montes	
32	
Sin pasaporte de salud vas al tenebroso reverso del sistema - Sandra Vivar Maestre & Sonia Villanueva	
34	
Southern narratives of the Future Hospital - Material from a research proposal in development 2021 - Ralph Borland	
36	
A Finite Game of Health, Life, and Death - Paricha Duangtaweesub	
38	
Bone Flute - Ralph Borland	
40	
<i>Participate and Add to the Miro mind map!</i>	
42	
<i>The contributors, in order of appearance</i>	
44	

# Queering the Waiting Room

## Phoebe Eustance

Waiting is often characterised by repetitive rhythms and delayed action. I imagine the extreme of this being trapped inside a Kafka novel; things are happening to you, but you have limited agency for response and time becomes an even more abstract concept. Although waiting is something that can happen anywhere and at any time, it is often associated with institutional procedures (usually in waiting rooms) and, in that sense, produces its own hierarchies. Typically, it is those with wealth and privilege who can jump the queue.

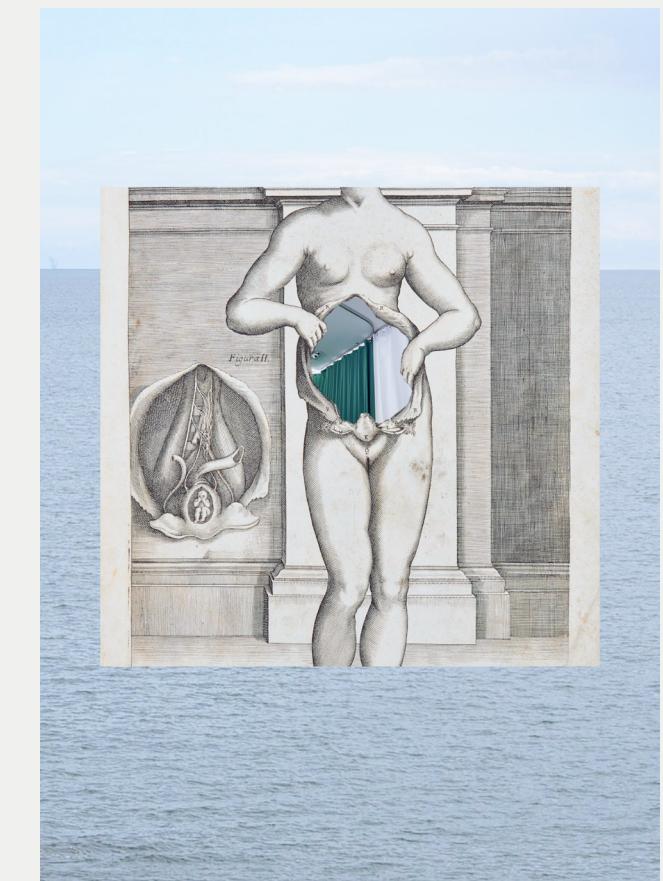
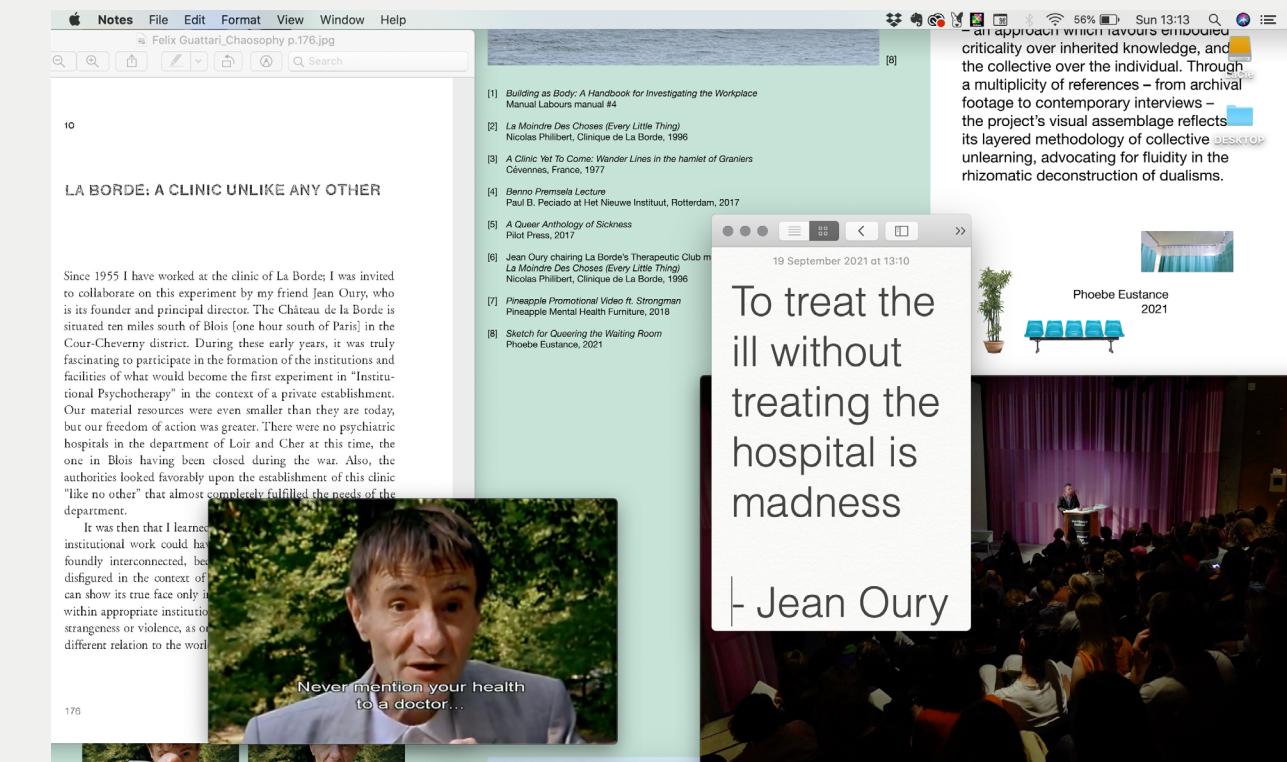
It isn't a surprise that patients and patience share the same etymology. If we think about this in the context of locked mental health services and the clinical encounter for patients, the waiting room can extend beyond the functional space of waiting for an appointment and become a daily reality. However, within this waiting room there are possibilities of resistance through collective unlearning and rethinking.

Queering the Waiting Room is a multi-faceted project that aims to open a critical dialogue around embodied encounters of disciplined spaces, with an emphasis on clinical environments, institutional processes, and their repetitive rhythms. These spaces reflect the prevailing neoliberal condition, serving to reinforce the reductive dualism of a body as either

healthy or sick; normal or pathological. This is especially true of the mental health institution where the loss of agency and time – for patients often detained involuntarily – are common side effects of rigid, controlling routines and stagnant institutional behaviours.

How can queer methodologies offer alternatives to standardised approaches in contemporary NHS mental health care that rely on binary modalities?

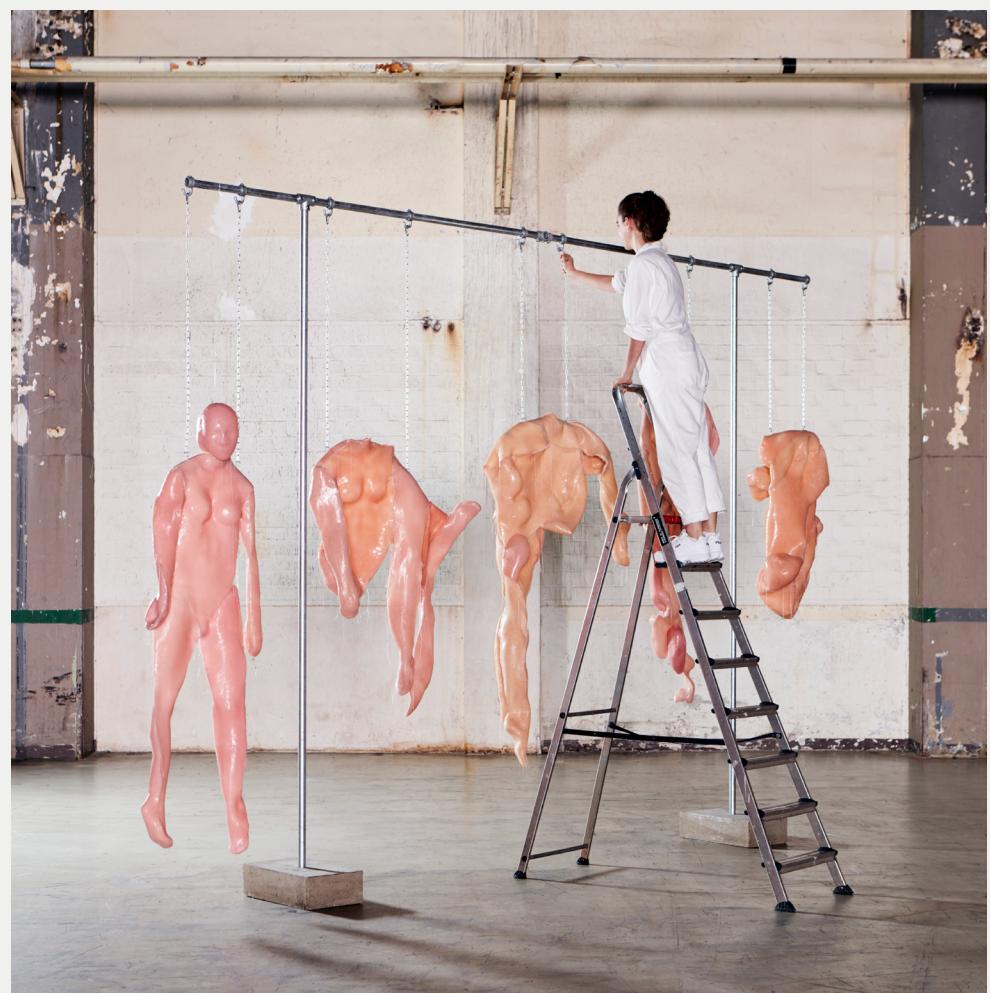
Drawing from queer theory, which questions norms and rejects thinking in binaries, Queering the Waiting Room reimagines the institution as malleable. Borrowing from Jean Oury's notion of 'pathoplasty', which attributes sickness to the milieu, the project redirects the gaze away from individual patients and towards the social structure of the hospital itself. In doing so, it turns the act of pathologising upside down and constructs a methodology for critiquing current models – an approach which favours embodied criticality over inherited knowledge, and the collective over the individual. Through a multiplicity of references – from archival footage to contemporary interviews – the project's visual assemblage reflects its layered methodology of collective unlearning, advocating for fluidity in the rhizomatic deconstruction of dualisms.



# Reborn

## Pleun Van Dijk

Until now, designers have been mainly involved in shaping the world around us. Now the mankind becomes easier to understand, analyze and unravel. We see designers intervene more far-reaching in the biomedical processes. We repair what is damaged, replace broken body parts and change our look till it fits our desire. As a result of this we seem to hold the key to perfection and gradually we seem to change into a designed human being. Now that we have become better at deconstructing the human, the question is arising if we are also capable of reconstructing ourselves? When we literally will disassemble the human and present it as a modular system, we are faced with impossible choices.

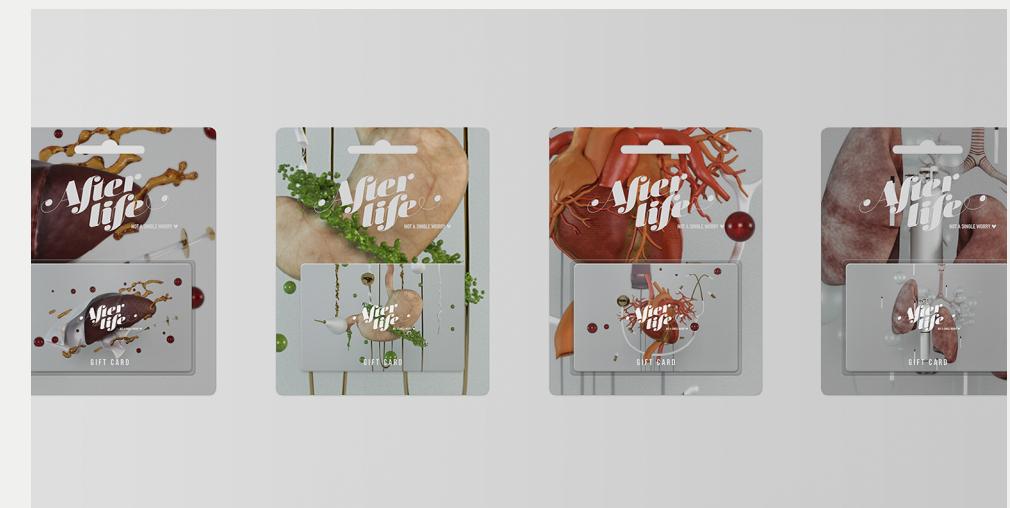


# After Life

## Mario Mimoso

Technology is developing at the speed of light, and the latest innovations have managed to even print cellular constructs to create artificial human livers, hearts or kidneys. In few years, this technology could be improved and available for everyone — or at least everyone who can afford it. That is the main goal of this project: not only to speculate about how the visual communication of the brands of tomorrow could be, but also and mainly to raise awareness about the dangers that this kind of technologies may have regarding topics as important as inequality, healthcare or organ trade. Afterlife sells custom 3D-printed human organs, working as an insurance company. However, consumers are also free to visit their closest pharmacy and buy one of the single use gift-cards, which will give them the chance to get a copy of the organ they choose.

The world is becoming healthier because we've come to the realization that, since we only have one, we need to take care of our body. This sometimes leads to tasteless diets, smoking bans and forced teetotalism. Afterlife, however, wants to encourage people to have fun, act reckless and enjoy the moment, and therefore the brand claim is “don't worry, keep drinking / smoking / eating”. This directly points towards the fact that technology, especially applied to human healthcare, should be regulated and guided by strong ethical values. Pure capitalism and economic interests lead us inevitably to inequality and a world, as we've seen many times during the COVID-19 pandemic, where the rich only get more and more privileges.



# The Ritual of Prescription

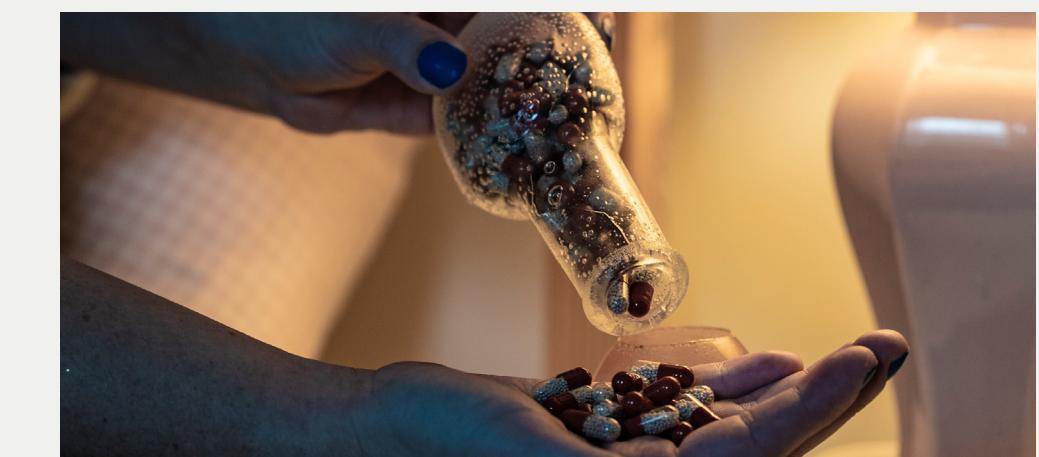
## Molly Bonnell

Can the aesthetics of care act as a tool to reconsider medical routines in isolation? What is the relationship between the physical body and the treatments I take to maintain it? Am I the same person with or without the medications keeping me alive?

Healthcare is a human right. Access to the systems that provide this care is essential. However, it often takes a crisis to exacerbate underlying cracks within the system, particularly the UK's National Health Service. On 21 March 2020, the NHS mailed letters to 1.5 million people in the UK deemed 'clinically extremely vulnerable', advising them to practice shielding measures in order to protect themselves from COVID-19. This group was identified based on

specific medical conditions that place someone at greater risk of severe illness from COVID-19. On this list of conditions was Cystic Fibrosis, a disease I have lived with my entire life.

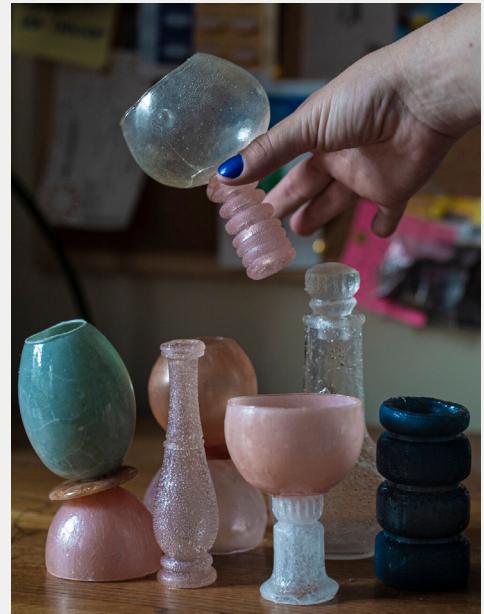
For the first time, many are confronted by the reality of their own medical vulnerability. Doctors exist at a distance through a screen, and individuals are now solely responsible for their health, obsessing over the minutiae of their daily care. The mundane routines of healthcare at home have been elevated to the priority event of daily life.



While people are thinking about their own health more than ever, the NHS is regarded with almost religious reverence. However, there is simultaneously a lack of understanding of healthcare as we constantly, without a second thought, transform our bodies through medicine.

Relying on domestic materials, such as sugar, The Ritual of Prescription is a series of speculative objects that amplify my personal healthcare rituals during this period of isolation with the aim to counter the current over-medicalization of healthcare and encourage a hypersensitivity to the ways we interact with and care for our bodies.

By crafting new and unfamiliar medical routines, like taking prescription medicine, this project questions the societal and individual value placed on health and the systems that support it, as well as a reflection on the nature of medicine itself and its relationship to human ritual.



# Parahuman Health

## Tom Bieling

In his book “Man - His Nature and His Position in the World” (1940), Arnold Gehlen introduces the concept of man as a deficient being whose greatest challenge is to adapt to the conditions of his natural environment<sup>1</sup>. The deficiencies associated with this also serve as a starting point for humans to create culture as a substitute nature («second culture»). Humans are thus forced «to relieve themselves, i.e. to convert the deficiency conditions of their existence into opportunities for their life time»<sup>2</sup>. According to Gehlen, human beings’ culture-shaping tactics (due to a lack of physical characteristics) do not consist in adapting to their environment, but in transforming it in such a way that it meets their requirements.

The discourses on the social, ethical and political consequences of new technologies, as well as their cultural and social meanings, will intensify even further in the future, especially with regard to the debates on self-optimisation and cyborgism. For with the continuous networking of the human body with things, a rigorous separation of the human being and technology will become less and less clear. For “homo Protheticus”<sup>3</sup>, the human being conceived as an artefact, who as a deficient being (Gehlen) experiences completion or optimisation through technical artefacts, the question increasingly

arises as to what extent interventions in the human body are still understood as compensation for deficits or as a desirable enhancement.

For, while for a long time prosthetics seemed to be geared towards compensating for physical disadvantages in the form of replacement parts, in the meantime a further demand for the technical modulation of bodies seems to be gaining ground: Instead of merely compensating for states of disabled bodies that are perceived as deficient, the option of a fundamental technical enhancement is now up for debate.

In addition, in view of the increasing digitalisation and miniaturisation of technology, a shift in the interface between technology and humans can be observed, in that technology - for example in the field of neuroprosthetics - is increasingly being implanted in the body itself. This general feasibility goes hand in hand with an increasingly altering body concept, which at the same time arouses desires towards technical optimisation. Christoph Asmuth and Sybilla Nikolow describe this as follows. The human body is seen as fundamentally in need of repair and in need of improvement. It is not only to be expanded, but optimised through prostheses. At the same time, it casts the actual state of the human being in a gloomy light and thus raises questions about

our self-image. In contrast to the envisaged ‘superhuman’, we can all only appear as ‘disabled’. Only ‘superabled’ are we what we want to be.<sup>4</sup>

Here, a growing pressure to be normalised is emerging, which could particularly affect those who cannot or do not want to participate in the technically driven body tuning (for instance, for economic or moral reasons). There is also a conceivable danger of an increasing division of individual social groups into those who can drive their bodies to new heights through technical interventions and those who (have to) be content with their formerly «normal» bodies. Against this background, Werner Schneider describes an increasing concern of many to soon be entirely dependent on technical enhancements and thus slaves to machines<sup>5</sup>.

It is obvious that the “anthropotechnical option”<sup>6</sup>, i.e. the formability of the human body, can be viewed quite critically. Karin Harrasser speaks of an «internalised culture of self-improvement» that has long since become a social imperative in the labyrinth of beauty mania, competition and times of crisis, and thus thrives as a pernicious ideology of perpetual self-optimisation that corresponds not least to neo-capitalist logic<sup>7</sup>. In terms of dealing with health, we may be manoeuvring ourselves into a catch-22 situation, insofar as medical-technical-design- interventions reveal opportunities and dangers in equal measure, which in turn raises new questions: Do the new options of body transformation lead to an increase in human dependency on technology, or can the associated options possibly even lead to more independence? In the coming years, it will be the task of a radically new understanding of health to plausibly fathom this complex and to constructively moderate it in a para-disciplinary discourse.

[4] Asmuth, Christoph / Nikolow, Sybilla (2014): *Superabled. Technisches Enhancement durch Prothesen*, Universität Freiburg.

[5] Schneider, Werner (2012): *Der Prothesen-Körper als gesellschaftliches Grenzproblem*. In: Markus Schroer (Hg.): *Soziologie des Körpers*. Suhrkamp, Frankfurt a.M. (2. Auflage). S. 371–397.

[6] Sloterdijk, Peter (2009): *Du musst Dein Leben ändern. Über Anthropotechnik*. Suhrkamp, Frankfurt a. M.

[7] Harrasser, Karin (2013): *Körper 2.0 – Über die technische Erweiterbarkeit des Menschen*. Transcript, Bielefeld.

[1] Gehlen, Arnold (1940/2016): *Der Mensch – Seine Natur und seine Stellung in der Welt*. Vittorio Klostermann Verlag, Frankfurt a.M.

[2] *ibid.*, 36

[3] Erlach, Klaus (2000): *Das Technotop. Die technologische Konstruktion der Wirklichkeit*. Lit, Münster.

# FaveSana: Self-managed health platform for favelas

## Adriana Hernandez & Marcela Machuca

La alarma sonó justo cuando Jao acababa de conciliar el sueño, el dolor de cabeza no lo dejó dormir en toda la noche. Se levantó y lo primero que hizo fue lavarse los dientes, con un poco de miedo de que los análisis que realiza el cepillo fuera a indicar algún tipo de infección. Esperó un poco y le llegó la notificación a su celular por parte de FaveSana app: Verde, fiu! que alivio, no se detectó infección. Se arregló rápidamente mientras se cuestionaba el porqué le dio dolor de cabeza, desayuno y salió camino al trabajo.

Se formó para pasar por la escalera sanitaria, solo había tres personas por delante. Una vez que bajó los primeros escalones y pasó el marco de revisión pudo ver que su temperatura estaba bien, continuó bajando hacia la zona desinfectante. Al ir por el último escalón recibió su código QR para poder utilizar el transporte público y entrar a cualquier espacio público o cerrado.

Ese día en el trabajo decidió aprovechar la hora de la comida para hacer puntos en FaveSana, pues estaba consciente en caso de que tu-

viese que hacer una consulta médica los necesitaría, además que disfrutaba dar asesorías para apoyar a la comunidad. Al salir del trabajo fue al bar con sus amigos a celebrar la jubilación de Tiago, después de unas cuantas cervezas y buenas pláticas, tomó camino a su casa subiendo las mismas escaleras que llevaba más de 20 años subiendo.

Jao nota que últimamente se siente muy agitado cada vez que tiene que subir, las cervezas, la comida chatarra y la falta de ejercicio comienzan a impactar aún más su salud. FaveSana, lleva tiempo mandando recomendaciones para mejorar su condición física pero es difícil encontrar el tiempo para ejercitarse. Esta vez, llegando a casa, FaveSana le manda una alerta que no le tomó por sorpresa: Rojo, tiene que ir a consulta, y le propone las horas disponibles para agendarla el siguiente día.

Al llegar a la revisión en el centro de salud donde uno de sus vecinos que pertenecía al Squad de Salud le indicó cómo entrar en la cápsula de análisis. Se acostó en ella con los brazos en

los costados, cerró los ojos y comenzó a seguir las indicaciones que escuchaba de la cápsula mientras rayos y luces escaneaban su cuerpo.

Cinco minutos después, terminó el proceso, salió de la cápsula y un doctor apareció en la pantalla explicando que lo que estaba viviendo eran síntomas de hipertensión y que además presentó una disminución en la audición del oído derecho.

En la app le aparecieron todas las sesiones de seguimiento, un plan de alimentación y la hora de entrega de su nuevo aparato auditivo que le será enviado a casa una vez impreso en 3D. Concluida la sesión, el doctor regresó con su vecino y le presentó su bitácora de servicio de salud, procesaron los montos y sus créditos eran suficientes para adquirir sus nuevos medicamentos.

Si bien es duro mantener los créditos para su cobertura, Jao recuerda como antes el sistema de salud estaba colapsado, con hospitales saturados, inaccesibles para la gente de la favela. Se siente muy agradecido de que en la favela decidieron organizarse con la plataforma de FaveSana para mantener saludables a todos, entre ellos mismos se cuidaban.

### Artefacto 1:

*Cepillo dental que además de higienizar realiza un estudio de la saliva y vías respiratorias de las personas para detectar enfermedades infecciosas, autoinmunes, diabetes, algunos cánceres, etc. Una vez que terminas de utilizarlo se procesa el análisis y te llega una notificación al celular con el estatus actual de salud. En caso de que se detecte algo anormal, debes ir automáticamente a la clínica FaveSana. Si el resultado es estable puedes continuar con tu día.*



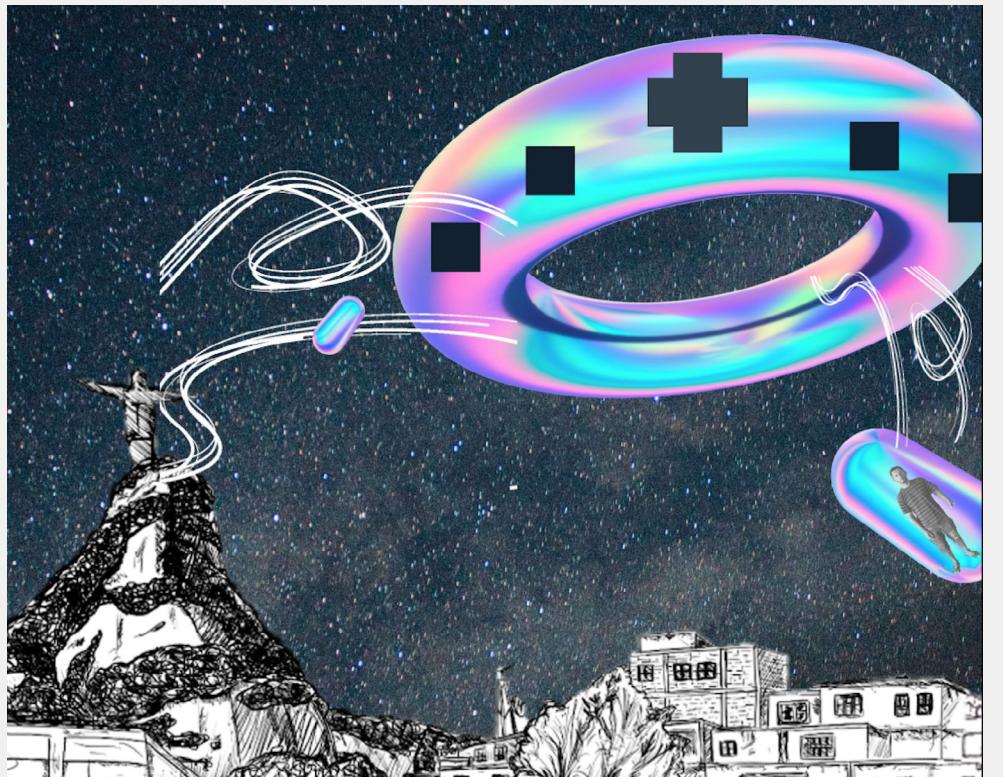
### Artefacto 2:

*Escachecheckpoint - escaleras preventivas. Las escaleras están situadas en los diferentes puntos de acceso a la favela, funcionan como portales de chequeo preventivo, mientras las personas circulan en ellas detectan signos vitales, temperatura y arrojan una bruma sanitizante para garantizar que no presentan síntomas graves y así reducir el riesgo de la propagación de enfermedades ya sea dentro de la favela o fueran en lugares públicos. Al final del trayecto en la escalera se envía una notificación al celular con el resultado, si no se detecta ningún síntoma se muestra un código QR que se puede utilizar para ingresar al transporte público o permite la entrada a la favela. Si la persona muestra síntomas, se activa un protocolo de atención y para evitar propagación en el resto de la población.*



*Artefacto 3:*

*Cápsula de atención primaria con clínica flotante. En caso de malestar, el paciente puede acudir a estas cápsulas 24/7, distribuidas en la favela, al identificarse con su celular la cápsula se abre, la persona se recuesta en la cápsula que al cerrar comienza un proceso de escaneo general por todo el cuerpo, revisando el estado de los órganos, signos vitales y otros estudios de atención primaria. Si los resultados de la cápsula son buenos o se detecta algún problema fácil de tratar, sale de la cápsula y a primera hora un doctor aparece en videollamada en su celular para darle las indicaciones de seguimiento.*

*Artefacto 4:*

*Clinica flotante. En caso de que los resultados del análisis de la capsula detecten síntomas de una condición crítica que requiera una intervención médica, la cápsula comienza a transportarse a un centro de salud que se encuentra flotando por la ciudad.*

« The hospital or the prison are not just spaces of confinement but also spaces of instruction and production of knowledge about the population. In this respect, the hospital is producing mental illness - it's not that the hospital is curing illness, but it is producing the very difference between the normal and the pathological. Therefore, the production of illness itself is the affect of the hospital. »

(Paul B. Peciado, 2017)

\* [View clips here](#)

# Design diseases, Disease designs Camila Andino

"The type of architecture that was meant to inoculate its occupants against disease has become a source of disease. We are becoming physically allergic to buildings. New bodies will probably have to be designed<sup>1</sup>" -Beatriz Colomina

The living prototypes of the future will take this into account- they will reconsider the concepts of autonomy, ecology and human relationships in such a way that all three will work cohesively as one.

Ask yourself this, when you think of a domestic space or an interior space, do you think about nature? Do you think about fresh air? Do you think about the environment?

Ask yourself this, when you think about nature, do you think about the human body? Do you think about technology?

Ask yourself this, when you think about the body, do you think about design? Do you think about the domestic space?

Back in 2019 when Beatriz Colomina published her book X-ray Architecture, she brought to light a problem that the current pandemic made obvious (but in reality, has always been there)- architecture has become a source of disease. Architecture is disease.

[1] Colomina, Beatriz. *X-ray Architecture*. Zürich: Lars Müller Publishers, (2019): 184.

[2] Kallipoliti, Lydia. "Closed worlds: The rise and fall of dirty physiology." *Architectural Theory Review* 20.1 (2015): 67-90.

[3] U.S. Environmental Protection Agency, Office of Air and Radiation. *Report to Congress on Indoor Air Quality, Volume II: Assessment and Control of Indoor Air Pollution*, (1989)

Ever since modernism, the exposure to tuberculosis and the aftermath of war, the design of the interior space has been centered around the ethos of clean, white and undecorated surfaces that shield humans from the shock of the world around us. It has been designed (unsuccessfully) as an attempt to please and heal humans. Domestic spaces have been created as 'closed worlds'<sup>2</sup> - almost completely autonomous from environmental input. It functions as a closed structure that performs under its own artificial conditions, generated within its own limits- which are composed of contaminated synthetics, and pesticides which inflict a constant threat upon our bodies.

Did you know that according to the EPA (Environmental Protection Agency) on average pre-pandemic we used to spend 80- 90% of our time indoors? And that indoor spaces contain 2 to 5 times more pollutants than outdoor spaces?<sup>3</sup>

We are often told that the interior is safer, cleaner, healthier. Is it? The interior space, particularly the domestic space, configures our urban reality and our day to day actions: our relationships, our choices, our health. This is key. Our domestic spaces design us, they design our body, but also make us sick. There are many good bacteria found in nature, which are essential to our

wellbeing, and strengthening our immune systems, that we are not exposed to, because we spend so much of our time indoors.

The question now becomes, how do we design spaces to healthen, rather than disease?

Instead of designing our indoor spaces as autonomous architectural objects, we should bring nature into the equation as the center of design itself. The design of nature is the design of the body. As such, we need to find ways to bring nature in, to think of the ecology of our bodies as parallel to that of nature, to design new modes of living.

## WILL YOU CHOOSE TO DISEASE OR TO HEALTHEN?



# Co-Healing

## Serina Tarkhanian

*Co-Healing.*

Photo Credit: Ronald Smits



Co-healing is an embodied, collectivized medical experience that uses the unique microbiome of participants to restore the microbial imbalances of others. By positioning health as a shared and self-governing experience, Co-Healing aims to break down the prevailing paternalistic, isolationistic and depersonalised practices within Western medical care, shifting it from a practice of caring for, to one that cares with. The project materializes a radical revisioning of Western healthcare, wherein everyone is both a caregiver and receiver. This is done by positioning the microbial body – the microorganisms that live with, on and in us – as the primary locus of care and people as co-producers of sensorial medicine.

Science has already begun to develop ‘the new frontier’ of treatments that enable the transplantation of human

microbiomes to address dysbiosis, a form of microbial imbalance linked to conditions such as Alzheimer’s and cancer. But the design of these therapies continues to base itself off current extractive modes of Westernized healthcare. With her immersive installation – a pop-up, warm and humid microbial care room heated at 37 degrees Celsius, Tarkhanian explores how healing with microbes and each other in collectivity may enable us to foster what she calls our somatic phronesis, the embodied medical knowledges shaped from our socio-cultural experiences of health. She proposes new rituals for health are designed to be experienced within what she describes as a «microbial bathhouse, structured around a series of tools for safely exchanging microbes from our bodies. One such device, the Lung Microbiota Exchange Tool allows co-healers to exchange microbes safely and somatically from their respiratory tract. This microbial transplantation process aims to help diversify the microbiome of people as a preventative health measure, also helping those who suffer from chronic respiratory diseases.

### Collaborators

Co-Healing was developed in collaboration with a medical microbiologist and infectious disease specialist (Maxime-Antoine Tremblay, MD FRCPC), and a scientific glassblower (Ad Waterschoot, TU/e). The project was developed as part of Tarkhanian’s graduation project for Social Design Masters at the Design Academy Eindhoven (Cum Laude 2020), earning her a Gijs Bakker Award 2020 nomination and the Best Thesis Award.

*Microbes from the respiratory tract are collected during a ritual of Giving. Each co-healer has their own reusable spout they insert into a glass vessel. The two compartments contain a broth that suits a large range of anaerobic and aerobic bacteria.*

*Photo Credit: Serina Tarkhanian*



*The microbial liquid is transferred into a ceramic vessel and then transformed into a fine particulate that can be inhaled.*

*Photo Credit: Serina Tarkhanian*



*Co-healers inhale tiny droplets of mist, helping the rich and diverse collection of microbes to travel into the respiratory tract. This process, of transplanting a collection of different lung microbiota, aims to help diversify the microbiota of people as a preventative health measure, but also to help those who suffer from different chronic respiratory diseases such as asthma.*

*Photo Credit: Serina Tarkhanian*



*The design of the objects shapes a different typology of medical instruments that reflect a more embodied practice of health. Each was designed with the intention of integrating the bodies that produced them. Tarkhanian worked with a scientific glassblower and encouraged him to use the variations in his breathing patterns to shape asymmetrical medical apparatus.*

*Photo Credit: Baptiste Comte*



### Microbe collecting vessel.

*Photo Credit: Baptiste Comte*



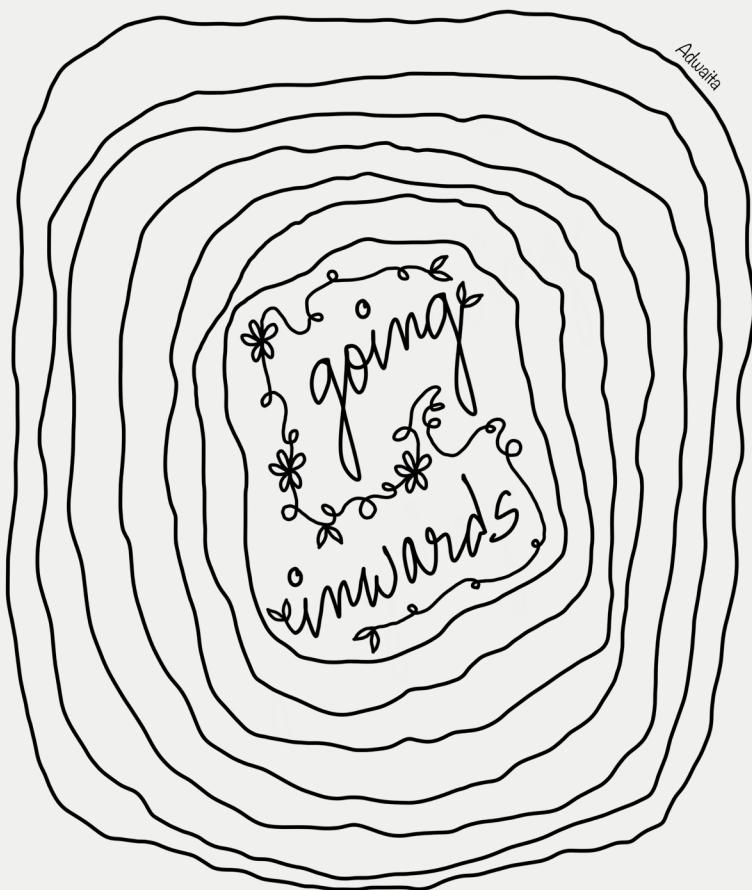
### Microbial mist spoon.

*Photo Credit: Baptiste Comte*

# Going Inwards & Epic love Story

## Adwaita Dias

«Epic Self Love Story» is a poster for Self Love. We have all heard of ‘epic love stories’. But it’s self love that can save our souls. Showing oneself the compassion we seek from others can be an immense step of empowerment, which can lead to healing and growth, mentally and hence physically too, since the mind and body are interconnected at their very core.



«Going Inwards» is a colouring sheet. Colouring is a great tool for anxiety relief. I had made and distributed it last year, amongst other designs, for free download, so individuals or groups, adults and kids, could have some fun relaxation. Colouring is also a form of practicable mindfulness. The central words plus the cocoon patterns are a suggestion to reach within, rather than search for distractions outside, in a time when everyone across the world had to sit and face oneself



« The cyborg is a creature in a post-gender world; it has no truck with bisexuality, pre-oedipal symbiosis, unalienated labour, or other seductions to organic wholeness through a final appropriation of all the powers of the parts into a higher unity. »

Donna Haraway (Cyborg Manifesto)

# An ‘ART’ Revolution: Procreation and Kinship in a Gestational Care Facility in the Netherlands

*Alita Reznik Teeuwe & Oshin Siao Bhatt*

In January 2020, my colleague and I published the first paper based on our ongoing ethnographic study in the second largest Gestational Care Facility (GCF) in Europe. In it, we highlighted the rapid development and steady normalisation of technologies like Extracorporeal Wombs and Assisted Parthenogenesis, alongside the simultaneous rise in clinical spaces such as Gestational Care Facilities. We also sought to capture the monumental shift in the conception of procreation and assisted reproduction that has occurred across the world, in the last decade.

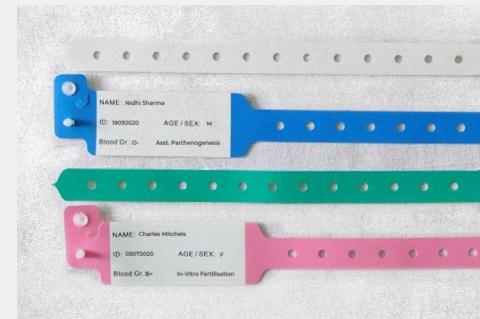
While the ongoing ethico-moral debates around the use of these technologies have prevented their advancement in a large part of the world, a number of countries have not only embraced them towards servicing their own citizens but also become reproductive hubs for prospective parents from across the world. The Netherlands, where the first Extracorporeal Womb was developed at the Eindhoven University of Technology in 2001, is one such country that welcomes hundreds of ‘medical tourists’ each year. In this paper, we look at the GCF based in Groningen in the Netherlands.

Since the birth of the first ‘biobag baby’ more than a decade ago, the scope of the “hope technologies” (Franklin, 1997) offered by facilities such as the one in Groningen has increased manifold. Despite the ongoing debates around the ethical implications of what critics have termed ‘baby farms’, the ‘promissory’ (Thompson, 2005) role played by GCFs for thousands of prospective parents is undeniable. By presenting the case studies of some of the prospective parents we met in the course of our research, we hope to touch upon themes like reproductive tourism, biomedical ethics, stratified reproduction, the symbolism of blood ties, and the imagination of relatedness created around future progeny.

When we first met Joanna she had just undergone an oocyte extraction procedure and was awaiting results of an ongoing parthenogenetic activation. Talking about the ‘unconventional’ mode of conception and childbirth she had chosen, she said, “Everyone always says ‘when it’s your own child, the maternal instinct kicks in the minute you hold them’. Well for me I think it kicked in as soon as they took out the first egg that could eventually become my baby”.

The zygote Rekha and Arun Kumar chose not only had the highest chances of surviving the development process but were also male and presented genes for tallness and high metabolism. “The great thing about the extracorporeal birthing process,” according to Rekha, “is that you get to start raising your child even before birth. Everything we do is for his future.”

Ana and Abbas Mahmoudi ended up in Groningen’s GCF owing to their inability to access assisted reproduction in their home country of France, due to their religious identity. The concept of Laicite, which prevented Ana from requesting specific conditions of treatment - a female Muslim doctor, privacy for her developing embryo to enable seamless visitations - based on her religious preferences, implied that the couple would either have to compromise on their religious beliefs or choose to forgive an ECB.



# Living longer by 2035

## Lina Jiménez, Lina Antolinez & Cristian Montes

Homes in Latin America have adapted places where people can monitor their health day by day, in addition to curing themselves of simple pathologies since they have the necessary implements and devices to do so.

People are going to be the times of «doctors» because their house and tools allow it. They will only see the need to attend a hospital when an organ is failing or has an emergency or complex procedure. Faced with these failures, people will be able to choose their organs from a catalog of 3D printed models in order to live longer.

Doctors graduate with a specialty in engineering and biotechnologies because their scope is expanding. Your job now that people can take care of themselves, is to be present at more important moments such as a transplant or emergency operation.

The new way to fight against diseases is by replacing the organs they affect (as it is more economically viable). Everyone can now print organs in 3D. This changes the status QUO of pharmaceutical companies not to produce drugs to cure diseases but to support the generation and free exchange of organs throughout society.

Although the long waiting lists for a heart or a kidney, are replaced by communities in which the free impression of what is needed is managed; For many, getting the procedure to insert it into their body involves planning ahead, saving, or getting a BIOcredit or specialized financial products with benefits that pay for trying to live a little longer and better.



Live longer and heal your body by printing it.



# Sin pasaporte de salud vas al tenebroso reverso del sistema

## Sandra Vivar Maestre & Sonia Villanueva

«Hoy no me puedo levantar»  
Diario de un día cualquiera

7 de la mañana, 10 de mayo de 2031, buenos días tenga usted, le digo al aire y a Ramón, y pienso que soy mi reino por un lugar sin conexión. Claro que eso ya no existe, o sí, pero no soy tan rica. Bien, pues arriba, que hoy es día laborable, café, ejercicio, ducha y 4 horas por delante!  
...

Son las 12 pm, me recita con su voz ni metálica ni humana RAM. Ramón. Le puse nombre para ser consciente de que no soy yo, para no sustituirlo por mi conciencia o confundirlo con mi alter ego aunque me hable. Por mucho que sepa cómo duermo, siga mis constantes y mi agenda como un parche, un perro escuálido o, en fin, como lo es, un complejo sistema de cuidado y control cuya interfaz muestra mis Key Health Performance a quien interese desde cualquier superficie. En mi caso casi siempre desde un dispositivo móvil más bien cascado.

Pero es mi salvoconducto, el pasaporte digital que me acredita como ejemplar sana y que te abre las puertas del empleo, vivienda y transporte. «Es mediodía y ya me sobra la otra mitad» pienso en la canción de ese grupo de antes de la Gran Sequía, el Columpio Asesino. Es decir, que me toca control sanitario. Por lo menos tengo que salir de casa, eso de que las nuevas fábricas del proletariado digital sea la casa de una me está convirtiendo en un felpudo.

Al entrar en el espacio común de los

bajos del edificio consulto el acta de la última reunión vecinal de acuerdos y calendario de chequeos (regla #1: Comprobar las cosas cuando son de autogestión vecinal).

Estoy en el centro vecinal para mi chequeo médico. Y siempre me pasa igual, me da una pereza enorme llegar y presentarme, es una especie de pudor por todos esos datos míos que van a aparecer en todas las bases de datos del planeta. Pero al llegar todo cambia, porque este es un espacio de cuidados para la comunidad donde todo transcurre sin fricción. Seamless. ¿Demasiado seamless? A veces un poco de fricción vendría bien. Porque ya no tengo esa sensación de tener que cumplir con un trámite para cualquier cosa, el crucero a la Luna, un concierto, el préstamo para el crucero a la Luna. Pero es cierto que el boom de los servicios de salud y bienestar y su universalización desde la Gran Sequía han derivado en estos espacios gobernados por personas (y por algoritmos). No puedo negar su eficacia, su conveniencia, su darlo por hecho y su irresistible atractivo, su adiposo bienestar. Todos los resultados en Ramón, es decir, en todas partes. Puedo ver los de mi madre y pienso que saber que está bien atendida no tiene precio.

Todo en orden, pasaporte sanitario actualizado, jornada de trabajo finalizada... a comer!  
Voy a probar un tugurio nuevo, está en

los bajos del parking Mikhail Gorbachev, buen acceso y libre de la lluvia ácida. Dicen que los dim sum de carne de sabor cochinita pibil son galácticos. ¿Cómo serían los de carne de verdad? Cuando la gente cultivaba vacas y cerdos para luego cuartearlos y zampárselos. No me extraña que estuviésemos a borde del colapso. Con la sobre-explotación del planeta, la inestabilidad política y los desastres climáticos, nos libraremos por los pelos. Y quedan cicatrices, no hay más que ver los mapas de renta y acceso a robots de salud.

En el garito me encuentro con los sospechosos habituales y mi particular club de lechuguinos, versión actual de Wodehouse.

- ¿Qué te cuentas? Me dice Rea, su cresta roja y túnica naranja, atuendo del género bissu de los bugis, es decir, ni masculino ni femenino, sino la totalidad.

Veo que están tomando agua de seltz, opción sin duda razonable a pesar de su sabor a rayos dada la cantidad de proteínas y minerales que contiene y dadas sobre todo las restricciones sobre productos procedentes de las reservas naturales. Es decir, sobre el alcohol destilado de productos vivos.

- Pues me acabo de hacer el chequeo médico para el crucero a la Luna, comento, así que veo ante mí la gran autopista intergaláctica hacia la felicidad, algoritmo mediante.

- ¿No te preocupa que te vayan a monitorear y que se sepa siempre dónde estás y sobre todo con quién?, me lanza Bruce -lo de lanzar es literal, con sus nuevos implantes oculares tiene mirada de halcón. Que razón no le falta, pero qué ganas de fastidiar.

- Lo mismo que si me hago un viaje con implantes corticales, querida. Por lo menos esto es de verdad.

E inmediatamente me siento lerda por usar aquello de «de verdad». Es que no le he puesto ni un poco de ironía. Pero pasado un momento la tarde termina escurriendo, con las bromas justas, las conversaciones que buscan consensos, la dosis adecuada de diversidad. Pero ahí ha quedado ese poso incómodo, una ligera frustración, la insatisfacción por la pérdida de vigencia de una cosa tan violentamente simple como «la verdad».

Qué poco podía yo, en aquel momento de compadreo, dejando pasar el tiempo en algo lejanamente parecido al aburrimiento, juntos en una tasa con aspecto propio cuando el mundo ya no es propio sino específicamente delimitado, estando todo tan medido y organizado y publicado en el BOE, imaginar que ese viaje a la Luna rompería mi mundo pacífico del post-empleo y me lanzaría a las redes de la mafia de los Órganos Vitales Robados (hay gente para todo, teniendo en cuenta que por mucho glamour que tenga un hígado auténtico el índice de rechazos y complicaciones es demencial comparado con los biobots).

Sin mi pasaporte de salud el desorden me esperaba. Una secuencia de sucesos, errores de datos y la aparición de la resistencia neo-hippie estaban a punto de succionarme al tenebroso reverso del sistema.

# Southern narratives of the Future Hospital - Material from a research proposal in development 2021

## Ralph Borland

This is a research proposal to develop new ways of engaging with inhabitants of the #futurehospital - from doctors and nurses, to administrators, cleaners, security guards and patients - on the future of healthcare, with a focus on Artificial Intelligence and automation. I will be using a range of creative, participative methods to both inquire into, and to share information about, emerging technologies in healthcare.

These methods will be drawn from Ethnography, Futures Studies, and Interventionist Art. Research lenses and reference points will include Science and Technology Studies, Global Narratives of AI, and Science Fiction (particularly Southern and feminist scifi). I will use objects too as entry points - Object Studies being another interdisciplinary area of research with links to STS. 'Deep hanging out' and 'wandering around' will also be employed ;)

The focus will be on hospitals in Africa, with the inclusion of other Southern locations such as Brazil, and a European hospital. The intention is to develop a constellation of sites and studies, and to develop the project iteratively across locations, learning as we go. The hospital as multiple

will be a key informing idea.

The intention of the project is to be activist as well as to conduct research - an approach that we can relate to Action Research and Critical Theory. The research is to better understand how hospital workers and patients understand the impact of emerging technologies, especially AI, on their locations. The activism is to facilitate people's engagement with the development of technology - trajectories of technological development - in response to the way most people are generally left out of technology choice.

This intention to facilitate the democratisation of technology could be framed as an ethical standpoint, to advocate for people's greater role in being informed of, understanding, and choosing ways of engaging with (or rejecting) new technologies in hospitals and healthcare: an 'ethics of care'. The project will develop a tool-kit for engaging with participants, but is wary of advocating for set 'methodologies' as such, having a Southern suspicion for prescription: I would like to share experiences, and what I learn, with others, and offer what I can to guide future work in this domain.



*Example of fictional material to be used in the workshops.*

*Images from the Mexican science-fiction movie 'Sleep Dealer' (2008) which plays on the future of automated work in a Southern setting, and technology for oppression and resistance.*

*Rivera, A. (Director). 2008. Sleep Dealer (Film) Likely Story, This is That Productions*



# A Finite Game of Health, Life, and Death

## Paricha Duangtaweesub

Traditionally, healthcare can be thought of as an infinite game, a term coined by James P. Carse, to describe a game that is played with the goal of continuing to play, indefinitely. The dominant approach in modern - which is to say Western - healthcare is curative and posits treatment options to every patient with all kinds of disease so that they can continue to live. There is a (generally accurate) assumption in this picture that everyone who walks into a hospital outpatient wing or comes in through the emergency room would like to leave the hospital functioning and healthy.

We stand at a dilemma, I think, one that COVID-19 has given spotlight to. It is an understatement to say that the pandemic gave us all a shared experience in coming to terms with death. For the first time in my relatively short life, I had to think about the fragility of life. How does one reconcile the fact that life is finite while healthcare is prescribed as an infinite approach to living?

End-of-life care, though not widespread legally, culturally, or in practice, is an antidote to this infinite mindset to our maintaining our health. Practices like palliative care, assisted dying, or use of living wills, represent finite approaches to the game of life, where the goal is to “end well”. These approaches that op-

timize for quality of life (as opposed to prolonging living) for the terminally-ill are commonly practiced in only a few countries around the world. Physician-assisted dying is rarer still and faces many legal challenges, plausibly because we are challenging the status quo of “doing no harm” and the infinite nature of healthcare.

As a design researcher, I've worked on a curious string of end-of-life projects in Bangkok, Thailand that made me question the markers of good health. In the first, I spent time observing and interviewing elderly caregivers in their homes on the day-to-day rhythms of caring for their family members, mostly parents, who have advanced dementia or are bed-ridden. I heard stories about how they managed their own stresses and how, through giving care, the perspective on their own end-of-life changed towards a finitude. In the second, I was looking to understand living wills; documents that individuals can use to essentially design how they would be treated in case of emergencies or upon discovery of terminal illnesses - and thus determining their own endgame. In the third, I was listening to middle-aged professionals who organized funerals for their parents, hoping to find ways of making that final goodbye less troublesome and more meaningful for the grieving families and their friends.

The projects led me to believe that death is a reckoning, the final variable in the equation of health. Good health = good life x good death. Living a good life doesn't just refer to when we're strong, happy and surrounded by loved ones, but also during those last few breaths on our deathbed. Of all the things I heard, it is difficult to argue against the universal truths about what we all want at the end: to pass away peacefully and to leave few burdens to the people around us.

Let's redefine the notion of good health by starting, quite literally, with the end in mind.

Good health should include a progress bar. To remind us every day that we're counting up the goods we do and counting down the time we have to enjoy ourselves. We could make a living bucket list the way we write our meeting agendas, never-ending and always more to be done. We could imagine a leaderboard that tracks the soul-enriching activities you do alongside the fresh foods you eat, not unlike the algorithm in the Good Place that shows how “good” people are based on what they did in life, or high score rankings on arcade games. These should set us up to appreciate that to end well is to have lived well.

Good health should be a community experience. Let's frame health around the quality of relationships with a no-regrets attitude. Doctors in the future could prescribe check-in with friends during a pandemic, with a complimentary Zoom link and chardonnay. You could revisit that bucket list of yours and invite people on your adventures, rain or shine. We could ask for dual physical check-ups, so that you can bring a loved one to or pair up with a stranger. These should comfort us that dying may be certain, but life is rarely a solo journey.

At the end of the day, we can rethink healthy living as living in the moment, always cognizant of the finitude of the game of life, but aware of the infinite number of options you can play before the end.

# Bone Flute

## Ralph Borland

---

This is a project to make a flute from the thigh-bone of the artist. A medical scanner is used to make a 3D model of the femur, and a computer-controlled cutter to sculpt a wooden copy. An instrument-maker carves a flute from it, on which the artist plays a tune: the song of his own demise.

### Concept

Images of skeletons playing their own bones as instruments occur in the western history of art as memento mori - reminders of the inevitability of death. They can also indicate festivity in the face of death, a reminder to enjoy life - the carnival as seen on The Day of the Dead in Mexico. The medieval Danse Macabre combines festivity and fear. The 1920s movie Metropolis shows a skeleton playing a femur flute, and early Disney cartoons show skeletons playing a range of instruments made from bones. While exploring attitudes to mortality, the project will investigate new tools and technologies for healthcare and medicine, through creative collaboration which connects doctors, technologists, musicians and artists.

### Background

Examples of flutes and whistles made from human bone have been found in

a variety of places, from the Americas to Europe, and from different periods of time. Some were made from the bones of enemies, to hold power over them, and some from the bones of loved ones, to hold them close to the living. Buddhist monks in Tibet make kangling, femur flutes, from the bones of felons, and of the holy. Flutes made from animal bones are the earliest known musical instruments, dating to between 35,000 and 43,000 years ago.

Experts say, besides serving recreation and religious purposes, ritual music might have helped to maintain larger social networks, a competitive advantage over the Neanderthals.  
[https://en.wikipedia.org/wiki/Paleolithic\\_flutes](https://en.wikipedia.org/wiki/Paleolithic_flutes)

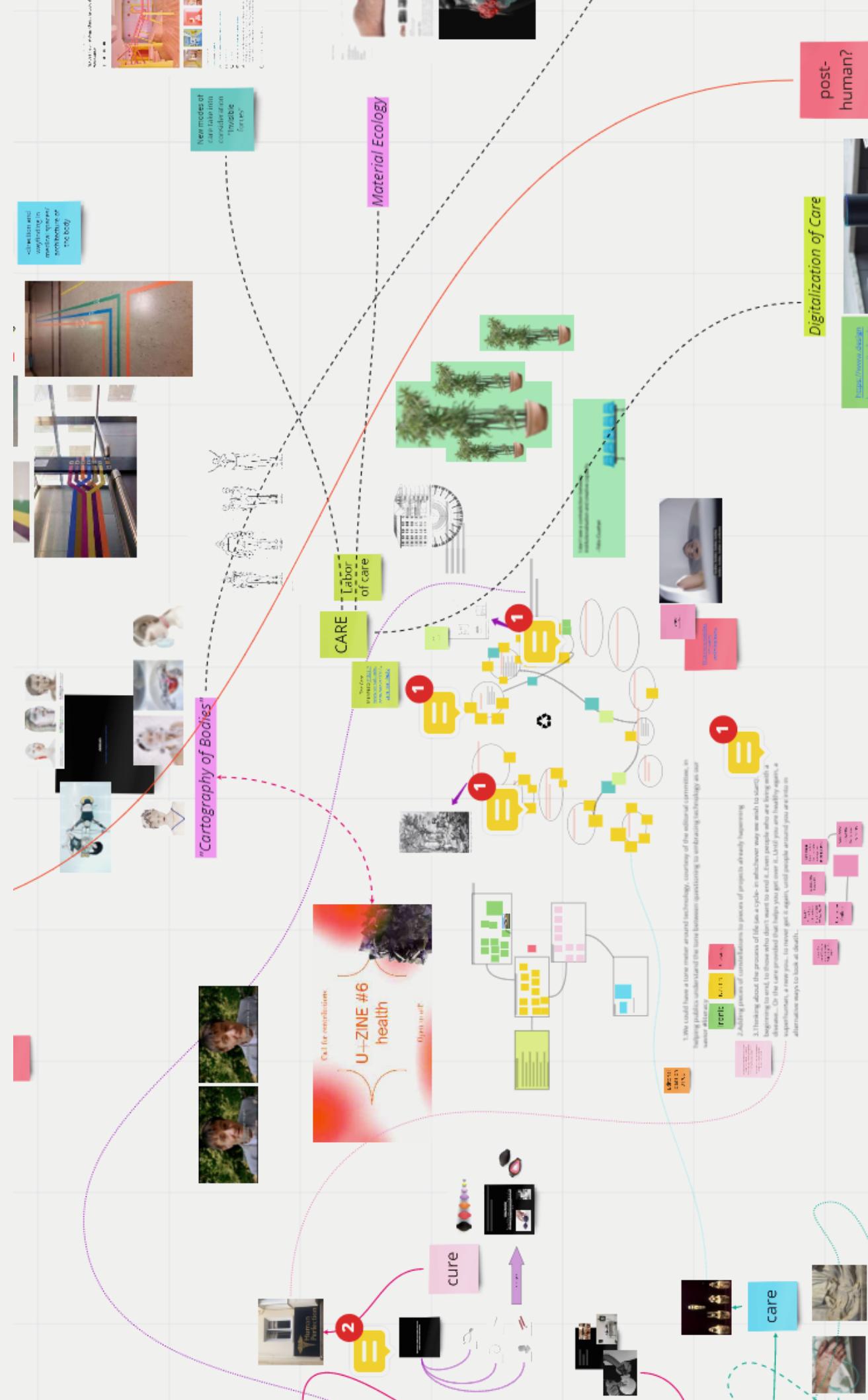
### Process

The artist Ralph Borland, as a researcher into the medical uses of emerging technologies at the University of Cape Town, met an orthopaedic surgeon pioneering the use of scanning and 3D-printing of patients' joints to assist surgeons in preparing for complex operations. They intend to collaborate on the production of a femur in an indigenous wood (another site for symbolic communication). A local ethnomusicologist will carve the flute, and Ralph will learn to play a tune on it, as a performance piece.



Participate and add  
to the Miro mind map!

During this process we layed out references we felt could “push forward” the reflections discussed in the publication. Here are a few of them. You can find all of them [here](#) and add your recommendations to them.



*Phoebe Eustance*, Queering the Waiting Room,  
 @phoebeus.tance & www.phoebeeustance.com

*Pleun Van Dijk*, Reborn, @p\_l\_e\_u\_n

*Mario Mimoso*, After Life, @mariomimoso

*Molly Bonnell*, The Ritual of Prescription,  
 @molly\_bonnell

*Tom Bieling*, Parahuman Health,  
 www.tombieling.com

*Adriana Hernandez & Marcela Machuca*,  
 FaveSana: Self-managed health platform for  
 favelas, www.insensatez.org & linkedin.com/  
 in/adrihg03/&https://egade-business-school.  
 teachable.com/p/diseno-de-futuros

*Camila Andino*, Design diseases, Disease  
 designs, @camiandinod

*Serina Tarkhanian*, Co-Healing,  
 www.serinatarkhanian.com

*Adwaita Dias*, Going Inwards & Epic love Story,  
 @adwaita.das

*Alita Reznik Teeuwe & Oshin Siao Bhatt*,

An ‘ART’ Revolution: Procreation and Kinship in  
 a Gestational Care Facility in the Netherlands,  
 @oshinsiaobhatt

*Lina Jiménez & Lina Antolinez & Cristian Montes*,  
 Living longer by 2035, www.linkedin.com/in/  
 linapjimenezo & https://egade-business-school.  
 teachable.com/p/diseno-de-futuros

*Sandra Vivar Maestre & Sonia Villanueva*,  
 Sin pasaporte de salud vas al tenebroso  
 reverso del sistema, @sandraMind &  
 @sonianoneka & https://egade-business-  
 school.teachable.com/p/diseno-de-futuros

*Ralph Borland*, Southern narratives of  
 the Future Hospital - Material from a  
 research proposal in development 2021,  
 objectsindevelopment.net

*Paricha Duangtaweesub*, A Finite Game of  
 Health, Life, and Death, paricha-duang.com

*Ralph Borland*, Bone Flute, studio.ralphborland.  
 net/bone-flute

This publication is licensed under a  
Creative Commons Attribution 4.0  
International License.

Images you see in here are the ones  
we received from the artist's to  
represent their project. They are not  
free of use. they might be, but you  
need to ask if you can use them.



Plurality University Network

u+

Réseau Université de la Pluralité