



**Artistiek en
ontwerpend
onderzoek**

PUBLIC RESEARCH

AWTI

@marleenstikker

@Waag



waag

MISSION BOARD EU Carbon Neutral and Smart Cities

“by and for the citizens...”

“role of citizens engagement of
citizens in the development of
the Missions”

Mariana Mazzucato

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Public Purpose*

MEETING OF THE ASSEMBLY AND THE BOARD OF THE ‘CLIMATE- NEUTRAL & SMART CITIES’ MISSION

11 February 2020
13:30 – 17:00

Borschette Building (room 2.A)
1040-BRUSSELS

DRAFT AGENDA
v 04.02.2020

	REGISTRATION AND LUNCH	12:00
1.	Welcome and opening by the Chair and the Deputy Director General Patrick Child, Directorate-General for Research and Innovation	13:30
2.	Presentation of the Mission proposal on ‘100 Climate Neutral Cities by 2030 - by and for the citizens’ and feedback from stakeholders	14:00
3.	Working-group discussion: <ul style="list-style-type: none">- Presentation of the choreography (10 min)- Group discussion¹ (45 min)- Reporting from each group (25 min)- General discussion (30 min)- Conclusions and next steps (10 min)	14:30
4.	Next steps and the role of citizens engagement in the development of the Mission	16:30
5.	Questions and answers	16:45
6.	Conclusions	17:00

¹ Mission Board and Assembly will be discussing in smaller groups focusing on a specific question.

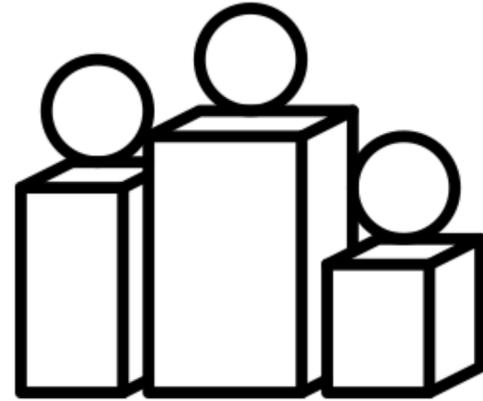
public research



academic research

matters of fact

Disciplinary heritage
Scientific community
Objectivity framing



public research

matters of concern

Interdisciplinary approach
Society as research community
Cultural framing

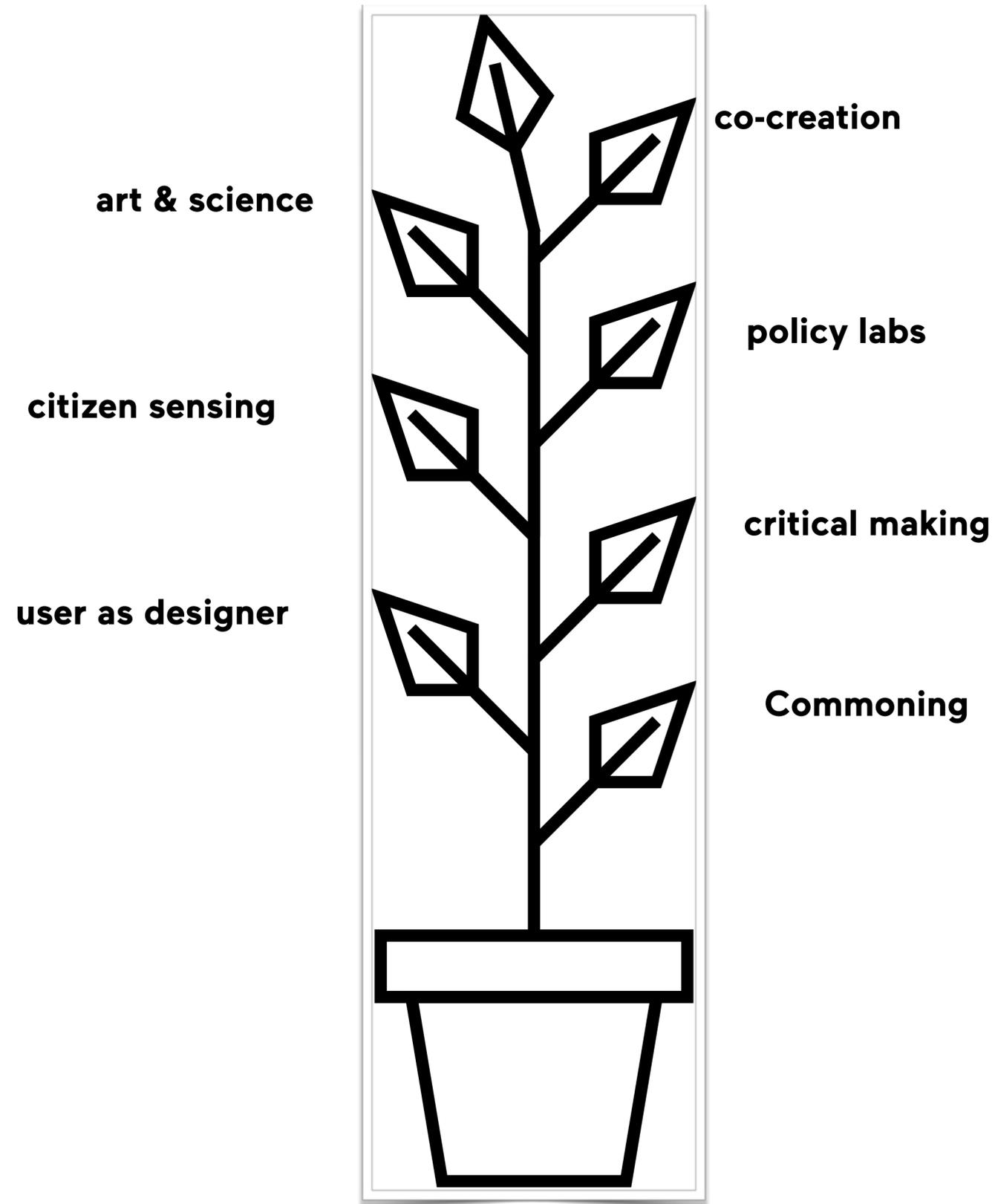


industry research

matters of interest

Solutionist approach
Market validation
Utilitarian framing

public research



Art-science Beide hebben een uniek vermogen om ons begrip van de wereld te vormen. De samenwerking levert aan weerszijden nieuwe inzichten en leidt tot nieuwe hybride vormen van kennis en presentatie.

Citizens Sensing werken samen om handelingsperspectief terug te winnen. Ze eigenen zich *IoT*-technologie toe om hun omgeving in kaart te brengen, en zo invloed te hebben op de processen die onze wereld vormen.

Co-creatie is een ontwerpmethode waarbij alle stakeholders met hun relevante kennis en ervaring betrokken worden in een ontwerpproces.

Critical making mobiliseert het vermogen van maak-praktijken in kunsten, ontwerp en wetenschap voor kritische reflectie op technologie in de samenleving.

Commoning richt zich op culturele waarden en het beheer van bronnen door gemeenschappen. Commons bevorderen *bottom-up*-initiatief en moedigen zelfbeschikking aan door culturele en economische praktijken samen te brengen.

liminal

/ˈlɪmɪn(ə)l/ 

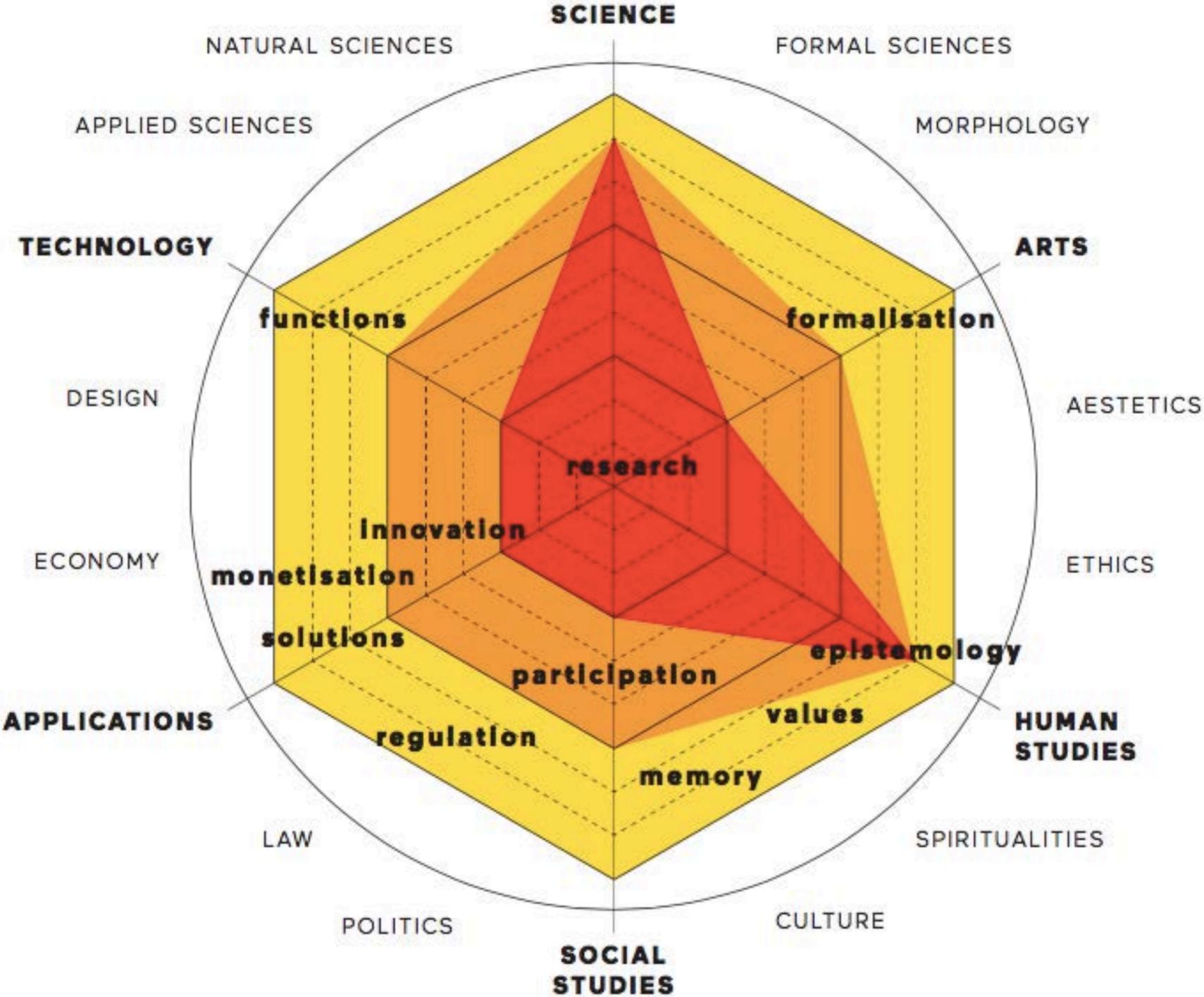
adjective technical

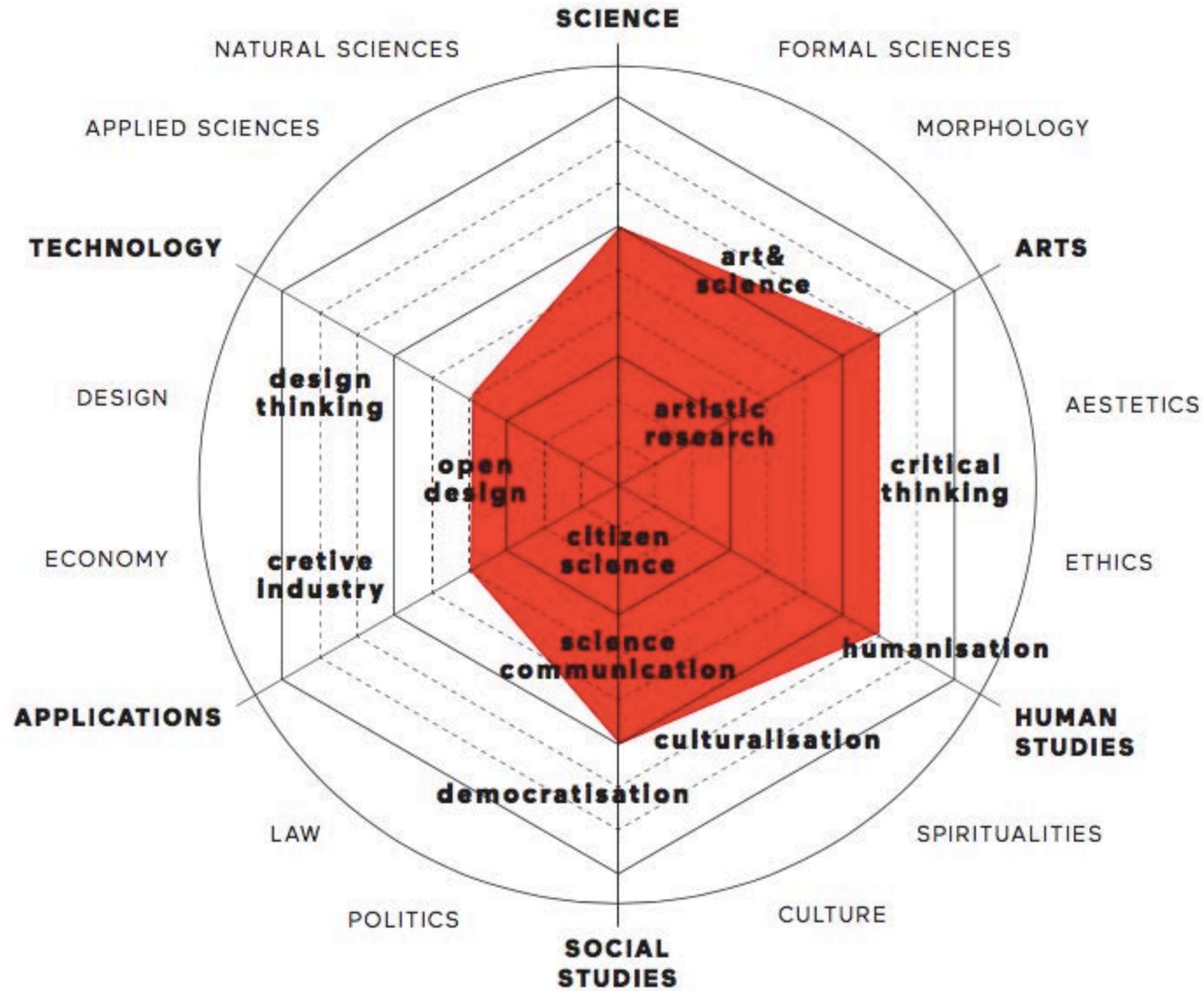
adjective: liminal

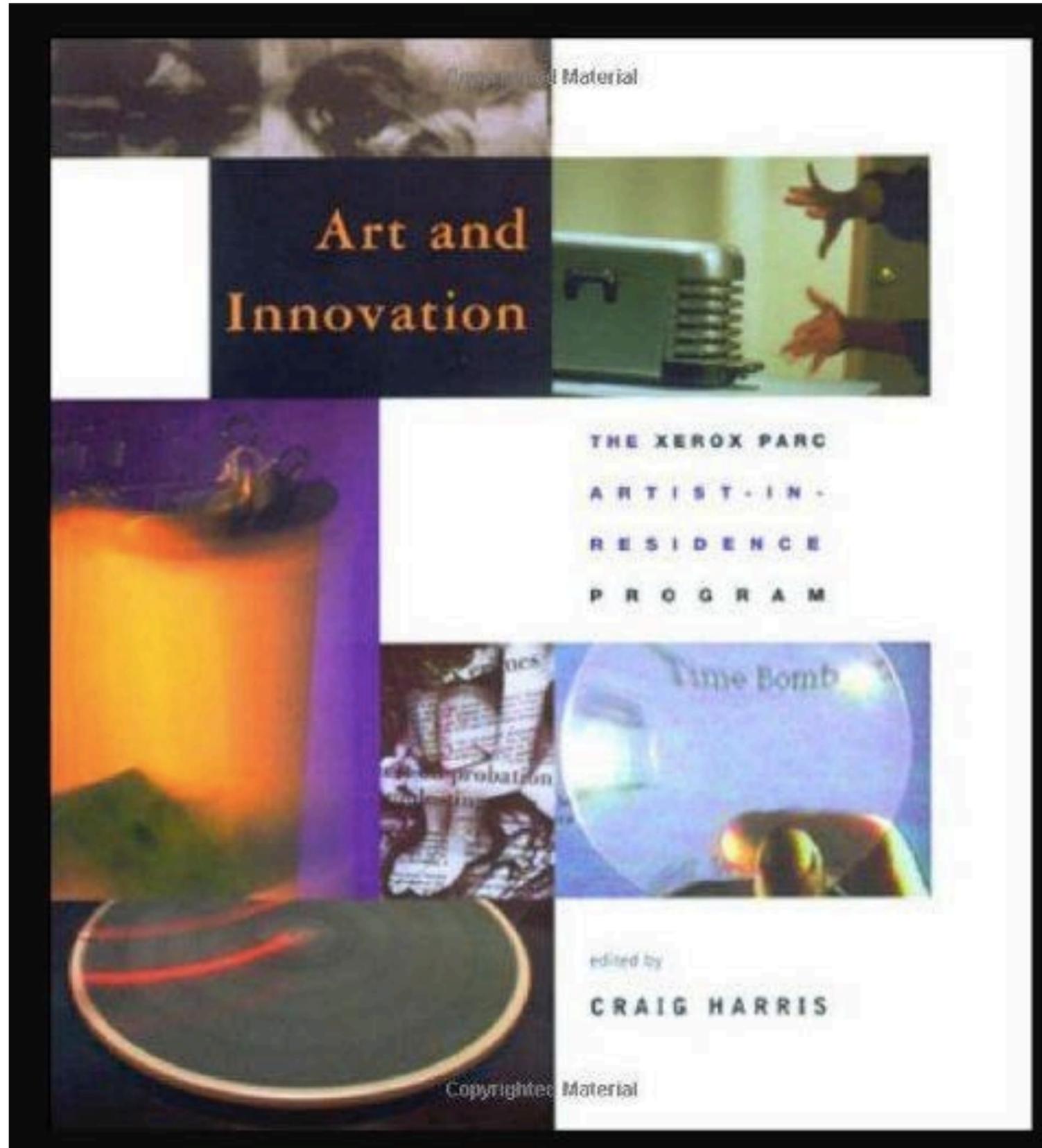
1. relating to a transitional or initial stage of a process.
2. occupying a position at, or on both sides of, a boundary or threshold.

Art-Science

Miha Turšič / Waag







Art-Science

“The PAIR program invites artists who use new media into PARC and pairs them with researchers who often use the same media, though often in different contexts.

The output of these pairings is both interesting art and new scientific innovations. The artists revitalize the atmosphere by bringing in new ideas, new ways of thinking, new modes of seeing and new contexts for doing.

This is radically different from most corporate support of the arts, where there is little intersection between the disciplines. It takes a bit of faith on both sides, and a belief that both science and art can use a

Art-Science

The Hands (1984)

Michel Waisvisz, STEIM

One year after the MIDI standard had been introduced, Waisvisz built the first experimental interface making use of sensor data converted into MIDI. The two wooden frames attached to both hands let him play music with hand and arm movements, tilting gestures, and fingered playing.

Converting analog sensor data into digital musical data has become a major issue at STEIM in the 1990s, introducing the mini computer The SensorLab



for
preview
only

Art-Science

I/Eye - Bill Spinhoven 1993

“Although we are generally unaware of it, our daily comings and goings are constantly being monitored by cameras and other surveillance-equipment: whether we're in a bank, at an airport, in a museum or a supermarket, our presence is being registered and checked-out practically round-the-clock, as if we were all potential criminals. Big Brother is watching you, or rather peeping surreptitiously at you - the interactive 'I/Eye' however, gazes at you quite openly with the naked eye. 'I/Eye' is a giant eye that fills the entire screen of a video monitor. Not only does it look directly at you, it follows you and actually moves with you. Initially, you think that you are the observer, but then you realise that you yourself are also being observed.”

Critical Making

De Digitale Stad 1993 - 1996



Art-Science

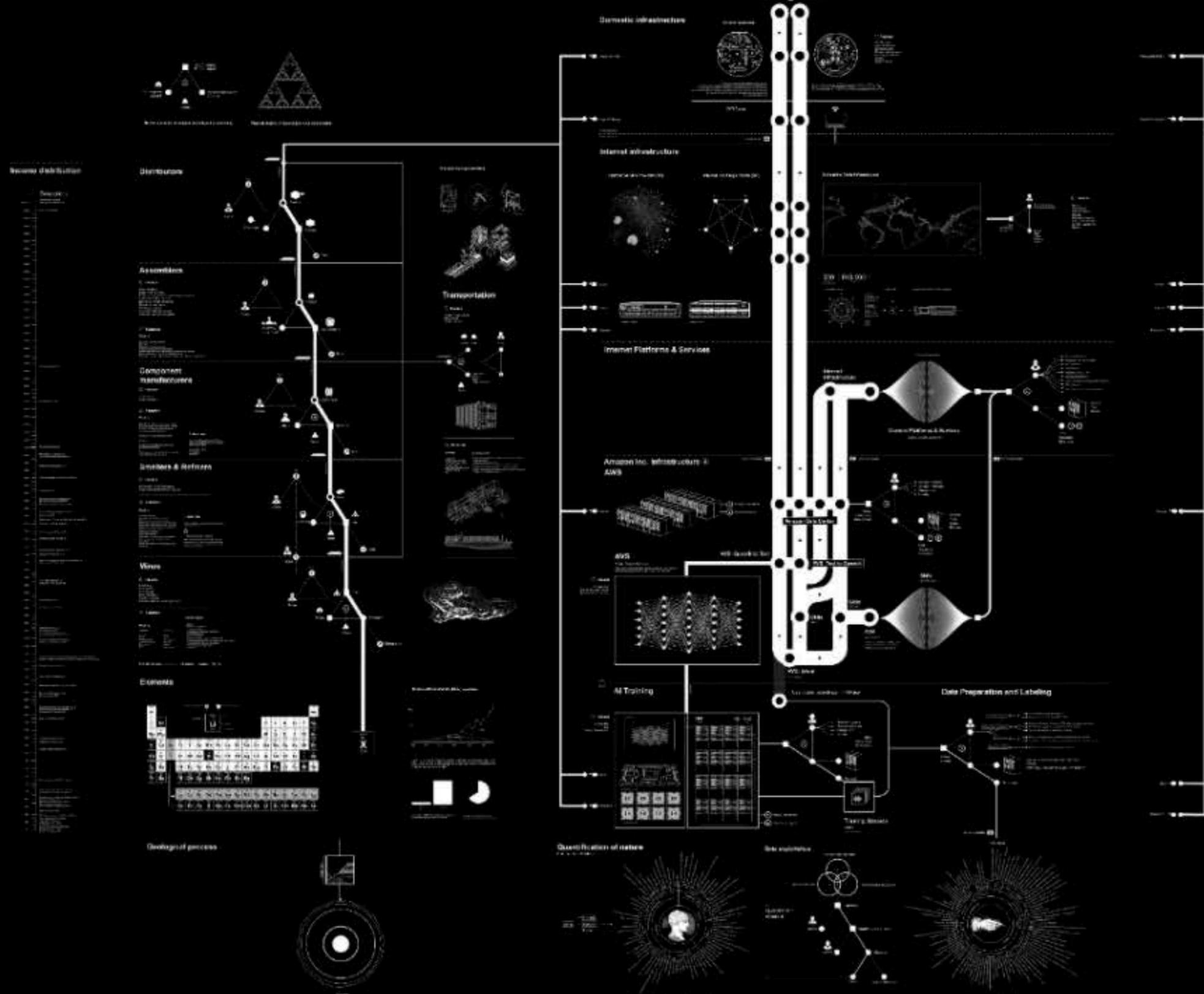
Amsterdam RealTime (2002)
by Esther Polak, Waag,
Jeroen Kee, Tom Demeyer,
Michael van Eeden

GPS and GPRS entered the world of art and culture. During two months, citizens of Amsterdam's were invited to be equipped with a tracer-unit. This was a portable device developed by Waag, equipped with GPS. Using satellite data the tracer calculated its geographical position. Tracers' data was sent in realtime to a central point. By visualizing the data against a black background traces, lines, appeared. From these lines a (partial) map of Amsterdam constructed itself.



Anatomy of an AI system

An anatomical case study of the Amazon echo as an artificial intelligence system made of human labor



Art-Science

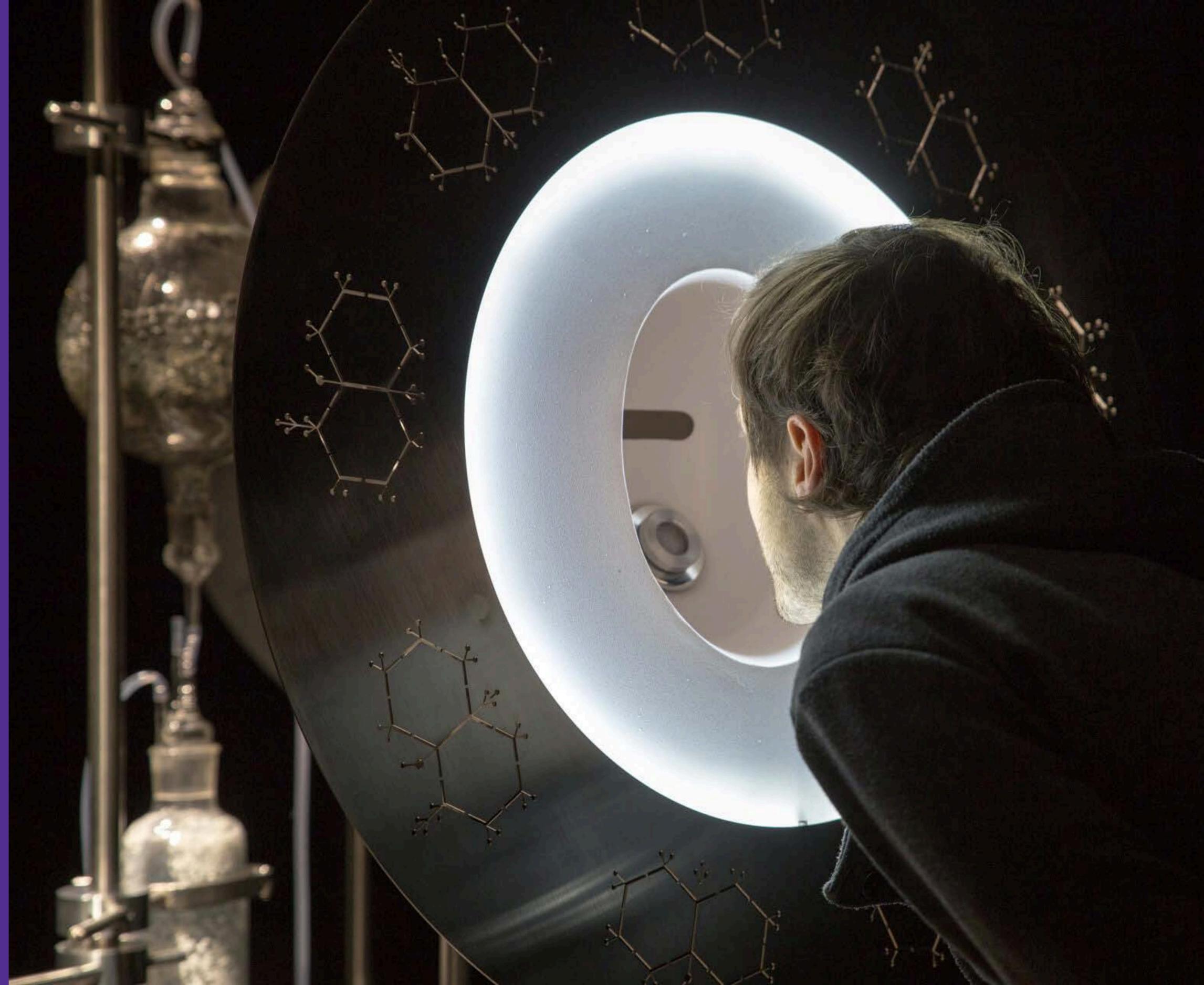
Anatomy of an AI system
Kate Crawford, Vladan Jole - <https://anatomyof.ai/>

“... each small moment of convenience – be it answering a question, turning on a light, or playing a song – requires a vast planetary network, fueled by the extraction of non-renewable materials, labor, and data ...”

Art-Science

Meta_bolus' by Saša Spačal

Saša Spačal is a postmedia artist working at the intersection of living systems research, contemporary and sound art. Her work focuses primarily on the posthuman condition, where human beings exist and act as one of many elements in the ecosystem and not as sovereigns. Therefore abandoning the Cartesian system of classification and accepting the fact that the field of technology has expanded not only from hardware to software but also to wetware resulting in hybrid phenomena inscribed in mechanical, digital and organic logic.





Art-Science

Anti-surveillance clothing - Adam Harvey (2017)

The clothing uses ghostly coloured patterns of digitalised faces to trick facial recognition software.

The patterns confuse facial recognition systems by overwhelming them with too many false 'faces' to read at once

Critical Making

Open Surgery (2016)
Frank Kolkman

Frank Kolkman investigates whether DIY surgical tools could plausibly support more accessible alternatives to the often costly medical health services worldwide. Inspired by the discovery of a slew of YouTube video's in which uninsured Americans can be seen performing basic operations for others to imitate, the project extrapolates on this phenomenon by proposing a DIY robot assisted surgery system for domestic keyhole surgery.



Critical Making

Facebook Farewell Party 2014

Institute for Networked
Cultures, Stadsschouwburg
Waag,

Manifestatie over surveillance
kapitalisme en campagne om
Facebook te verlaten. Krijgt in
2018 een vervolg in de actie
van Arjen Lubach/VPRO



Critical Making

Makermovement

Repairbeweging, open the
black box



Critical Making

Toaster Project
Thomas Thwaites

I'm Thomas Thwaites and I'm trying to build a toaster, from scratch - beginning by mining the raw materials and ending with a product that Argos sells for only £3.99. A toaster.

Part of the project consists of finding the places where it's possible to dig up these raw materials. Mining no longer happens in the UK, but the country is dotted with abandoned mines, some having been worked since before the 'UK' existed, but all currently uneconomical.



Critical Making

Fabcity

Fablab Barcelona, Fablab
Waag, Pakhuis de Zwijger

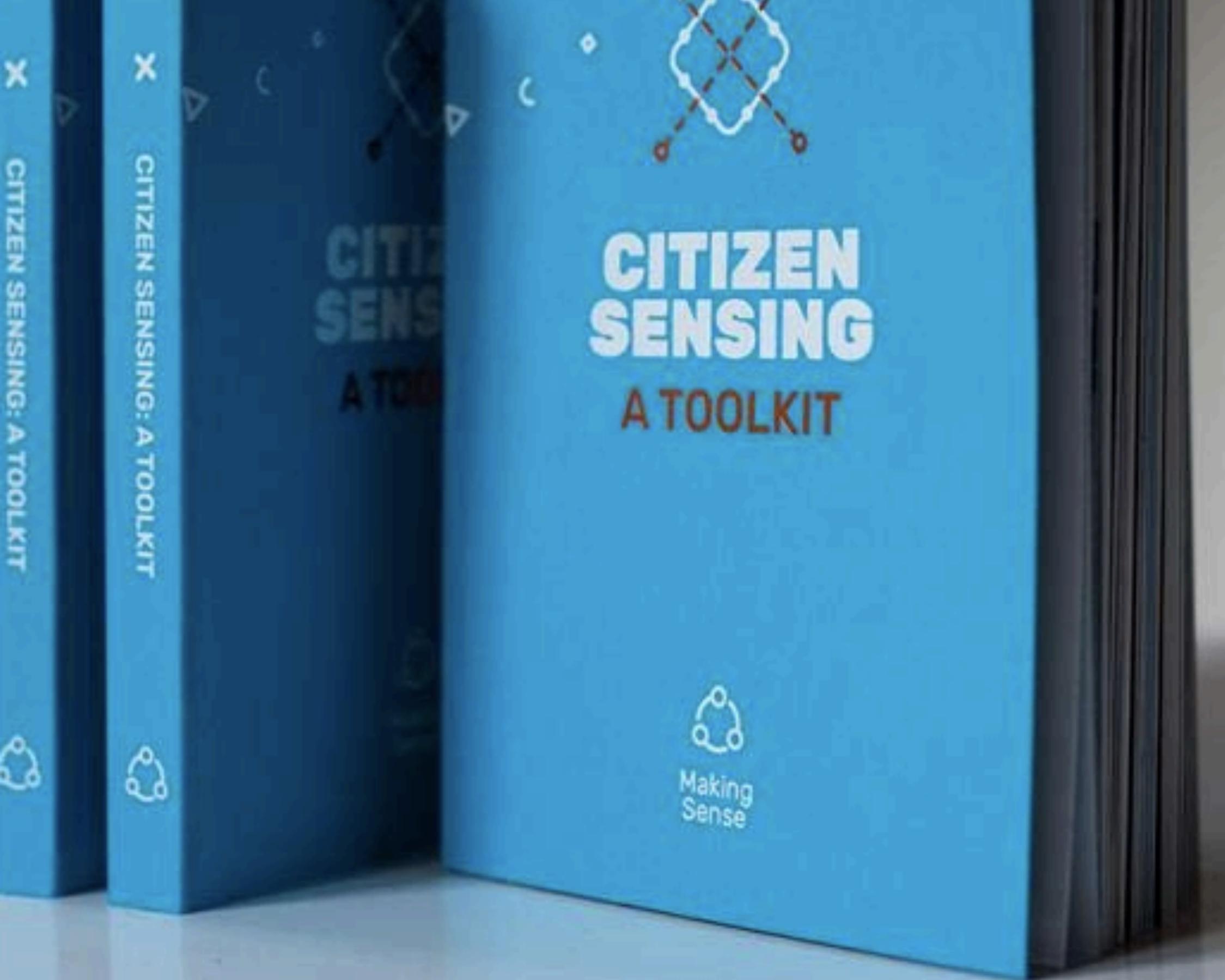
Distributed manufacturing
Commons in the city

THE FAB CITY MANIFESTO

- 1 ECOLOGICAL**
We take an integrated approach to environmental stewardship, working towards a zero-emission future while also preserving biodiversity, rebalancing the nutrient cycle, and sustaining natural resources.
- 2 INCLUSIVE**
We promote equitable and inclusive policy co-design, through the development of a Commons Approach, regardless of age, gender, income-levels and capabilities.
- 3 GLOCALISM**
We encourage global knowledge sharing between cities and territories in order to provide access to tools and solutions that could be adapted to local cultures and needs.
- 4 PARTICIPATORY**
We engage with all stakeholders in decision-making processes and empower citizens to take ownership of innovation and change-making.
- 5 ECONOMIC GROWTH & EMPLOYMENT**
We support sustainable urban economic growth by investing in building the skills, infrastructure and policy frameworks needed for the 21st century, thanks to a thorough consideration of social and environmental externalities and the implementation of the polluter pays principle.
- 6 LOCALLY PRODUCTIVE**
We support the efficient and shared use of all local available resources in a circular economy approach, to build a productive and vibrant city.
- 7 PEOPLE-CENTRED**
We give priority to people and culture over technology, so that the city can become a living and resilient ecosystem. Autonomous vehicles, digital tools, artificial intelligence and robotic machines must be placed at the service of the people's well-being and expectations.
- 8 HOLISTIC**
We address urban issues in all their dimension and interdependencies to build sustainable, resilient and inclusive cities for everyone.
- 9 OPEN SOURCE PHILOSOPHY**
We foster a Digital Commons Approach that adheres to open source principles and values open data, in order to stimulate innovation and develop shared solutions between cities and territories.
- 10 EXPERIMENTAL**
In order to meet the principles just outlined, we actively support the research, experimentation and deployment of innovation which includes but is not limited to: low impact supply chains; distributed production; renewable energy and smart grids; sustainable food and urban agriculture; recycling and reuse of materials, sustainable resource management for energy, food and materials.

These proposals have been drafted with the collaboration of Fab city global initiative members.



Citizens Sensing

Toolkits

New collaborations



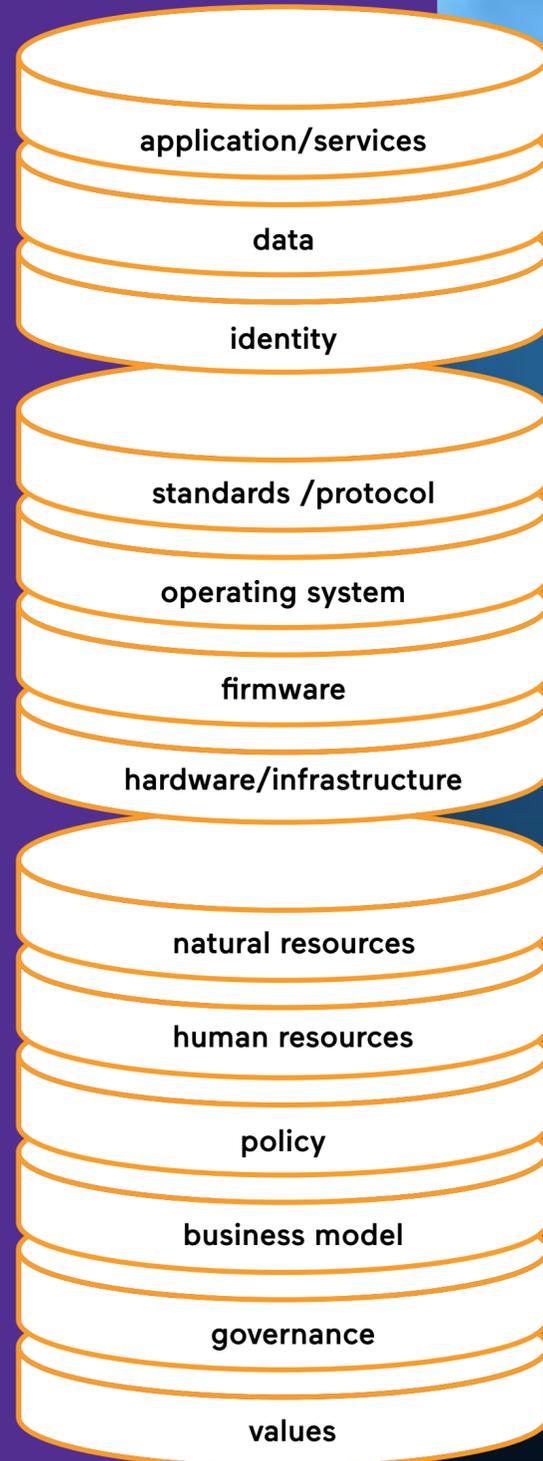
Co-creatie, Citizens Sensing

Hollandse Luchten, hét burgerplatform voor het meten van leefomgeving in Noord-Holland

Via diverse pilots, burgermetingen en evenementen brengen we de leefomgeving van Noord-Holland in kaart en zetten we deze gezamenlijk om in actie. Door data samen te verzamelen, zullen we ook samen op zoek gaan naar oplossingen. Deze aanpak noemen we *citizen sensing*. Hollandse Luchten maakt gebruik van experimentele technologie en onderzoekt de waarde van nieuwe sensortechnologie voor inwoners van Noord-Holland.

Next Generation Internet

Public
Stack
citizen

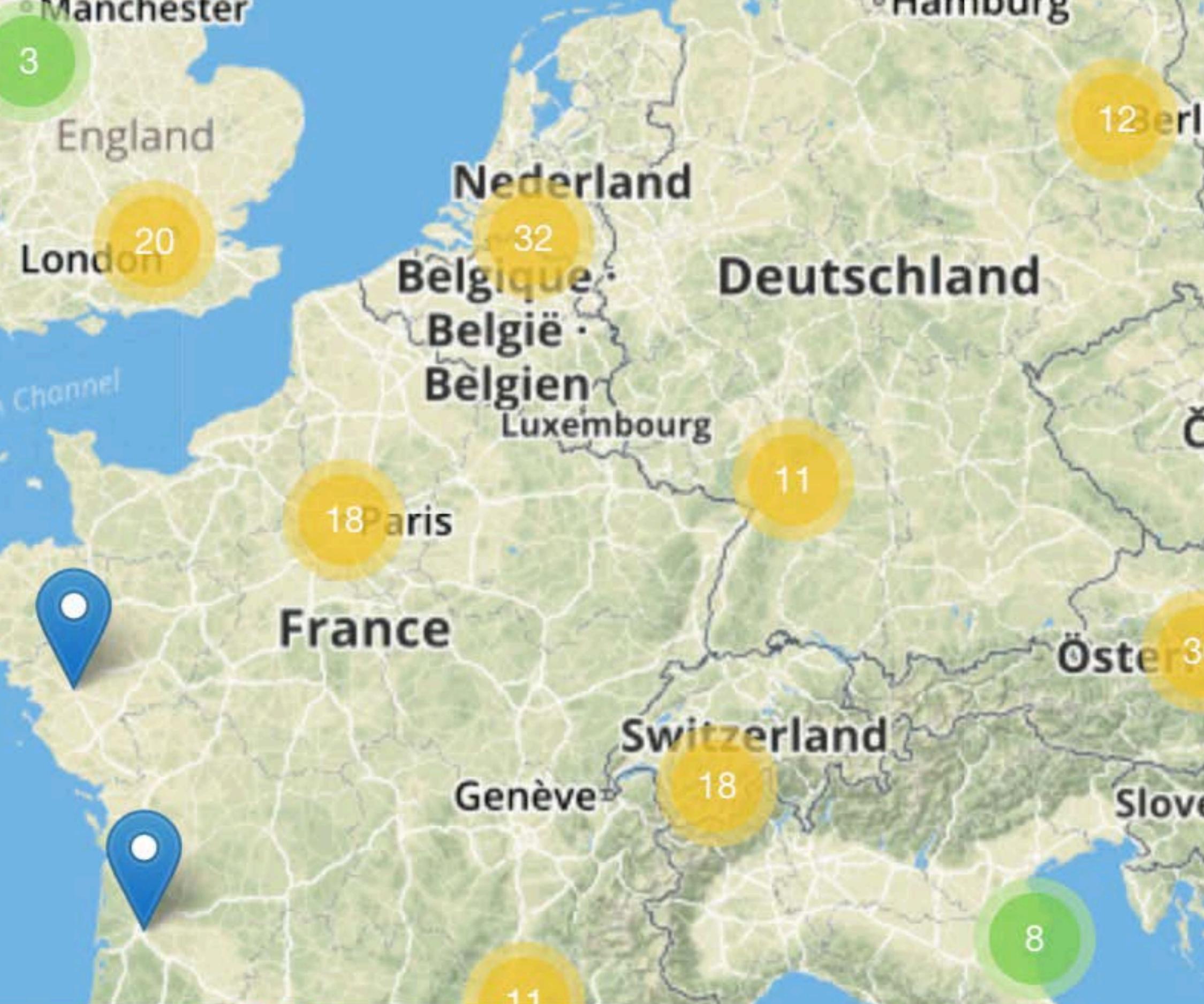


open tech

public
values

application

- open/public
- accountable
- non extractive
- data minimalisation
- society in control
- fair & sustainable



STARTS PROGRAM EU

STARTS -Science +Technology +Arts -is about thinking out-of-the-box and building bridges between these three fields.

With disruptive methods of exploration and an accurate critical eye on the use of technology, artists decisively raise awareness of the societal challenges and global concerns we are facing.

STARTS is driven by the conviction that science and technology combined with an artistic viewpoint also open valuable perspectives for research and business, through a holistic and human-centered approach.

BELEID

1. Public Research & engagement: Future Fund / Missions: 20%
2. STARTS NL Programma
3. STARTS Hubs NL
4. Open NWO/NWA voor ontwerpend en artistiek onderzoek



waag

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Tekst