Report from the EU H2020 Research and Innovation Project Artsformation: Mobilising the Arts for an Inclusive Digital Transformation

Culturalisation Workshops

Mariana Peréz Bobadilla, Zoénie Liwen Deng, Floortje Vermeer, Maitreyi Maheshwari, Lesley Taker, Nora O Murchú, and Lucas Matray





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¹Waag

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³ transmediale festival

D6.1: Report on Culturalisation Workshops

WP6: Arts-Based Methods and Productions Tackling the Digital Transformation

WP Leader: Stichting Waag Society

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1. Executive Summary

The Culturalisation Workshops presented in this document, build on the exhibitions and events produced to launch Artsformation. Their aim is to expand the areas of critical enquiry established at the launch, with a focus on refining key questions for future productions through an engagement of artists and a broader creative community, institutional and civil society stakeholders and audiences.

Each of the partners -Waag, transmediale and FACT- developed programmes bespoke to their contexts: workshops and discussions that were part of the festival of Expedition: Future at Waag, transmediale's summer camp and Framework for Trust at FACT. These individual programmes coalesced for the Transformer Summit, which offered a shared day of discussions and provocations themed around questions of Control, Refusal, Trust and Care. These four concepts have emerged to form the backbone of the work package partners' approach to examining the central thematics of Artsformation and the role of digital technologies in perpetuating *cultures of surveillance* (Control), *a crisis in democracy* (Refusal) and *new ways of working* (founded through a rebuilding of Trust and a prioritisation of Care).

2. Introduction

The Culturalisation Workshops build on the exhibitions and events produced to launch Artsformation. Their aim is to expand discussion on the areas of critical enquiry established at the launch, with a focus on refining key questions for future productions through an engagement of artists and a broader creative community, institutional and civil society stakeholders and audiences.

Within this framework, Waag has curated workshops and discussions in the Transformer Summit about how to regain agency to act in the context of control and surveillance mediated by digital technologies. The summit included contributions from FACT and artistic interventions from transmediale. A different format for workshops was the summer camp developed by transmediale, which focused on the theme of the launch exhibition: refusal, explored as a possibility. FACT launched the *Framework for Trust*, including events and a collection of resources that explore the ways artistic practises overlap and collide in relation to trust in both the digital space and in the featured artworks.

Four concepts have emerged to form the backbone of the work package partners' approach to examining the central thematics of Artsformation and the role of digital technologies in perpetuating cultures of surveillance (Control), a crisis in democracy (Refusal) and new ways of working (founded through a rebuilding of Trust and a prioritisation of Care). This deliverable details the programming, the contents of the event related to our four core concepts that these programmes covered, as well as the findings from these events. It ends with the plan for the next steps in relation to arts-based productions.

2.1. Transformer Summit

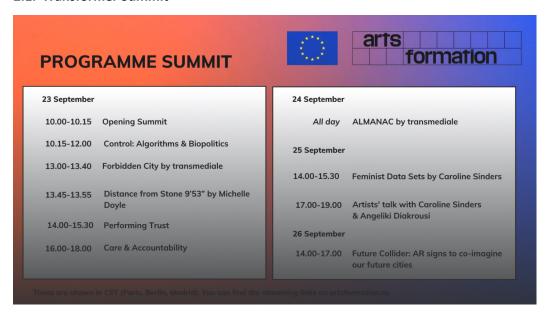


Figure 1: Transformer summit schedule

Waag, FACT, and transmediale presented the Transformer Summit: an international series of online conversations, interventions and in-real-life workshops that looked at how art can explore the social, cultural, economic, and political benefits of digital transformation.

Between 23-26 September, the Transformer Summit explored how we can use art and technology to investigate control and surveillance, refuse previous systems of power, build trust and act with care and accountability, develop intersectional, inclusive, and ethical practices of Artificial Intelligence (AI), and imagine a more inclusive and equitable future with digital technology. It consisted of Transformer Sessions--online panels with interventions, and workshops and discussions in Waag.



Figure 2: Poster of Caroline Sinder's Feminist Dataset Workshop

Transformer Sessions were the panel discussions curated by Waag and FACT, with an intervention from transmediale. They addressed our four themes: Control, Refusal, Trust, and Care. They were followed by workshops and discussions curated and organised by Waag that engaged with citizens to critically investigate the possibilities of making the digital transformation more inclusive and fair via artistic practices: the Feminist Data Set Workshop by Caroline Sinders, Artists's talk and discussion of Caroline Sinders and Angeliki Diakrousi on independent platforms and feminist strategies, and a workshop by Tomo Kihara: Future Collider: co-creation workshop using Augmented Reality (AR) signs to co-imagine more inclusive future cities.

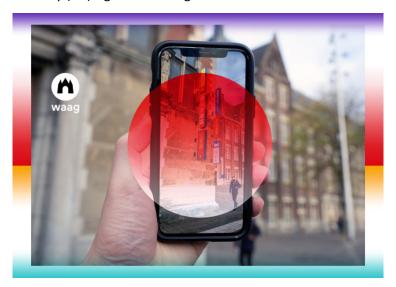


Figure 3: Poster of Tomo Kihara's Future Collider workshop

2.2. Summer camp by transmediale

The transmediale summer camp was a four-day programme that took place between July 6 - 10, 2021 outside Berlin. The summer camp brought together a group of Berlin-based artists, philosophers, theorists, technologists, and critical engineers whose practice intersects with the festival theme of refusal.



Figure 4: transmediale summer camp - Workshop: "Foraging" with The Mycological Twist Photo: Jacopo Falsetta, CC NC-SA 4.0

As an act carrying both risk and promise, refusal suggests political and social imaginaries that articulate new collective and careful ways of living and being otherwise. In the transmediale summer camp, refusal is seen as a possibility: a channel of meaningful exchanges and development that focus on concrete actions, methods and examples, all of them forged through the axioms of hope, solidarity, repair and care.

Through diverse formats, the participants approached topics such as network topologies, blockchains and organizational design, DAO's, the legislation of Nature, non-human hierarchies, strategies of resistance and refusal, post-colonial cosmologies and networks.

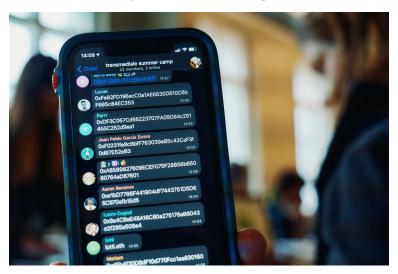


Figure 5: transmediale summer camp - Workshop: "Web3" with Kei Kreutler Photo: Jacopo Falsetta, CC NC-SA 4.0

The participants were Ahmed Isam Aldin, Aaron Benanav, The Mycological Twist (Eloïse Bonneviot & Anne de Boer), Xenia Chiaramonte, Laura Cugusi, Constant Dullaart, Sarah Grant, Parrr Geng, Kei Kreutler, Laura Lotti, Mariam Mekiwi, Bassem Saad, Juan Pablo Garcia Sossa, TRAKAL and Danja Vasiliev. You can find a short biography of all participants in the appendix.



Figure 6: transmediale summer camp - Screening & discussion: "Before I Forget", with Mariam Mekiwi Photo: Jacopo Falsetta, CC NC-SA 4.0

2.3. Framework for Trust

During 2020 and 2021, FACT has been working with artists to think about how they make artworks and build artistic programmes. These collaborations developed a series of conversations, interventions and resources called Framework for.... These focus on the topics urgent to FACT's current and future research, and to those with whom they are working.

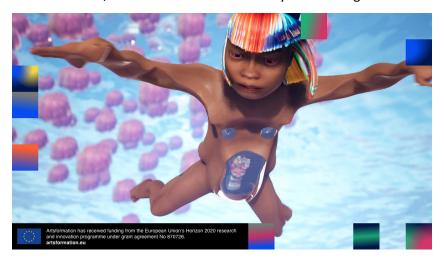


Figure 7: Three Generations in One fleshy Body by Ebun Sodipo and Keiken, one of the artworks in Framework For Trust.

This specific Framework For Trust online resource thinks about TRUST: how FACT's artists-in-residence think about it, and the relationship it has to the work they are doing. They have all developed works whilst in residence at FACT, but Framework for Trust sits outside of those commissions. Their interventions were free to examine the processes of art making within a residency, and the way their practices overlap and collide: especially around the topic of trust in both digital space and artworks.



Figure 8: Meditation For A Falling Whale by Yambe Tam, one of the artists contributing to Framework For Trust.

The six artistic resources, developed collaboratively by 11 of FACT's 2020/21 resident creatives, including artists, activists and curators, range from podcasts to online discussions and film works and can be accessed here:

https://www.fact.co.uk/framework-for-trust



Figure 9: Rain Paradox by Angela YT Chan, one of the artists contributing to Framework For Trust.

3. Context

3.1. For the transformer summit

In contemporary societies, our bodies are quantified, digitised, categorised, and mined as data, which is based on the commercial or political demands of those in power—think about the social media companies that constantly sell your data to advertisers, the digital billboards and surveil-lance cameras that track you and genealogy databases tracing suspects. In this scenario, our bodies are in a passive position, and we don't really have privacy. But can we take active actions to hack and change the power dynamics in the matrix of algorithms and biopolitics? How can we gain agency to act via digital technologies as empowered bodies rather than passive bodies that are managed and exploited from above?

In this summit, through public workshops and discussions, we explored ways of thinking and acting actively on these matters of concern. The discussion tackled how one can learn from artistic practices in order to understand what it takes to demand participation in the decision-making and about which of those technologies we accept and use or what one can do to refuse, regain trust, and function with care and accountability. Therefore, the four themes of the summit are: Control, Refusal, Trust and Care.

The Transformer Summit is part of Artsformation and part of Waag's festival of Expedition:Future. Artsformation is a research project exploring the intersection between arts, society and technology that aims to understand, analyse, and promote the ways in which the Arts can rein-

force the social, cultural, economic, and political benefits of digital transformation. Artsformation investigates the potential of the Arts to intervene in critical social issues, with a view to remedying a range of abusive and exploitative aspects of digital technologies, such as labour politics, privacy and education.

Waag's Festival in the Future is the result of this year's first expedition of Waag as Future Lab Design & Technology. The first expedition included a number of walks during which many citizens were invited to contemplate their vision of the future. Walks lead participants along data centres, over collectively owned farmlands, along the country's permeable borders and the greatest wilderness of our North Sea shoreline. Citizens, artists, designers, policymakers and many more joined us to contemplate societal and ecological issues found in these contexts.

3.2. For transmediale's summer camp

Transmediale's summer camp brought together 16 Berlin-based artists, philosophers, theorists, technologists, critical engineers to form this study circle of refusal. The selected participants proposed activities to work with fellow campers, stemming from their own on-going projects and practices. These activities were to respond to or extend from specific issues being raised on the transmediale online platfom *Almanac for refusal*, such as deconstruction of growth myths, post-scarcity, the future of labour and automation of work, debt, abolition, misinformation and state accountability, failures and smartness in smart technology, indigenous knowledge and Al, digital and creative civil disobedience, queer and trans-ecologies, etc.

The transmediale summer camp focused on the embodied collective empowerment among a community of selected participants, sharing concerns, ideas, skills, knowledge, critiques, and more importantly, engagement and care for each other in a relaxed, experimental setting. The camp addressed socioeconomic, ecological, geopolitical, artistic and speculative modes of refusal, with an emphasis on the capacity of hope and regeneration for a post-pandemic and post-scarcity society. The flexible and adaptive structure of the programme encouraged discursive (mis)alignments and unexpected encounters among the participants.

3.3. For FACT's Framework for Trust

FACT's Framework for Trust was the second in its series of 'Framework for...' programmes which began in February 2021 with Framework for Resilience. The series focuses on the topics urgent to FACT's current and future research, as well as offering a space to examine institutional practice with artists, curators, critical thinkers, activists and other stakeholders FACT is working with. Framework for Trust emerged from new processes of working with artists and participants that developed during 2020 and 2021, necessitated by the Covid-19 pandemic. It responds to the shift to largely online working, and the need to create and share artworks, and build artist programmes through different means.

Framework for Trust invited artists from across all aspects of FACT's programme - Learning and Exhibitions, who had been involved in residencies to consider their relationship to TRUST, how it is built, exchanged and performed in their practises, especially as they increasingly work

within digital spaces. 11 artists and curators were invited to collaborate with each other or invited artists and curators to develop a series of conversations, interventions and resources supplementing the core of their work developed during their residencies. The interventions examine the processes of art making within a residency, the possibilities opened up by spaces of collaboration within their practises and trust as both a thematic undercurrent within their artworks and as a necessary condition for how they work.

The collaborations resulted in six new resources in the form of meditations, performances, podcasts or videos shared online with audiences from 20 September onwards, in anticipation of the Transformer Summit shared day of events that week.

4. Programmes and Themes

4.1. Programme

Transformer Summit

Time	Description
10:00- 12:00 CET (9 am for UK) https://vimeo.com/604765239	In the control systems run by algorithms, how to know what are the criteria, rules, and biases that the control is based on? How to make this lack of transparency and thus legitimacy of the control systems visible or audible? How can the use of data shift from surveillance, control, and manipulation, into knowledge production? What and who is not represented in datasets?
	This panel looked into the technological mediation of the control of the bodies, the temporalities and politics of digital culture and algorithmic governance.
	If the biopower that regulates the population today is based on data-crunching algorithms that enable prediction-ori- ented regimes, how do we live in and resist this algorithmic regime?
	Speakers: - Evelyn Wan - Caroline Sinders - Andrius Arutiunian Moderated by Lucas Evers and Maro Pebo (biographies in appendix)

Refusal: In-between interventions from transmediale (23/09/2021)

Time

Description

Glacier Kwong, Joel Kwong, Ellen Pau

13:00-13:40

Forbidden City

https://vimeo.com/612517312

37'23"

Since 2019, pro-democratic protests of an unprecedented scale have taken place in Hong Kong. Provoked by the aggressive clampdown on Hong Kong's freedom by the Chinese government and the proposal of an extradition bill violating legislative procedures and breaching the Sino-British joint declaration, the movement has held numerous demonstrations and committed self-organised acts of civil disobedience. In this talk, Ellen Pau, Joel Kwong, and Glacier Kwong re-flect on their experiences of the protests, identifying the tactics of surveillance deployed by the government and how protestors and citizens circumvent censorship with creative strategies of refusal. They explore everyday strategies for civic disobedience and refusal; looking at the use of digital technology for collective organising and the development of community economies with businesses supportive of the movement's aims. These strategies protect protestors from detection and help to sustain the collective demands of the movement.

13:45-:13-55

Michelle Doyle

Distance from Stone

9'53"

Three burning castles are depicted on the crest of Dublin City, representing the watch towers outside the old city walls. Beneath the crest, the Latin motto chosen for the city – by the English colonial powers – reads "Obedientia Civium Urbis Felicitas", or "the obedience of the citizens produces a happy city." In Distance from Stone, Doyle comments on Dublin City Council's contemporary ambitions to develop the 'smartness' of the City, and reflects on the impact that both the heritage industry and the cultural resonance of stone have had on Dublin. Taking pebble dashing as a symbolic worship of stone and aspiration, the film negotiates how the city conditions citizens into obedience. Her trope of the Visitor Centre Informational video connects the touristification of the prehistoric monuments in Ireland, such as Newgrange, to the privatisation of the cities resources and calls into question the unfolding realities of civic life in Dublin.

Session 2: Performing Trust (FACT) (23/09/2021)

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Description

14:00- 15:30 CET (1pm for UK) Live Streamed, available after as a podcast.

https://vimeo.com/612589849

A core question for FACT, from our work with artists and participants, has been around the idea of trust. How is trust built and exchanged in digital spaces? In his role as artist-in-residence on FACT's Board of Trustees, Jack Tan explores how trust exists as representation and as performance, asking how it is enacted between staff, trustees, funders and audiences?

For this online event, Jack has invited Rachel Higham, Chair of FACT's Board of Trustees, to discuss how we build, maintain and explore trust through organisational work and policy-making. Also joining the conversation will be Jane Wentworth, bringing her extensive experience working within cultural institutions to refine their brand and embody their values.

Performing Trust is part of *Framework for Trust*, a week of events and collection of resources created by artists-in-residence at FACT around the topic of trust.

Speakers:

- <u>Jack Tan</u> FACT's Board of Trustees Artist-in-Residence
- Rachel Higham Chief Information Officer, WPP / Chair of FACT Board of Trustees
- <u>Jane Wentworth</u> Founder and Director of Jane Wentworth Associates

Moderated by Maitreyi Maheshwari, Head of Programme at FACT

Event Link

https://www.fact.co.uk/event/performing-trust

Session 3: Care and Accountability (Waag) (23/09/2021)

Time

Description

16:00-18:00

CET (15:00 UK)

https://vimeo.com/612661578

After control, refusal, and trust, session three presented the idea of care and accountability as alternatives to approach the effects of digital transformation on individuals and groups within society. This session combined the presentation of artistic practices that deal with care in their participatory and inclusive approaches as forms of resistance.

The discussions critically examined the coded systems and power dynamics to explore ways of thinking and acting actively on other forms of approaching the matrix of algorithms and biopolitics.
Speakers:
- Taeyoon Choi
- Salvatore Iaconesi and Oriana Persico
- Aris Papadopoulos
Moderated by Lucas Evers and Maro Pebo

Feminist Data Sets workshop and panel, Waag

Time	Description
Saturday 25th September 2021 14:00-15:30	On Saturday, Waag hosted a workshop with Caroline Sinders thinking the possibilities of critical algorithms, particulary feminist datasets, followed by a panel on bias in AI, the materiality of its writing by often underpaid labor and alternatives to these realities.
	Feminist Data Set is a multi-year project that interrogates every step of the AI process that includes data collection, data labeling, data training, selecting an algorithm to use, the algorithmic model, and then designing how the model is then placed into a chat bot (and what the chatbot looks like). Every step exists to question and analyze the pipeline of creating using machine learning—is each step feminist, is it intersectional, does each step have bias and how can that bias be removed?
	Artists' talk and conversations With Caroline Sinders and Angeliki Diakrousi Moderated by Maro Pebo Waag
17:00-19:00	Caroline Sinders was in conversation with Angeliki Diakrousi to discuss common issues regarding bias in AI, and compare artistic strategies critically addressing them, as well as the creative proposals that their work from different angles offer as an alternative. https://vimeo.com/612661578

 $\label{thm:collider: workshop using AR signs to co-imagine our future cities. \\$

By Tomo Kihara

Waag

Time	Description
14:00-17:00	In this workshop, participants were invited to co-create the future of Amsterdam by using an augmented reality app that superimposes signages representing stores and public signs that might exist in the near future.
	It's hard to imagine a world we don't yet live in. Before the global pandemic, most of us probably could not have imagined a future where there were signs in the city asking people to wear masks and keep social distance. Signages in the city capture our desires through billboard advertisements and represent our societal restrictions through warning signs.
	In the Future Collider workshop we used signage as a medium to connect us with our city's past, present and future. By deploying future signages in familiar everyday contexts, we invite everyone to co-create the future we are headed toward.
	In this workshop we especially focused on thinking how this future city can best serve or not serve vulnerable groups that are often marginalised in cities such as children, homeless and queer.

transmediale summer camp

Tuesday, 6th of July 2021	
Time	Description
14:00-16:00.	Keynote: "Undefined Panorama" - with Yang Ah Ham & Nora O Murchú
	Yang Ah Ham came as a guest to the summer camp to present her ongoing exhibition "Undefined Panorama 3.1", presented at transmediale. Drawing in part on her own experiences of civil unrest and inequalities, Undefined Panorama explores issues including globalisation, work, basic income, education, culture, disasters and their aftermath. At the core of the work is an effort to understand the ways of being that exist within complex networks, and to ask what alternatives might be possible.

16:30-18:30.

Workshop: "Weaving Redes" - with Juan Pablo Garcia Sossa

Exploring planetary interdependence, *Weaving Redes* aimed at building a "rede" - the Portuguese word both for network and hammock. The workshop explored symbiotic relationships to our natural and artificial environments, using strings as recording devices, while developing FLOW (Free Libre Open Wild) systems - systems meant to be mutable, re-appropriable and wild. Embracing interdependence of all living and non-living beings and refusing binaries, separations and verticalities, the participants collectively crafted artifacts as tools for interspecific communication protocols. Departing from the nuances and specificities of the territory, they created generative wild systems, enabling the transition towards becoming planetary sentient beings.

19:30-21:00.

Screening & discussion: "Congress of Idling Persons" - with Bassem Saad

Congress of Idling Persons (2021) features five interlocutors who play themselves and fictionalised versions of themselves amid broader transhistorical narratives. Bassem Saad collaborates with DJ and translator Rayyan Abdel Khalek, musical artist Sandy Chamoun, writer Islam Khatib, and organiser Mekdes Yilma to examine a cartography of protest, humanitarian and mutual aid, migrant labour, and Palestinian outsider status. Punctuated by the late Arab Spring and the Black Lives Matter revolts of 2020, as well as by the Beirut port explosion, the film weaves through transhistorical constants, from collective rage to mutualism, propelled by the speech and acts of its performers. Discarded building sites, shaky mobile footage of protesters, and staged musings on disenchantment, explore how older, recognised dynamics of state failure persist and extend in new directions. With this work, Saad asks: If a group action is a riot and not a revolution, then who films it? If four is a riot, is it also a congress?

Wednesc	lay,	7th	of.	July	[,] 2021
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Time	Description
10:00-12:00	Workshop: "Plant2Plant" - with Sarah Grant

	The Plant2Plant protocols use the garden as infrastructure. IR transmitters and receivers are attached to plants and transmit floral ASCII art as modulated light pulses between plant nodes. A meditation on the fragility of communication networks, where data is disrupted whenever the sun comes out from behind the clouds or the stems sway in the wind.
12:00-13:00	Outdoor-Workshop: "Walking mediation" - with Laura Lotti
14:00-16:00 Available as podcast.	Conversation: "Against a Fully Automated Post-Scarcity Future" - with Aaron Benanav Against a Fully Automated Post-Scarcity Future is a group conversation that initially took place during transmediale's Summer Camp. Building on his latest book, Automation and the Future of Work, Aaron Benanav imagines how post-scarcity economies might function. In this conversation, originally recorded in July, Benanav, together with other transmediale summer camp residents, explores how underemployment, low wages, inequality, stagnation, and artificial scarcity might be rethought in a post-scarcity world. Weaving and moving between science fiction, economics and social theory, Benanav and his interlocutors put forward questions about needs and desires - and how they might be met.
16:30-18:30 Available as podcast.	Conversation: "DAO's, Goals, Loots and Raids" - with Laura Lotti & Kei Kreutler Kei Kreutler and Laura Lotti explore decentralised finance and decision-making processes. In this discussion, they draw out the frictions of collaborative working in a context shaped and defined by Silicon Valley and neoliberal ideologies and explore the many kinds of refusal within these models.
21:30-22:30	Outdoor-Workshop: "Starlink-Gazing" - with Danja Vassiliev Observation of and conversation on the US space company SpaceX's Starlink satellites.

Thursday, 8th of July 2021			
Time	Description		
09:00-09:30	Performance: "Breakfast Radio" - with Ahmed Isamaldin Broadcast on social movements in the MENA countries and the Global South.		
10:00-13:00	Outdoor-Workshop: Foraging - with The Mycological Twist		

The act of foraging can be understood as a way to map a land-scape in motion, including a notion of temporality and a three dimensional aspect. A way to source craft materials, inspiration, food or medicinal plants, foraging as a repetitive practice also demands care and responsibility for the patches one comes back to every year. The line between agriculture and the act of 'gathering' is put into question. When does care become cultivation? Isn't foraging, because it inherently works with uncontrolled settings, an act of radical rewilding? Is the forager a citizen of the land, or its keeper, or something much more profound and entangled? The conscious political practice of foraging stubbornly stamps on traditional notion of food production, public and private space, and conservation work. It demands a reimagination of those concepts through the lens of commoning and rewilding.

14:00-16:00

Workshop: "Xenotopic Encounters" - with Trakal

This character development and writing exercise aimed at encountering radical alterity as a relational experience. The workshop was inspired by the concept of the Xeno, in the form of a Xeno-subjectivity, that might already have been present in the figure of the alien in Science-Fiction, but has also been a contested front in anti-colonial, post-socialist and psychoanalytic contexts. Unknowability, opacity and alienness share a call to disavow and refuse hegemonic forms of being legible and identifiable as subjects. This exercise gives a forum to the encounter with another being, human or not.

16:30-18:30

Available as podcast

Lecture: "Postnaturalism: how to conceive the rights of nature?" - With Xenia Chiaramonte

Working on ecology and the potential institution of a Western version of the so-called "rights of nature", Xenia Chiaramonte strives for a de-anthropologization of the pluriverse. Contesting the ecological and juridical concepts of nature, she claims that the subjectivation of nature is based on the dualism between human beings and non-human beings, even if it intends to establish a unity between them, and on the moralistic hypothesis according to which the subject is higher in rank than the object.

20:00-21:30.

Screening & discussion: "Before I Forget" - with Mariam Mekiwi

A science-fiction story set in an indistinct coastal region, between land and sea, above and below water. El Captain disappears, one of his disciples takes a journey in the ocean to cut off the internet cable, the water level is rising, an amphibian woman appears at the shore looking for her mother, and the memories of two women in a ward intertwine. Scientist Dr. Sharaf is trying to gather all of them – the members of the secret society of amphibians – in an attempt to save the world.

Friday, 9th of July 2021	
Time	Description
10:00-11:30 Available as podcast.	Conversation: "The Movement Is Not for Bread" - with Ahmed Isamaldin Beginning with the question of how to learn from divergent visions and experiences of social movements in the MENA countries and the Global South, the discussion explores the tensions of collectively envisioning and experiencing refusal on a global scale. From the project "Object of Austerity," artist and activist Ahmed Isamaldin leads a group conversation with Xenia Chiaramonte, Aaron Benanav, Mariam Mekiwi, and Bassem Saad. The group shares their experiences of social movements and asks how the relative positions of action and observation, technological literacy and romanticism, and self-awareness and confusion, figure in collective acts of rebellion and renewal in the 21st century. What emerges from the actions and experiences of particular social movements? How can living-through revolution be collectively thought about and built upon? What is the subaltern asking for, and what is the body of knowledge their refusal produces?
11:30-13:00	Workshop: "Collective Doodling" - with Parrr Geng Months in isolation, yet bombarded by information online. We lost our old sense of time passing, yet new ways of perception emerged. Parrr Geng's current interest lies in symbiotic relationships - those long-term living together of unlike organisms. The workshop combined an introduction to character design and a conversation on "in-betweenness", and on symbiotic worlds could gradually take form.
14:00-14:30	Workshop: "Web3" - with Kei Kreutler Introduction to the web3 technology and practical example on setting up joint bank accounts using cryptocurrencies.

14:30-16:00	Conversation: "The Power of Narrative" - with Laura Cugusi
	This last conversation was based on Laura Cugusi's research work on parallel narratives of permanent crisis, recurring cycles of outrage and oblivion in the media and political discourse, as well as on the shortcomings and unexplored potential of image manipulation techniques, procedurally generated virtual environments, VR/AR and other forms of immersive/interactive media as storytelling strategies. The participant discussed the progressive weakening of the affective impact of traditional journalistic content, as well as the constant struggle of narrative techniques against the limited human capacity for information overload.
16:30-18:00	Collective Feedback Session

FACT: Framework for Trust programme

FACT: Framework for Trust programme)	
Time	Description
From 20 September on fact.co.uk:	RESOURCES:
https://www.fact.co.uk/frame- work-for-trust	MEDITATION FOR A FALLING WHALE (AND OTHER SOCIAL ANIMALS)
	https://www.fact.co.uk/resources/2021/09/listen-medita- tion-for-a-falling-whale
	Grab your headphones and take a guided meditation through Yambe Tam's Deep Dive as part of Framework For Trust
	Explore the connection between human presence of mind, and the uncertainty of the natural world by following the journey of a whale falling from the surface of the ocean to the seabed
	THREE GENERATIONS IN ONE FLESHY BODY
	https://www.fact.co.uk/resources/2021/09/listen-three- generations-in-one-fleshy-body

In this Framework For Trust resource, Ebun Sodipo and Keiken have collaborated to create an audio piece that invites you on a journey: offering a full-body experience through your imagination

The piece explores voice, tone, stories and sound as different modes of audio communication to create our own fleeting and invisible mode of communication and question, where does trust begin? Music and sound design by Khidja.

A SHORT CONVERSATION ON MISTRUST AND DECEIT

https://www.fact.co.uk/resources/2021/09/listen-a-short-conversation-on-mistrusst-and-deceit

In this podcast, produced for Framework For Trust, artist in residence Andrius Arutiunian is joined by curator and writer Alessandro Vincentelli, to discuss visual and aural mistrust within the post-internet reality

Andrius' new work, The Irresistible Powers of Silent Talking, investigates automated deception recognition systems, and their worrying use in border surveillance

IN BOTH TRICKLES AND FLOODS

https://www.fact.co.uk/resources/2021/09/listen-in-both-trickles-and-floods

As part of Framework For Trust, artist in residence Angela YT Chan and curator Annie Jael Kwan have co-created an experimental audio work that explores their shared fascination with liquidity

The piece weaves field sound recordings and research into water scarcity and embedded power structures in cultural narratives to examine rising waters and eco-anxiety.

AS YET UNTITLED

https://www.fact.co.uk/resources/2021/09/watch-as-yet-untitled

Linda Stupart and Ayesha Tan have collaborated for Framework For Trust, to share how they can make work together, whilst they are apart

Over the space of a week they will use each other's gifts of instructions, to do lists and prompts to create visual work, exploring their time together. They hope that by sharing their prompts, others will find it meaningful too.

I'VE GOT THE POWER

https://www.fact.co.uk/resources/2021/09/listen-ive-got-the-power

For Framework for Trust, artist in residence Tessa Norton and artist Shonagh Short have produced a podcast by exchanging voice notes

Their unfolding conversation considers how questions of trust are important to their practice, and asks how learning to trust can offer solutions or create problems. Are artists trusted, or indeed trustworthy?

4.2. Themes

With the overall aim of promoting sustainability, fairness, and inclusivity in digital transformation via critical art, social practice arts, and digital culture, WP6 explores possibilities of thinking and acting beyond control, surveillance, and current modus operandi regarding institutions, AI, environment, economics etc. in relation to digital transformation. Three partners generate spaces for debates, interventions, and knowledge production to achieve the aforementioned goal by focusing on four themes: Control, Refusal, Trust and Care.

Control, Refusal, Trust and Care

WP6 works around four related concepts stemming from each institution's programmes and focus: Control, Refusal, Trust and Care. These themes were already present in the Transformer Sessions and continue to function as a conductive thread for the activities of the partners.

"Control" makes reference to a critical analysis of exploitative and controlling aspects of digital technologies. It refers to an awareness of the situations and possible consequences of current uses of these technologies such as social media, big data, and border control surveillance systems. Therefore, it is the departure point and first concept.

The response to the abusive forms of control is "Refusal", close to the program of transmediale, refusal is a radical response from the arts to unacceptable situations of exclusion. It is a strategy of resistance that fundamentally rejects unfair practises.

From refusal we move on to the possibility of rebuilding Trust. We ask what are the transformations necessary to perform trust after situations of inequality and exploitation and what are the conditions and benefits of generating relations of trust.

After restoring trust, Care and accountability are a form of healing from digital exploitations, and economic and algorithmic exclusions. Care is a shift proposed as a creative response from the arts.



5. Findings of Transformer Summit

CONTROL

- 1) Temporal governance and algorithmic governance, how time has been remediated through digital technologies into new forms of control?
- 2) Artificial intelligence at the intersections of civil society and the private sector, impact of technology in society particularly with vulnerable groups, builing feminist datasets.
- 3) Al surveillance systems that are based on micro facial expression recognition, positions of listening, the politics of migration.

Dr. Evelyn Wan discussed temporal governance and how it has always been part of algorithmic governance. Her presentation asked how time has been remediated through digital technologies into new forms of control. Our internet is synchronized to the time structure of deep colonial history, which defines for example Greenwich Mean Time.

Artist Caroline Sinders presented her research-driven art on artificial intelligence, at the intersections of civil society and the private sector thinking about the impact of technology in society particularly with vulnerable groups. She discussed her project "Feminist Data set", which started in 2017 as a critical design and social justice art project as a response to problems in technology and bias in machine learning, investigating bias in machine learning, data collection, training, and neural networks, including a chatbot.

Artist Andrius Arutiunian works through sound and through hybrid forms of sound, and investigates both non-western positions of listening, and the politics of migration. He presented his research-based project *The Irresistible Powers of Silent Talking*, in which he critically looked into the European border patrol surveillance programme I Border Control and the notion of deceit. In this installation, instead of scanning the faces of refugees who answer questions to the avatar of I Border Control, the algorithms map the avatar's deviations of supposed truth or lie and transform them into sounds, therefore he challenges this surveillance system that is based on bad science built upon colonial and racial biases.



Figure 10: The Irresistible Powers of Silent Talking by Andrius Arutiunian

In terms of policy regarding digital technologies, Andrius remarked that we need to pressure political bodies for policy change regarding more equitable and ethical AI, and digital surveil-lance and control, and also organise in a more communal and political way in pressuring and, and extending this power, that these kinds of principles would be changed through policies. Evelyn said that European types of directives such as Explainable AI, fair AI, trustworthy AI, but we still have a very long way to go. we really have to try and build those intermediary steps between the grassroots efforts and policy making in order to see our practices reflected on higher up policies and directives. Caroline mentioned that it may be a live investment in regulatory auditing systems that are affiliated with local or regulatory blocks.

REFUSAL

- 1) Democratic protests, the tactics of surveillance, and how protestors and citizens circumvent censorship and surveillance with creative strategies of refusal.
- 2) Smart city that demands obedience from citizens, critically question the privatisation of the cities resources and "smartness" of the city.

In Forbidden City, Ellen Pau, Joel Kwong, and Glacier Kwong reflected on their experiences of the protests, identifying the tactics of surveillance deployed by the government such as online censorship and smart lamp poles with facial recognition cameras, and how protestors and citizens circumvented censorship such as using safer social platforms to organise themselves. They looked at digital technology for collective organising and the development of community economies with businesses supportive of the movement's aims. One example is the citizens crowdsourced information about "yellow shops" that supported the movement and made a map for people to find them so that they could create synergies with local business. The protestors also used coded languages online and offline. These creative strategies of refusal protected protestors from detection and helped to sustain the collective demands of the movement.



Figure 11: Forbidden City in the transmediale Almanac for Refusal

Distance from Stone is a visitor centre style video about the history of heritage, stone and the city. Dublin in 2018 is a living museum and one whose obedient citizens have little control over. Taking pebbledash as a symbolic worship of stone and aspiration entirely unique to Ireland, the film negotiates in what way the city has made citizens obedient. Privatization of resources and of history further distances the people who should be able to access them. Is the city an incinerator, which routinely burns heritage and turns it into a combustible gas?

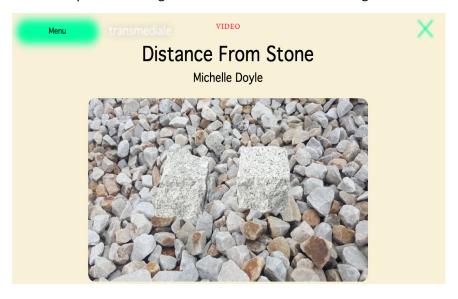


Figure 12: Distance from Stone in the transmediale Almanac for Refusal

- 1) How to build trust within an institution and with people that the institution serves in the midst of a crisis of democracy?
- 2) How does an institution open up to trust things that are different (with help of digital technology)?
- 3) How to perform trust with action?

The new way of work of performing trust within the institution and with the people they serve lies mainly in four aspects: transparency of the organisation regarding its ethics, values, visions, and decision-making process; protocols for whistleblowing, issue raising, and feedback; representativeness of the communities they are tending to; opening up to the differences and listening to and grievances of the underrepresented, accountability to those they work with, and the public.

The organisation should set the boundaries for ethics, data, experience for the audience, development of team etc., and make sure that these lines cannot be crossed. It is also essential to tend to the trust dynamic by having responsive feedback loops. If there are signals coming from within or without the organisation about certain things that are not what it is supposed to be, the trustee, or whoever is building and maintaining trust should show absolute responsiveness and empathy, first listen, then take action, and make sure that what damage it causes is recovered.

Regarding how an institution open up to trust things that are different, the institution should reflect on the protocols of dealing with grievances and be mindful of the bureaucratisation that can drain the energy of the movement from the ground.

Digital technology such as augmented or virtual reality can help by building empathy, and design thinking and methods such as co-creation can involve different stakeholders in the process of decision making, and thus help to build trust. The hapticness of trust should not be overlooked since it can help the organisation become a body with flesh and warmth, rather than a cold apparatus. "Entropy of trust" (Jack Tan) is in constant change and thus we need to keep building trust and performing trust to render the society in *digital transformation* more equal and fairer.

CARE

- 1) How to nurture care among human-human relationships and human-non human relationships (with technologies such as digital technology)?
- 2) Medical care in relation to data and computation, generative models of data collection, care for the environment via digital technologies.
- 3) How to care for refugees' human and digital rights in the refugee crisis and COVID-19 pandemic?

This panel darts by thinking of different ways of acknowledging the activist work, bringing accountability to the society. Some other words are "stewards"-- people who take care and support each other. Other terms could be facilitation or mediation. These terms defer from the concept of the activist as a political hero, or the idea of volunteer and community service, thinking of a much more integrated-interdependent approach to your practice.

It also introduces the notion of care for the non-human other. The point was to create a living being that required care and creating a technology-totem around which people can create social imagination, the plant is alive and a workshop and experience are growing around this artificial being.

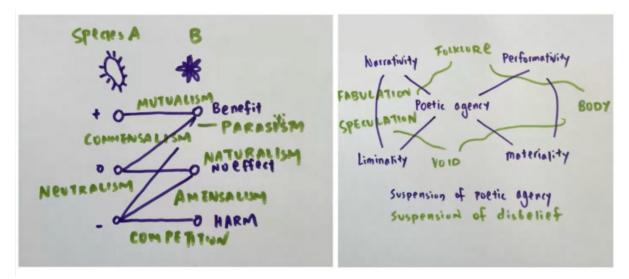


Figure 13: Slides on Taeyoon Choi's presentation.

It presented the way to empower vulnerable groups, in particular by producing Zines, small scale personalized publications. Their communities made their zines, booklets in workshops aimed at questioning European values such as democracy, freedom and respect for human dignity at the times of the pandemic and adverse human rights protection policies. Zine workshops work as safe haven where opinions could be exchanged and as a sanctuary from systemic violence.

The notion of responsibility when working with communities. The longevity and sustainability co-created from the outset with the community itself so they were the leaders of the idea, in authorship and leadership from the community, where the artists become facilitators and mediations that make the funds available.

And finally, a transition from care to healing: How do we progress from care to healing? Because care might entail that there is a preservation of an unhealthy condition, healing entails discontinuation of the unhealthiness and art and art practices are fundamental in doing these transitions.

Feminist Dataset workshop

- 1) What is intersectional feminism?
- 2) The biases in commercial and surveillance datasets. Why is it important to have ethical, inclusive, and representative datasets for machine learning and AI?
- 3) How to build an intersectional feminist dataset?
- 4) What is this dataset for?
- 5) What is the problem of using existing platforms for social media?
- 6) What are the available independent platforms and critical tools?
- 7) The conundrums of open source platforms.



Figure 14: Caroline Sinders facilitating the workshop.

In this workshop, Caroline first talked about biases in AI and machine learning, then introduced what the intersectionality and intersectional feminism in this field could be, and why it was important to practise this in developing AI systems. She gave an example of the racial and gender biases embedded in google, and a participant asked whether we should also include non-Western scenarios such as data surveillance and biases in Asia. She also introduced the 7 data feminism principles put forward by Catherine D'Ignazio, Lauren F. Klein (2020):

- 1. Examine power
- 2.Challenge power
- 3. Elevate emotion and embodiment
- 4. Rethink binaries and hierarchies
- 5.Embrace pluralism
- 6.Consider context
- 7. Make labour visible



Figure 15: Participants having discussions in the workshop.

what the algorithmic model they would like to build etc.. She also invited the participants to ask themselves during the process: is each step feminist, is it intersectional, does each step have bias and how can that bias be removed?

Artist talk and discussion by Caroline Sinders and Angeliki Diakrousi

- Some of the topics of the conversation included:
- What is the problem of using existing platforms for social media?
- They are privatized spaces,
- Not anonymous (access with accounts)
- Policies, codes of conduct, terms defined by a company and not a plural body.
- Bias in the technical language used and the technology,
- Aims and objectives not decided by the users .
- he approach to technology is rooted in commercial, weaponised, hierarchical, patriarchal principles.
- The platform as a servant instead of a collaborator (check feminist server manifesto)
- Based on interface logic: not understandable technology, distance from the users
- Focus on individual consumers or companies: even with decentralized, open source alternatives- it does fall on the user to change things. The benefit of mastadon is that we can change it, but the problem with mastadon is that it falls on users to manage their own harassment or come up with their solutions.
- Independent platforms and how they function:
 - Open source is not enough > toward real critical tools
 - Not paying ourselves,
 - o Low quality,
 - Access to big audiences.
 - o Problems but many reasons to make the
 - how are they created? Collective work and bottom up building
- instrumentalisation of buzzwords:
 - o It is not only the words open source and transparency.
 - Intent versus impact
 - o we may intend equitable tech but what does that look like in practice?
 - o is it equitable if it's just white people building it?
 - Open not for everyone.
- Critical to the open-source
- Vulnerability and networks of care
 - Complexity, going alternative open source is not enough, it is a first step, not one easy solution.
 - o How to stay motivated in the struggle even after setbacks?

Future Collider: workshop using AR signs to co-imagine our future cities

On Sunday 26th September, facilitated by Tomo Kohara, citizens co-created speculative futures of our cities through the signs that we find in them. Tomo Kihara, a Japanese artist and designer, hosted a workshop that started by thinking about what the signs in each city tell about its inhabitants, about our desires, rules and situations. What is forbidden, what is promoted, what are it's logics, and conditions. The workshop presented a developing APP that allows users to virtually place signs in the city via AR and make pictures or videos with them. With a web-based augmented Reality app, we revisited the city including signs that could be part of our future including drone surveillance and crypto economies. Tomo gave the participants the challenge to come up with signs for the future presenting strategies and consequences for different scenarios in dealing with the climate, housing, and privacy crisis.





Below is the unabridged version:

Control

Evelyn Wan

Made a presentation around temporal governance and how it has always been part of algorithmic governance. Her presentation asked how time has been remediated through digital technologies into new forms of control. Our internet is synchronized to the time structure of deep colonial history, which defines for example Greenwich Mean Time.

Wan introduced the work of Tabitha Rezaire "Deep down Tidal" reflecting on how our transcontinental telecommunication cables follow the same routes as colonial routes. Evelyn Wan argues that digital cultures are connected to a deeply extractive enterprise as the infrastructure is physically synced to an extractive history of exploited bodies. To what extent digitalization prolongs this colonization of bodies? And the expectations that our lives will bend to the demands of the machine.

Biopower is the power to manage, constrain and govern life, how technology functions as biopolitical control, the presentation gave flesh to what we mean by algorithm governance by turning to the specific aspect of time.

We are embedded in an ecology of digital objects, computers and over devices have their own layers of temporalities way faster than human scale. Dr. Wan presented them with some milestone examples on how the regulation of time is central to technologically mediated biopower, first during the industrial revolution workers had to clock in and clock out that enforced work discipline. Bodies have to synchronise to the rhythms of factory machines. Also part of this culture is the chronocyclegraphs by Frank and Lilian Gilbreth that uses long exposure photographs of workers with attached light bulbs to capture the most efficient movements for production.

Bodies are meant to be productive under a capitalist extraction of biopower in different ways in each historical moment. Contemporary algorithmic biopower is asynchronous, where the machine has its own temporality and rhythm but we are only episodically synchronising to it, checking in with it. Some examples are delivery people working for apps that track their routes to evaluate their speed and performance, the employees at Amazon that have to pick up products at warehouses for a shop open 24 hours a day. The wearables that track heart and breathing patterns to keep you focused or posture trackers that allow employers to keep their staff up straight in interaction with the clients.

There is continuous monitoring of bodies, voluntarily or involuntarily submitting to these deep extraction modes of biopower, in these ways people are asked to increase their productivity within these regimes.

The problem countering this is that it happens within machinic time, in the possibility of resisting these modes of biopower beyond the tracking of time; other factors are quantified like speed, rhythm, duration. The presentation ended with the question: how do we resist these technologies and how do we reclaim time?

Caroline Sinders

Caroline Sinders presented her Research-driven art on artificial intelligence, at the intersections of civil society and the private sector thinking about the impact of technology in society particularly with vulnerable groups.

Artistic practices in moments of cultural upheaval, how to make theoretical critical technological work to do more, critical design has this capacity to explain and expose the logics of racial capitalism, under the auspices of artistic collaboration can enact critique, making an argument through process.

She thinks about the idea of usefulness in an interdisciplinary work, inspired by Tania Burgera's notion of Useful art and her work with communities. Art as a necessary Troyan horse to discuss useful change.

Other examples departing from research and investigatory practices Frances Seen?, Johanna Mall, Ann Harvey, Mimi Anoha, Forensic Architecture

Why design? Is all over in our lives, it is inescapable. As an example, harassment is related to the design of a platform infrastructure, but then can art be both poetic and useful? Perhaps it can in critical design.

Art offers temporary open-source fixes in gaps of equity created by society, like a band-aid, as a necessary provocation or patch. Provocations can create new imaginaries for a new reality.

Caroline presented the case study of her project "Feminist Data set" which started in 2017 as a critical design and social justice art project as a response to problems in technology and bias in machine learning, investigating bias in machine learning, data collection, training, and neural networks, including a chatbot. What we are doing is using intersectional feminisms as an investigatory framework to step into the machine learning pipeline. Inspired by the work of the maker movement, critical design, arte util, the critical engineering manifesto APC feminist principles of the internet. It is a multiyear project, trans inclusive, and focusing on reach for justice and extremely process driven, so the outputs of the project are workshops. Mechanism for thinking how community driven, equitable data collection could look like. It works on the notion of slow data in opposition to fast data. In the workshop is what intersectional data means, focusing on professor Kimberle Crenshaw's definition. The participants provide data in the form of texts. The feminist data sets is intersted in imperfection, it is not meant to be functional, asking what are the concessions you have to make, to remake everything with intersectional feminist values.

TRK or tecnical responsible knowledge is another project under the umbrella of the feminist data set, that looks into wage inequality for those working in open sources alternatives to data labeling and training in AI. As a second step it looks into data labeling and the labour behind labeling and cleaning data sets. The TRK provides a wage calculator to make visible how much work would make a livable wage, many companies use this service without thinking of the cost of the structures, and the mechanical tuerk interfaces do not take into account time, it only calculates the price per task.

UX or user dressing is a utilitarian intelligence and focuses on architectural layouts, usability and user flows but desin has a politics to it, it can suppress or uplift content. Design muc as

technology is not neutral. As an artist I use design as a material to confront and comment on the inequity of for-profit technologies.

As an artist who deals with politics activism, the trauma of others, Caroline Sinders, in which design can be a tool like technology and art to create small political acts of resistance and change. What kind of design can we make if we stop looking from a silicon valley, neoliberal and extremely capitalist lens, it is time to change design's relationships to power.

Andrius Arutiunian

Andrius Arutiunian works through sound and through hybrid forms of sound, and investigates both non-western positions of listening, and the politics of migration. In this panel, he talked about his project *The Irresistible Powers of Silent Talking*, in which he looked into the European border patrol surveillance programme and the notion of deceit. The piece was dealing with I Border Control, which also received funding from Horizon 2020, and which is working with border control agencies in Hungary, Greece, and Latvia. This AI system is run by micro facial expression algorithms that would scan the refugees and asylum seekers or travellers entering the European Union. As they would enter the European Union, they would have to answer certain questions to an avatar interface. Based not on their answers, but on their facial micro expressions, the avatar would give them a score about their truthfulness regarding their intentions.

Arutiunian remarked that this AI system is very problematic for several reasons. The avatar of this system is a generic looking white male, in Queen's English asking questions that disregard the refugees' traumatic mental state. The algorithms were trained by a dataset that was provided by the facial expressions of 32 actors, half of which were asked to tell a truth, and the other half to tell a lie. This method was based on Paul Ekman's research that functions on an assumption that there exists nonverbal facial micro gestures as they label them as biomarkers of deceit. But this string of research is bad science--it has been based on colonial and racial bias principles. One example is Ekman's original studies, in which they were using freshmen college students as one subject group, comparing the results with those of illiterate subjects from New Guinea. Various academic studies have repeatedly demonstrated that this kind of theory as well as micro facial expression recognition does not does not work in real life situations. However, due to heavy investment from the governments and certain right wing policies in Europe, there has been more and more funding being poured into the use of these technologies.

His sound installation consists of two screens and a seven channel audio signal. It is a slow scan of the original avatar's face. So this is the avatar that the refugee would be answering to at the border. Its facial data is output as a seven channel audio signal, which basically maps the deviations of supposed truth or lie, and it does not map it directly. Through this piece, he critically questions this certain Silicon Valley mentality involved in seeing these complex human notions of truth or deceit as something that can be coded, something binary.

Plenary discussion

A question is asked to Evelyn Wan: how can we reclaim time, and how can human bio systems learn from non human bio systems, which yield efficiency without necessarily technological or

algorithmic intervention? She answered that in some way these algorithmic interventions are actually really helpful. But on the other hand, we're also subjected to them. She gave an example of logging one's activities/tracking oneself in a co-writing experiment. This kind of interaction with the system: we're both bound to it, but we're also trying to exceed it at the same time; we're aware of how they're able to control us and limit us in certain ways. It is a continuous process where we're trying to figure out how to mold time differently and to claim time and to claim this sort of temporal sovereignty that we can have over these technologies.

Regarding the question about how we can create more sovereignty in having to work with these technologies as they are so pervasive, and how we can escape them, Caroline Sinders replied that it's quite difficult, and at times, almost actually impossible to escape the sort of the pervasiveness of algorithms, but also big technologies. She gave an example of the reporter, Kashmir Hill's story on trying to spend five days without using any tech tied to Amazon in the US. It was almost impossible, because AWS power, so much of the internet and power, so much of the everyday technology we use, from our phones to certain kinds of IoT devices. With certain apps that are made with open source, or are more transparent, we could argue more equitable ethos. And that's something that the feminist data set is going to acknowledge in the book that she is writing, but even she has to use things like AWS. This is a concession where we are now in society, when it comes to building things or building an alternative, that we may not be able to have totally our own total separate alternative. She mentioned that open source and alternative technologies crash a lot and are less accessible compared to for-profit companies. Nevertheless, we should try to build for that future. What if our open source alternatives were more accessible, privacy-focused, and had design standards?

She also remarked that we need more artistic research like Andrius to complicate all these narratives. It is already clear for a long time that these algorithmic machine learning systems are too complex for any single human to understand. But there is this idea that one can put things into easily understandable binary answers and binary concepts. So we end up with these technologies and these political answers, political systems that basically tell us good or bad. The question is how do you complicate this narrative? And how do you speculate within future and the past that actually goes beyond simple answers?

Evelyn Wan mentioned in predictive policing, on epistemological level, this binarised understanding turns into a certain calculation that no longer resurrects the kind of complexities of real life and the complexities of actually how crime functions.

Lucas Evers asked: "can we make those technologies in such a way that they help us?" Caroline replied that technology needs to be constantly updated and maintained, and it is not neutral, since we have harms and biases within ourselves. One should be constantly reevaluating, or re-looking or shifting or changing what one is making, and also taking a step back from the technology one is building and asking: what kind of system are you building. Is it a surveillance system? One should also keep auditing checks through one's data systems, looking for data drift, analysing one's model, updating one's dataset to ensure that it's timely or representative. Can you ever mitigate the harms of it? The product that is holding the technical technical system needs to be interrogated of how it is built, of how it is given out to people, of who works on it, and what are their values or their benefits? "We constantly have to be working at it...you cannot

have a totally intersectional dataset". She cautioned that her feminist dataset project that is based on workshops, even with a lot of the constraints that were put in place to try to help design for equity, also provides self-selecting filters, which do need to be interrogated, who has time to come to this participatory workshop, or the institutions that have the time and availability and the support to do this. "Even when you try to define an equitable or intersectional feminist process, these are all the things you will butt up against, anyway, that are frictions or failures". Things are always interconnected, so one alternative technology would make people rethink and speculate the related parts and infrastructures, and even the whole system.

An audience member asked this question: "How do we continue to build literacy to ensure that we continue to be productively critical about digital solutions?" Andrius referred to works by Kate Crawford and Trevor Paglen and said that the problems lied in both the data training sets and the logic behind the algorithm. Even if the data sets are fixed, the biases are still embedded within the way it is coded. It's going to be continued, reiterated, because of the way we practically learn how to code--we're using certain parts of the code that exist from the past, and therefore, it's already encoded into the past into the future. We tend to see this question as a tech question, and that's what a big data company wants us to do. However, we need to pressure political bodies for policy change, and also organise in a more communal and political way in pressuring and, and extending this power, that these kinds of principles would be changed through policies. Evelyn remarked that biopolitics and control nowadays become more and more dispersed into the way we live, when we start to think about it in terms of norms and normalisations in terms of how these devices function, and you cannot really necessarily point to an intentionality. Therefore we also have to ask: how are we enabling some of these methods of controlling us?

In terms of policy, Evelyn said that European types of directives such as Explainable AI, fair AI, trustworthy AI, but we still have a very long way to go. we really have to try and build those intermediary steps between the grassroots efforts and policy making in order to see our practices reflected on higher up policies and directives. Caroline mentioned that it may be a live investment in regulatory auditing systems that are affiliated with local or regulatory blocks.

Trust

In the second session of the transformer summit, Head of Programme of FACT Maitreyi Maheshwari curates a panel called Performing Trust, in which she explores with the panellists what it means to exchange trust, and also questions the governance of an institution.

As we know, *crisis of democracy* partly stems from the lack of trust towards institutions. For FACT, it is important to find *new ways of work* by building trust within the organisation, and with stakeholders/the public and different communities. The panellists are Jack Tan, artist-in-residence on FACT's Board of Trustees, Rachel Higham of the Board, and Jane Wentworth, consultant for cultural organisation's branding and vision.

Regarding trust in the digital world, Tan says that he overtrusted the digital, as an early techno adopter. How to distrust it is the question. In a broader sense, he relates trust to trust for society, of which the social contrast is essential—he mentions that he could not trust a society if he was

in exile in his own country, as a British with Chinese background. It is important to have open discussion with people that are concerned to explore trust, to co-create a contract of trust.

For Higham, speaking from her role as Chair of FACT's Board of Trustees, trust is about the governorship of relations of different stakeholders such as general public and funders, and work for their interests. It is important to build trust through transparency. It starts with asking the question: who is the organisation for. The organisation should be transparent about the principle of operation as an organisation, its ethics, diversity and inclusion, and what is the policy for whistleblowing and safeguarding of people who want to raise the matter if the trust equation is brought down. The organisation should set the boundaries for ethics, data, experience for the audience, development of team etc., and make sure that these lines cannot be crossed. It is also essential to tend to the trust dynamic by having responsive feedback loops. If there are signals coming from within or without the organisation about certain things that are not what it is supposed to be, the trustee, or whoever is building and maintaining trust should show absolute responsiveness and empathy, first listen, then take action, and make sure that what damage it causes is recovered.

Wentworth remarks that to win trust, the organisation should make it clear that the development is for the people working in it, not for the chief executive, and give them the chance to speak up. Those who are in authority positions should talk to everybody in the organisation in order to know what is working and what is not. The conversations should be confidential. The organisation should be totally honest about what is not so good, and face up to that, so that we can move ourselves to a better place. She also resonates that transparency is crucial, especially regarding decision making. She says that museums should actively listen to what the audiences say—what are the perceptions, why the institution is alienating people, and then, try to change the reality.

Regarding Maheshwari's question about how we open up ourselves to trust things that are different, Higham mentions that empathy and inclusion are key to this question, and technology can help. It is important to ask questions such as how to have conversations about the uncomfortable around things as personal as one's own personal biases towards difference? What is the mechanism to broker conversations about differences and move forward and pass it? Technology such as gaming, augmented or virtual reality can help to build empathy by giving people the chance to walk in someone's shoes, therefore help to bring the understanding closer and build trust. Tan remarks that we need to question how institution procedures work to build trust since they are often not very helpful. He draws on his own experience of his participation in the campaign of defunding Centre for Chinese Contemporary Art in Manchester because of its racist practices, and he criticises how the institutional methodologies and procedures, bureaucratisation in short sucks the campaign dry from its rich emotional narrative content. The heart of the question lies in: what are the protocols of the institution in dealing with grievances in order to create trust? How can artists and the public trust that the institution would listen when it has a track record of not listening? He mentions that trust is a haptic relation, and it is bodily, not just intellectually. For him, it is important that the organisation needs to reach out to re-establish trust, so that it can become a body with flesh.

When it comes to the question of how to perform trust with action, Rachel Higham considers experimentation is important, and there shall be an environment of trust with a learning zone where people can take risk and experiment, and share knowledge. This is also where design thinking can help—we co-create, prototype, test, have feedback, and move towards solution together with the end users. Since the users are part of the process, trust is built. Wentworth suggests that it is crucial to involve the organisation as fully as possible when it comes to the value and vision of the organisation. But Tan questions who can get into the room of co-creation, because people might not have the self-belief and capacity to come to the room, especially the unrepresented and even the subaltern. How to build trust with them? People who can join the focus group have the privilege to represent the community, but what about the others?

"What are the duties of care? What do the communities want from us?" asks Maheshwari. Higham suggests using digital art to bridge the gap, while Tan considers art as a medium, a discipline that relies on empathetic language at its broadest sense, and he as an artist is understanding and working with social relations, perceptions, senses and sensibilities. The institution needs to make the first step since people often do not have the capacity to speak up, or time to build trust. "Trust leaks all the time", so we should keep building it.

Apart from transparency, another crucial point in this new way of working is accountability—an institution should be accountable to the public and communities that it is serving, and this can be started by asking itself: within the governance, how representative it is to those who want to hold them to account, Maheshwari remarks. An institution is also accountable to the artists they work with—when inviting artists to engage with communities, the institution should pay artists fairly and not stretch the artists' resources to a breaking point, Wentworth points out.

To sum up, the new way of work of performing trust within the institution and with the people they serve lies mainly in four aspects: transparency of the organisation regarding its ethics, values, visions, and decision-making process; protocols for whistleblowing, issue raising, and feedback; representativeness of the communities they are tending to; opening up to the differences and listening to and grievances of the underrepresented, accountability to those they work with, and the public. Digital technology such as augmented or virtual reality can help by building empathy, and design thinking and methods such as co-creation can involve different stakeholders in the process of decision making, and thus help to build trust. The hapticness of trust should not be overlooked since it can help the organisation become a body with flesh and warmth, rather than a cold apparatus. "Entropy of trust" (Jack Tan) is in constant change and thus we need to keep building trust and performing trust to render the society in *digital transformation* more equal and fairer.

Care

We started with control, trust, care, artists offer perspectives on how to go from the systems of control to creating mutual trust and to care, especially for those who do not benefit from the digital transformation.

Accountability in a dynamic approach.

Taeyoon introduced himself as an artist, teacher, organizer of spaces and experiences, and activist. He started with the idea that the word activist no longer captures the essence of the work that these people do. Thinking of different ways of acknowledging the activist work, bringing accountability to the society. Some other words are "stewards"-- people who take care and support each other. Other terms could be facilitation or mediation. These terms defer from the concept of the activist as a political hero, or the idea of volunteer and community service, thining of a much more integrated-interdependent approach to your practice.

Taeyoon shared images of his work, paintings, thinking about the idea of care in family and lovers, and how it extends to society and our environment. The painting depicts humans and the landscape. The idea of nature, nurture, and habitat, the spaces that we occupy play an important role in these works. Sometimes environments are digital, a small peer-to-peer library archive of his teaching and his projects, connected through the network, not through the world wide web, but through a decentralized web protocol. Only in the exhibition space, you can access the archive that is exactly the same as the one on Tayoon's computer. This project is thinking about physical space, and digital space and connection between the two, and creating much more nuanced experiences.

Like many others, Taeyoon Choi has been expanding the concept of technology beyond, the software, hardware or system to include the environment. A beehive growing behind his work has triggered his thinking of the collaboration with other living organisms, and to explore symbiotic relations, from mutualism to competition.

The suspension of poetic agency as a potential approach to think about the world and our relationship with the tech. Paying attention to the world through organic matter.

Accountability and technology, challenges of accountability, issues of social justice, fair credit for all the participants of work, and issues of sharing of the equity of the work that we create, most institutions and organizations are going through this.

We need to look at small relationships among people and organizations, who you work with, who support you, and who you make your work for.

The idea of "activism" in the broad sense is easy, to think about pressing issues of global warming and racial oppression, issues connected because of the systems of oppression that create those contexts, a response can be a nuanced approach to accountability, care, and sharing the responsibility.

Nabil Hassein writes about "Computing, Climate Change, and All Our Relationships", he talks about our relationship to technology, us as users and creators, and how that impacts climate change at a very large scale. But also a microscale in relationship to these things, to everyday objects, each other, and the space.

Sources: Ecological Prospects for Computing, Nabil Hassein https://nabilhassein.github.io/blog/ecological-prospects-for-computing/

Oriana Persico and Salvatore Iaconesi

Joining remotely from Rome, Oriana and Salvatore are both artists and researchers, interested in the way that digital technologies transform our lives, our cultures, our knowing the world and expressing in the world, and our rights and freedoms change in the rapidly changing technological scenarios. Salvatore laconesi is a robotic engineer, designer and artist.

In 2004 they formed a network called Artis Open source because we were dealing with gigantic systems and our tiny network was not enough, therefore they created a research center called "Human Ecosystems".

The brain cancer experience of Salvatore Persico opened an awareness of the way doctors treat patients as data, and with this, they started thinking of data as a technical issue but an existential issue. For this, the launched an initiative called "La cura" and "Nuovo Abitare" is the condition of the human being which happens when so many of our rights and freedoms depend on data and computation, second, in our globalized and hyper-connected world we are constantly exposed to complex phenomena, and these phenomena are planetary, which means that I cannot just look outside my window to understand climate change, to understand that, migration, pandemics, we all might need enormous quantities and qualities of data, and the computation that adds up this data to our senses and understanding of this data.

According to Salvatore and Oriana, this data is something we share, we do not have any sensibility for, it is too much, too large, too complex so we need to find ways to adapt this data to human senses and another problem is the fact that data and computation are currently extractive models, and instead of one mayor item of "Nuovo Abitare" is that we do not use extractive models but generative ones, which are models in which data is not extracted from people, from the environment as if they were oil wells. Rather data is used as a means for self-expression, autobiography. These changes the whole scene, autobiographies that can be for humans and not humans. If you think about it, every human and everything, river, forest, building or neighborhood can generate data to represent itself, to express itself. And this is a complete paradigm shift, we do not have to be extractive.

Nuovo abitare, new living which is a research and art project centered in the artistic device, but also a ritual, to create a totemic object around which people can dance around with data as we did in the past with fire. And create new social roles, new types of activation around which we can do things together in society. This project happened in Palermo, there they created in a Museum Bado Mare e memoria, viva. They created a device that was a living organism plant-shaped, fed from data from the river. It tells people in the museum about the quality of the water, it is a living sculpture animated by data.

The sounds and the colors of the plants tell us if the water is in a good share or not. Where is the difference? Why is this a new type of alliance in our ecosystems being them human and not human? There are no sensors extracting data from the river to feed the sculpture, we decided to build together with citizens a new social role which was the custodians of water. About 15 people in the city decided to answers to become custodians of the water, which meant that they received a very simple sensor and the knowledge, sensibility to go to the river to generate data as in the past we walked to rivers to wash our clothes and for water, now for generating data, to know nature is a different way because we are extended through technologies. So, in the

museum, if people feed the plants, artificial living being, so the plant is in a good shape with light s are on, if people stop feeling the plants the creative you will die informant of everyone in the middle of the museum. We are confronted with a technology which is vulnerable as we are and depends on the relation.

Strategies and possibilities that data and computation can create new ways of caring and empathy.

This idea of a technology that is vulnerable and depends on relations was central for the creation of this project, it was a process of a dialogue with the museums that was at the beginning scared about what with a living creature that can die, why not just use the data for the duration of the project length and put it on display?

The point was to create a living being that required care and creating a technology-totem around which people can create social imagination, the plant is alive and a workshop and experience are growing around this artificial being.

Aris Papadopoulos

Representing LATRA socially engaged art-science practice, Lesbos Greece, comprised of Activists and artivists advocating for systemic changes, 21st-century European challenges, decolonization or art science and technology.

Part of artsformation, responding hands-on to the most pressing social, political, and cultural concerns of citizens that have been pushed at the margins of society through systemic and systematic oppression.

Aris presented their work "Letters from the front", an ongoing practice developed in response to the collapse of Lesbos civic and democratic fabric as the refugee crisis intensified through the years, letters from postal code 801100 which is Lesbos' postcode. What is happening in Lesbos affects not only the inhabitants of the island but the whole European community, started at September 2020 fire at the refugee camp where people lost their homes and their human and digital rights, a new camp was swiftly erected in a way to deny the inhabitants any sense of permanence or dignity, unable to connect and organize, limiting people already living with uncertainty about their future happened when COVID-19 was spreading across Europe, and this was an opportunity to further make use of oppressive performs to turn the camps into a detention facility.

LATRA's response was to empower particular groups, producing Zines, small scale personalized publications, part of the culture of Zines in fluxus and as a form of distribution of ideas. Their communities made their zines, booklets in workshops aimed at questioning European values such as democracy, freedom and respect for human dignity at the times of the pandemic and adverse human rights protection policies. Zine workshops work as safe heaven where opinions could be exchanged and as a sanctuary from systemic violence.

Scripted and visual storytelling, through intercultural dialogue with our communities we understood how zines in the hands of marginalized people become an instrument for individual care and collective healing. Authors gave intimate testimonies on their journeys that brought

them to lesbos and the impact of those on their mental health, insights on their current wellbeing, and signs for direct actions to safeguard them in the present. The zines safeguard voices of decent and human rights advocacy which were lost among conservative policies.

Zines require little resources, have a versatile format, they could make a healing journal or a care artifact, marginalized individuals and communities can find a platform where they can project insights messages and thoughts, which makes zines as powerful medium and tools, both at the hands of communities and practitioners, easily implemented marginalized an oppressed communities.

We are in the present in which our future can be predicted not by reading our DNA, but our home postal code. If your name is Fatima or Mohammed and your postal code is 81100 you do not have access to a preschool at all.

Plenary discussion:

Who is an activist and going beyond and activist terminology, the question is who can marginalized people trust, and who are the safeguards of human rights. Who gains trust and what do they do with it? The impact of having a detention center in a small community on an island is greater than it seems, what happens to our neighbors will soon start to impact, it is hard to be in a community and be hard removed from the problem itself. Discourses around trust are based on paradox because our senses are not sufficient anymore.

Hyperconnected societies. Find and form new alliances and sensibilities with our neighbors and for what is happening in the Amazon forest. This paradox of unsuitability of the discourse around trust, focusing on new alliances human and nonhuman.

Oriana: Art is not about decoration it is about strategy, politics, and administration, they need the art as other specialists, artists reveal how liberties and rights have to be different.

Taeyoon: critical to institutional art unless as a vehicle to create a condition for human dignity.

In a funding landscape of arts and culture funds and social justice, funders want to see the impact in different ways, we navigate both worlds we might be neglecting the people we are working for if we work for the approval of the funders.

Taeyoon: Dignity, the use of photography, museums and funders want to see images of your work, but it is unethical to make images of human suffering unless it is done with consent. To think about different structures for creativity and how to position ourselves as creators in that space.

Aris: How do we progress from care to healing because care might entail that there is a preservation of an unhealthy condition, healing entails discontinuation of the unhealthiness and art and art practices are fundamental in doing these transitions, data can give a good background to care, art can really deliver healing to those who experience it, are part of it, and are engaged with it.

Taeyoon: The struggle is to think about what is the meaning of the relationship you create through your project after the project is done. Meaning you enter a community as an "expert"

or artist and then you do amazing things, you take photographs and you leave and there goes into your website, talks and etcetera. But people who take part in these projects often do not benefit in the same way because you are gone.

The struggle is to balance between being a practitioner who can travel between communities or planting yourself in a community where you have a long term commitment and accountability for them, it would be regional and closed to work only in your own community, but at the same time the model of entering communities through art we are left with responsibilities of care that are beyond our capacity. The pragmatic solution has been to come back physically or with projects to the community, to redirect the funding so they can run it on their own, the artist is not the center of the project, the values and the intentions are the center. This would be a living project that can exist on its own, to think of ourselves as farmers planting a seed and letting the communities grow the plant on their own.

It is ok to create art that is not a permanent relationship with people as long as you are clear about it from the beginning. As a guest in the community not as a host, disappointment might come from the built-up trust.

Longevity and sustainability co-created from the outset with the community itself so they were the leaders of the idea, in authorship and leadership from the community, where the artists become facilitators and mediations that make the funds available.

Unfair to put so much weight on social practice, as if changing the world overnight and in a profound way, care and change take time.

6. Next steps (also in relation to arts-based productions)

transmediale

For the transmediale arts-based commission, the festival will work with UK based, Nigerian artist and architect Ibiye Camp. As digital technologies and automation increase productivity, and improve our lives, their impact on work and conditions of labour has raised debate about the extent of automation adoption. Building on the issues explored during the transmediale summer camp, Ibiye Camp's installation explores new societal shifts for women workers in Nigeria, and the impact of automation on knowledge and traditional handcraft. Reflecting on the history of Kalabari cloth in Buguma, Nigeria, Camp draws attention to the societal role that the fabric plays in Kalabari ceremonies, and the development of female creative craft practices in the region. The madras fabric, originally from India, is a lightweight cotton with a colourful patterned texture and a distinctive plaid design. The fabric has circulated through global trade, and evolved into a variety of designs as it is adopted by different communities. In the installation Remaining Threads, Camp explores how the technique known as Pelete Bite, where thread is pulled from the plaid Madras cloth thus redesigning the texture, has been increasingly carried out by machines. Today, Nigeria relies on textile imports from China, transforming labour practice and work conditions for craftswomen. Reflecting on these shifts and their implications for women's creative practice, social roles, technologies, and aesthetics, Ibiye Camp asks what is at stake in processes of automation and what traces of social and spiritual values remain? The installation

will be exhibited at the transmediale 2021-22 exhibition *abandon all hope ye who enter here* at Akademie der Kunste from Jan 26 - Feb 18, 2022.

Waag

For our 6.3 art-based production, the overarching goal is to make digital transformation more fair and beneficial for young people and children, who are rather vulnerable when it comes to influences from social media. Waag would like to work with Caroline Sinders and Tomo Kihara in developing a collaborative project with young people to promote digital literacy and competency about how the algorithms of social media work, how they influence the user's ideology and eventually our political choices. This project also aims at involving young people in imagining and experimenting with other forms of democratic participation via digital technologies. Through this project, we hope that young people would have agency to act differently instead of being manipulated and shaped by algorithms, and to act on their matters of concern.

The project would take shape in workshops, online interventions on social media such as tik tok, workshop manuals with visuals etc. This will take place in the summer of 2022.

FACT

For it's arts-based commission, FACT is producing a new participatory commission called *Following the Gourd*, with UK-based artist Ebun Sodipo and a group of LGBTQ+ young people in Liverpool.

This commission will be produced within FACT's Learning team whose participatory practice produces outcomes and artworks which are then showcased as major new works within FACT exhibitions and other contexts: asserting that these practices have a space at the centre of the gallery. Working with the artist at the centre and in collaboration with participants, the team considers not only the artwork but also the legacy of the projects, and how this might be served by the creation of online resources and related programmes of activities. Within this process the participants are the expert and work within a framework proposed by the artist, creating a space for the creation and sharing of knowledge.

Following the Gourd is based around an African-American spiritual song of the same name that allowed the enslaved to find the North star and follow it to freedom. The song references the code name, "the drinking gourd", for the guiding constellation Ursa Major (the Big Dipper). Within the lyrics of the song, references to a series of steps and landmarks are hidden, guiding those who hear or sign it to a safe place where they could be free.

Ebun's reason for wanting to reference this spiritual whilst working with a group of young people, and remember why it was used, is "A lot of people of colour don't have access to their own history, and when they do, it's dark and full of pain." and that she wants " to bring a history that doesn't hurt, a history that heals." This work will consider what experiences are recognised, validated and shared. It will focus primarily on the way young people use and experience online spaces, specifically how they create and share knowledge using social media.

Using this approach and inspired by the song *Following the Gourd*, the young people and Ebun will produce an online interactive constellation chart which archives and shares stories. Participants will construct the journey and narrative of the work using their own experiences of contemporary cultural references, especially those shared online and through social media. In doing so, they will develop an interactive constellation of artefacts that traces and captures their experiences, transforming them into an accessible archive for others to use and reference.

The archive, which takes the form of a web app, will be designed in collaboration with a small number of participants. During key moments, it will also be further developed and beta-tested by a wider group of participants who will edit and challenge the shape of the project and the ways in which it captures community stories.

The final work will be experienced both online as this web app, and also within FACT's galleries as part of the major group exhibition opening in March 2022, *Let the Song Hold Us*, which thinks about the important role song and storytelling play in the construction of our identities. Accompanying the work, the core group will work with Ebun and FACT to develop both online and inperson public programmes, as well as to create online resources to further unpack the project both conceptually and technologically.

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7. Appendix

Biographies of contributors to the programmes:

Transformer Summit

Evelyn Wan - Assistant Professor at the Department of Media and Culture Studies at Utrecht University. She conducted postdoctoral research at the Tilburg Institute for Law, Technology, and Society at Tilburg University. She graduated cum laude from her PhD programme with her dissertation, "Clocked!: Time and Biopower in the Age of Algorithms", and was awarded a national dissertation prize by the Praemium Erasmianum Foundation in the Netherlands in 2019. Her work on the temporalities and politics of digital culture and algorithmic governance is interdisciplinary in nature, and straddles media and performance studies, gender and postcolonial theory, and legal and policy research.

Caroline Sinders - Caroline Sinders is a machine-learning-design researcher and artist. For the past few years, she has been examining the intersections of technology's impact in society, interface design, artificial intelligence, abuse, and politics in digital, conversational spaces. Sinders is the founder of Convocation Design + Research, an agency focusing on the intersections of machine learning, user research, designing for public good, and solving difficult communication problems. As a designer and researcher, she has worked with Amnesty International, Intel, IBM Watson, the Wikimedia Foundation, and others. Sinders has held fellowships with the Harvard Kennedy School, the Mozilla Foundation. Her work has been featured in the Tate Exchange in Tate Modern, Victoria and Albert Museum, MoMA PS1, LABoral, Ars Electronica.

Andrius Arutiunian -Andrius is an Armenian-Lithuanian sound artist and composer based in The Hague (NL). His works use hybrid media and technologies of automation, dealing with sonic artefacts, aural identities, and fluid digital presences.

Jack Tan - Jack Tan makes work that explores the connection between the social, the legal and art. Using social relations and cultural norms as material, he creates performances, performatives, sculpture, video and participatory projects that highlight the rules — customs, rituals, habits and theories — that guide human behaviour. https://jacktan.wordpress.com/

Rachel Higham - Rachel Higham, WPP CIO joined WPP in Dec 2020 to lead the creation of a new global IT organisation and lead a multi-year digital transformation programme. Over the past 25 years, Rachel has served in technology leadership and transformation roles at ABN Amro, M&S Money, HSBC, ACE Group and BT, and has worked across EMEA, ASPAC, NA and LATAM.

Rachel is passionate about building diverse teams and inclusive cultures and giving back through volunteering. She has been named as one of the top 30 Global Executives driving gender equality by HERoes, and one of the top 10 Inspirational Leaders at this year's British LGBT awards. Rachel has served as the chair of the Board of Trustees at FACT since 2016.

Jane Wentworth - Jane Wentworth is the founder of Jane Wentworth Associates which provides specialist consultancy to the cultural sector, embracing the visual and performing arts, museums, cultural tourism and higher education. She had 30 years of experience developing brand strategies for international clients from Virgin Atlantic to Orange, before moving on to help cultural clients including Tate, the V&A, the Smithsonian and Scottish Opera - to flourish, by articulating where they want to be in future, the unique story they want to tell and the difference they want to make to the world. A graduate of the Royal College of Art, Jane has been a Trustee of Chisenhale Gallery, the British School at Rome and the University of the Creative Arts. She is currently a Trustee of the Longplayer Trust and writes about brand related issues at international conferences and in the media.

Angeliki Diakrousi - Angeliki's work engages critically with notions of listening and dynamics of public realms. She is curious, often together with others, about collective memory and public grief, politics of urban landscapes, technological potentialities of voices, high frequencies, critical tools, archipelagic communal practices, networks and infrastructures. She is currently streaming through Varia Broadcasts, hacking within the Feminist Hack Meetings and developing collective platforms in Social Practices of Willem de Kooning Academy. A recent collaboration with Katarina Jazbec, for her film 'You Can't Automate Me', brought her closer to readings on automated bodies.

Taeyoon Choi - Taeyoon is an artist and educator who works with drawing, painting, computer programming, performance art, and video. He explores the poetics of science, technology, society, and human relations. He believes in the intersectionalities of art, activism, and education; and he supports disability justice, environmental justice, and anti-racism. As a co-founder of the School for Poetic Computation in New York City, he helped build the school's curriculum and administration. Now he is based in Seoul, South Korea. Taeyoon's solo exhibitions include those at Eyebeam Art and Technology Center, NY; Spanien 19c, Aarhus, Denmark; and Art Space Hue, Seoul, South Korea. His works have also been featured in group exhibitions at Nam June Paik Art Center, South Korea; the Shanghai Biennale, China, and performance at the Whitney Museum of American Art, NY, among others.

Oriana Persico and Salvatore Iaconesi - Oriana Persico is a cyber-ecologist, autobiographer and expert in digital inclusion. Salvatore Iaconesi is an interaction designer, robotics engineer, artist, hacker. Living and working together since 2006 under the brand [AOS - Art is Open Source], they created artworks and performances of global interest united by the exploration and observation of contemporary technological human beings and societies — and their continuous mutation. Promoting a possibilistic vision of the world in which art is the glue between science, politics, anthropology and economics, they are the founders of Nuovo Abitare and HER, the two research centers they use to study the psychological and social implications of data and computation in human societies.

Together, they wrote Digital Urban Acupuncture (Springer, 2016), La Cura (Codice Editore, 2016).

Aris Papadopoulos - Aris is an architect and an engineer that graduated from the Architectural Association School of Architecture in London and further specialized in the Management & Economics of Innovation in University College London. He is the founder of LATRA, an award-winning incubator specializing in socially responsible projects that promote innovation, technology and entrepreneurship in the humanitarian sector. In response to the world's largest humanitarian crisis, Aris established LATRA inside a refugee camp in his native island of Lesbos (Greece), in order to challenge the frontiers of innovation, technology and entrepreneurship in the humanitarian sector. He has been awarded a Start-Up Grand and two Internationalization Programs by the Creative Industries Fund in the Netherlands, as well as a Culture & Art Program by the Nordic Council of Ministers. Aris is a member of the global UNICEF Design Pool.

Transmediale summer camp:

Ahmed Isamaldin is a visual artist-designer and blogger from Khartoum, based in Berlin. He studied physics at the University of Khartoum as well as graphic design and photography in Cairo. His practice focuses on immigration and psychology, the processes of revolutions, de-colonial design, and technology. He participated in various exhibitions between Khartoum, Cairo, and Berlin, and is currently studying Visual Communication at Weißensee Kunsthochschule Berlin.

Aaron Benanav is a researcher at Humboldt Universitat zu Berlin. He is the author of Automation and the Future of Work, which appeared in November 2020 with Verso Books. A German translation with Suhrkamp is forthcoming this autumn. Aaron Benanav has written for Nation, The Guardian, and Dissent, Endnotes, Logic Magazine, and the New Left Review.

The Mycological Twist is a project by Eloïse Bonneviot and Anne de Boer, operating both as a fixed mushroom garden and as a nomadic project, infecting and spreading mycelium alike. Since 2019 the garden is located on a balcony in Berlin. The projects initiated by The Mycological Twist can be seen as a place to investigate the cycle of deterioration and regeneration happening in zones of Dark Ecology.

Xenia Chiaramonte is a jurist, socio-legal scholar, and author of *Governare il conflitto: La criminalizzazione del movimento No TAV* (Governing conflict: The Criminalization of the No TAV Movement, 2019). She is an ICI Berlin Fellow 2020–2022, currently working on a potential ecological approach to law and social movements: "Instituting Nature". Recently, she experimented with science-fiction through the tale *Greetings from the Undergrowth*, e-flux architecture.

Laura Cugusi is an artist, writer, researcher and producer. After studies in media, politics, sociology and urban design, she has been working in research and reporting, documentary photography and video production, project management and programme design with artists, collectives, international organisations, urban initiatives, NGOs, academic and art institutions and media platforms in Egypt, Italy, Morocco, Spain, Greece, the UK and Germany.

Constant Dullaart is a conceptual artist exploring the intersections between art and technology in our modern digital age. He has used his artistic abilities to explore the ways in which the Internet has informed and manipulated our relationship with art and image. Dullaart investigates how art functions in this new digital space and how in turn the rules of authorship and originality are defined.

Sarah Grant is Visiting Professor of New Media at the Kunsthochschule Kassel, member of the Weise7 studio in Berlin, and founder of the interactive media studio Cosmic.Berlin. She is currently a Digital Fellow at the Weizenbaum-Institut in Berlin. Her teaching and arts practice engages with the electromagnetic spectrum and computer networks as artistic material, social habitat, and political landscape.

Parrr Geng grew up in a small town on the Yangtze River Delta and now lives in Berlin. She holds a BSc. in Biological Sciences from Fudan University and a MSc. in Biochemistry from National University of Singapore. She is currently interested in speculative biology and world building through video games or illustrated stories. Her recent work includes visual design for *The Shape of a Practice*, HKW and Postrational Foundation.

Kei Kreutler is a writer and artist interested in how cultural narratives of technology shape their use. She leads strategy at Gnosis, a network of teams building the web3 software stack for decentralised organisations (DAOs). She also contributes to the Other Internet research group and sits on the Board of Regen Foundation.

Laura Lotti is a researcher investigating the transformations of monetary technologies in relation to economic and cultural formations. Her current work focuses on the mimesis and memetics of desire in markets and their effects on the reconfiguration of ecosystems of value. She cofounded Black Swan, an experiment which is developing modules to facilitate artist-led p2p decision making and funding.

Mariam Mekiwi is a filmmaker and film editor from Alexandria, Egypt. She completed her MFA in film at the Hochschule Für Bildende Künste in Hamburg (HfbK) in 2017. Her fiction film *Abl Ma Ansa* premiered at the Berlinale's Forum Expanded section in 2018 and was nominated for the First Steps Awards of the German Film Academy in the same year.

Bassem Saad is an artist and writer trained in architecture. His work explores objects and operations that distribute violence, pleasure, welfare, and waste. Through video, sculpture, and writing, he investigates and records strategies for manoeuvring within and beyond present systems of governance. He is also an editorial team member at FailedArchitecture.

Juan Pablo García Sossa is a designer, researcher and artist exploring the clash between emerging technologies and grass-root popular culture in tropical territories. JPGS is a design research member at SAVVY Contemporary The Laboratory of Form-Ideas' Design Department in Berlin and Co-Director of Estación Terrena, a space for Arts, Research and Technologies in Bogotá.

Danja Vasiliev is a media artist, critical engineer and educator. He studies Systems and Networks through anti-disciplinary experimentation with hardware, firmware and software. Using computational platforms he engages in examination and exploitation of System and Network paradigms in both the physical and digital realms. Based on these findings, Vasiliev creates and exhibits works of Critical Engineering.

Trakal is a filmmaker, writer and participatory artist. Through collaborative process, performative rituals, historical interrogation and psychodynamic research, Trakal develops films, texts and installations that deal with the impact that neoliberal subject production, post-socialist processes and surveillance technology have on the formation of communities.

Framework for Trust:

Andrius Arutiunian is an Armenian-Lithuanian sound artist and composer based in The Hague (NL). His works use hybrid media and technologies of automation, dealing with sonic artefacts, aural identities, and fluid digital presences. http://andriusarutiunian.com

Annie Jael Kwan is an independent curator and researcher whose exhibition-making, programming, publication and teaching practice is located at the intersection of contemporary art, art history and cultural activism, with interest in archives, histories, feminist, queer and alternative knowledges, collective practices, and solidarity. https://anniejaelkwan.com/

Angela YT Chan is a 'creative climate change communicator', working as an independent researcher, curator and artist. Her work reconfigures power and knowledge in relation to the inequity of climate change, through communal self-archiving of minoritised climate histories and contemporary experiences. Since 2014, Angela has produced exhibitions, curatorial projects and workshops asWorm: art + ecology, collaborating with artists, activists and youth groups. http://www.angelaytchan.com

Keiken are a cross-dimensional collaborative practice (Hana Omori, Isabel Ramos and Tanya Cruz), whose practice merges the physical with the digital by building online worlds and augmented realities for you to experience, often through face filters hosted on Instagram. The collective are based across London and Berlin, working with virtual reality, augmented reality, performance and gaming engines to explore new fictional presents and futures. www.instagram.com/ keiken

Tessa Norton is an artist and writer based in West Yorkshire. Her work playfully explores cosmic and expansive worlds using unlikely theoretical frameworks like pop music, teen movies and ghost stories. https://tessanorton.co.uk/

Yambe Tam is an artist whose creative practice centres around the evolution of consciousness in living and artificial beings. Her artwork takes the form of virtual spaces and immersive sculptural installations, and is informed by the fields of sensory ecology, evolutionary biology, cognitive science, and theoretical physics, as well as her practice of Zen Buddhism. https://www.yambetam.com/

Shonagh Short is a socially engaged artist based in Bolton, Greater Manchester. They make participatory, playful work that uses language in its widest sense, including metaphor and everyday visual language, as a lens to explore class, gender and society. They have been making site-specific work with marginalised communities since 2014. https://www.shonaghshort.com/

Linda Stupart is an artist, writer and educator from Cape Town in South Africa. They live in Birmingham in the UK, a place people think is terrible, but they really love. Their work is about bodies, ideas, and things, that don't fit into near categories, that move between states – like bleeding women; genderqueer people; and melting icebergs. http://lindastupart.net/

Ayesha Tan Jones' work is a spiritual practice that seeks to present an alternative, queer, optimistic dystopia. They work through ritual, meditating through craft, dancing through the veil betwixt nature and the other. Ayesha weaves a mycelial web of diverse, eco-conscious narra-

tives which aim to connect, enthrall and induce audiences to think more sustainably and ethically. Traversing pop music, sculpture, alter-egos, digital image and video work, Ayesha sanctifies these mediums as tools in their craft. https://www.ayeshatanjones.com/

Ebun Sodipo is a London based artist making work for those who will come after: the black trans people of the future. Her interdisciplinary practice narrates her construction a black trans-feminine self after slavery and colonialism. Through a process of fragmentation, collage, and fabulation, she devises softer, other-wise ways of imagining and speaking about the body, desire, archives, and the past. https://www.ebunasodipo.com/

















