CREATIVE METHODS FOR FORESIGHT

Activating the rigorous imagination for anticipatory policy?

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AUSTRIAN INSTITUTE OF TECHNOLOGY
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Fraunhofer ISI
Competence Center Foresight

OVERVIEW

A short introduction to *creative methods*

A systematization

A case study

ASSUMPTION

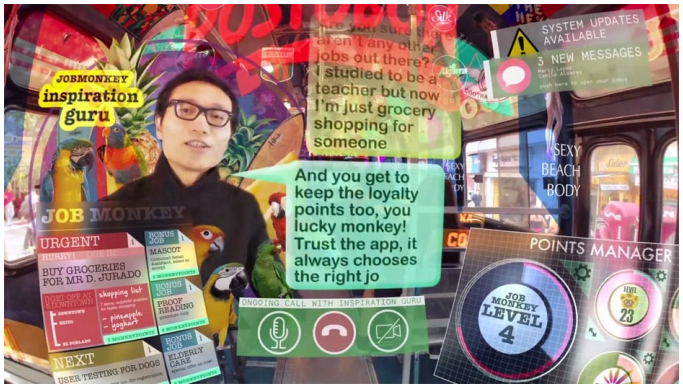
Creative futures methods and approaches will continue to proliferate into new arenas including policy development in different contexts (public and private) and at different layers of governance.

WHAT ARE CREATIVE METHODS IN FORESIGHT?

Experiential Futures, Speculative Design, Design Fiction, Participatory Speculation

Marco Janssen – DryLab 2023 (2017)

Ai Hasegawa – I Wanna Deliver a Shark (2011)



Keiichi Matsuda – Hyper-Reality (2016)

IMPLICIT PROMISES FOR THE USE IN POLICY CONTEXT

Creative methods are sexy (creative bureaucracy vs. bureaucratic art)

Creative methods allow to explore different futures

Creative methods engage stakeholders (low threshold)

Creative methods can result in estranging perspectives

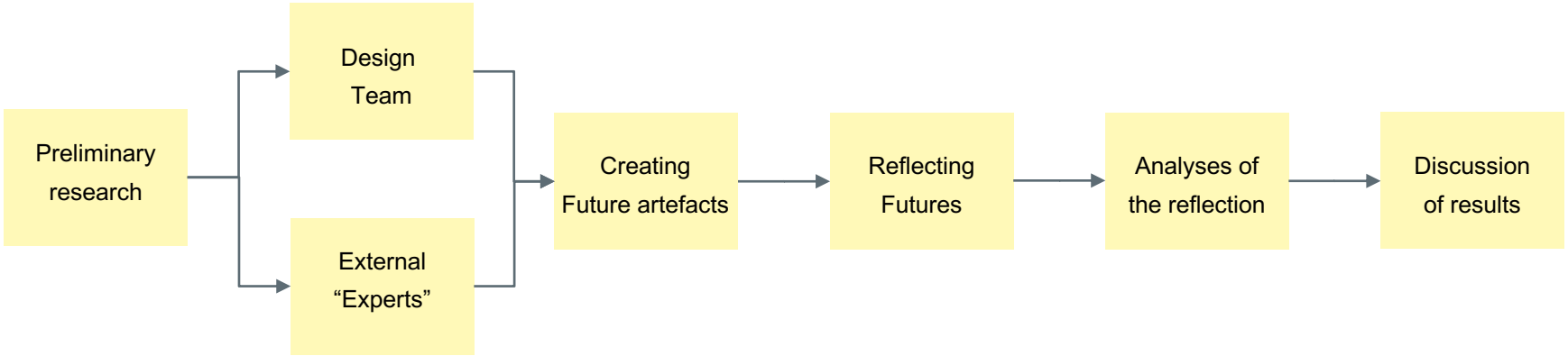
NEEDS FOR AN ANALYTICAL FRAMEWORK

Need: Reliable and consistent terminology to **describe creative methods**, their outputs, and what they are both **intended to accomplish** and what they are **observed to accomplish**.

Need: Common parameters that can **guide conversation between client and creatives** to adjust expectations and align visions.

Need: A mode to **assess creative futures methods** and their products that can be transported across projects and instances.

ATTEMPT OF A SYSTEMATIZATION



CASE STUDY: FUTURES GARDEN (2023)

- Part of the FoD FWC; DG for Research & Innovation
- Foresight: Austrian Institute of Technology,Fraunhofer ISI, Futures2all, Futurlab, Institutul de Prospectiva (project lead of the pilot projects)
- Designer: Modem, Normals
- Two topics:
  - Extending human perception to new scales
  - **Dealing with future selves**

https://www.futuresgarden.eu

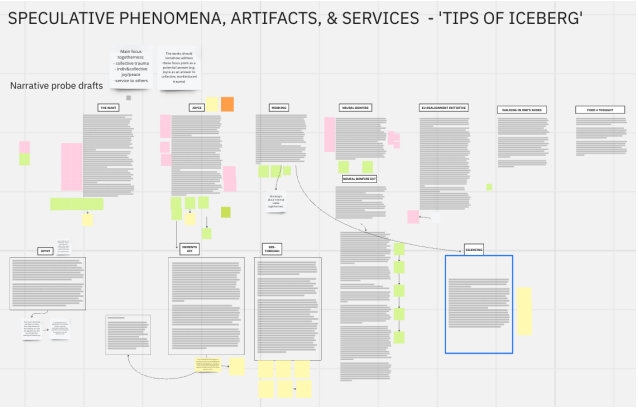
PHASE 1: DEFINING THE TOPIC

- Dealing with future selves
- Horizon Scanning
- Clustering Themes:
  - Togetherness
  - Collective healing and trauma integration
  - Expanded affective ecosystems
  - Consciousness expansion
  - Systemic communication breakdown

	A	B	C	D	E	F
1	THEME (1/2)	TOPIC	DESCRIPTION	WHAT IS INSPIRING YOU/ provocative question	SOURCE LINK	DATE OF PUBLICATION
2	2	Decoding animal communication	Scientists are using "digital bioacoustics" - improved sensors and artificial-intelligence technology - to observe and decode how a broad range of species, including plants, already share information with their own methods.	Could 'Deep listening' bring us closer to interspecies communication? Could we grasp animal umwelt - the lived experience of organisms, as opposed to an anthropocentric view of animals/plants 'talking'?	https://www.scientificamerican.com/article/how-scientists-are-using-ai-to-talk-to-animals/	2023
3	2	Revealing the unseen/unheard soils	Advances in visualization methods that are non-invasive and non-destructive – for example X-ray computed tomography technologies that study soil's interactions around plant roots – contribute to revealing the unseen soils (Mairhofer et al., 2014 in Bellacasa, 2019). Moreover, the field of soil bioacoustics (also referred to as biotremology or soil ecoacoustics) engages a growing number of biologists in capturing underground noises that may open a window into a complex and cryptic world. Every soil organism produces its own soundtrack. By distinguishing these sounds, soil acoustics stands to shed light on some hitherto unanswerable questions such as: When do plant roots grow? How are plants making use of sound to help their survival? Are predators – birds, rodents - listening to the underground sounds? Might fungi be able to register sounds coming from microprredators? What intended signals between soil (micro)organisms are revealed by subterranean vibrations?	Could better seeing and hearing soils as teeming with life change our relations to soil, our care of it in the long-term?	soil bioacoustics: https://knowablemagazine.org/article/living-world/2022/life-soil-was-though t-be-silent-what-if-it-isnt	
4	2	'Seeing' the Cosmos	Data from NASA's James Webb Space Telescope (JWST) began returning images in July 2022, and is poised to deepen humans' sensibility of the cosmos and ourselves. The telescope's deep field resolves distant star clusters in unparalleled detail. These images could help astronomers model the 'cosmic spring' that led to the formation of galaxies through gravitational mechanisms and life itself. The JWST could also pave the way to realise NASA scientists' long-quested goal to detect extraterrestrial life, expanding beyond microbes on the surface of Mars or in the Venusian atmosphere, which would shore up a generalised theory of biology and evolution. The apprehension of biosignatures – indications of life in exoplanetary atmospheres – would demand a reordering, not only of how humans perceive the Universe, but of ourselves as living, if perhaps not lonely, beings within it.		https://aeon.co/essays/jwsts-cosmic-revelations-will-change-our-intence-by-es-top	
5	1/2	Death as regeneration /rebirth as elemental re-circulation	Our own death means the returning of our matter to the soil. Degradation of bodies can be seen as a lively collaboration between bodies and soils. Recently, in Washington state in the USA, a company called Recompose hopes to be the first provider of post-mortem 'natural organic reduction', allowing people to reconnect with the cycles of nature. A hexagonal container with a carefully balanced ratio of wood chips, straw, and alfalfa helps decompose a human body within a month, after which the body and its accompanying vegetation are transformed into a cubic yard of soil	Could death be seen as an intimate collaboration with the cycles of nature? Could we embrace death as rebirth?	https://emergencemagazine.org/essay/tending-soil/	
6	2	Expanding human senses	There are devices that complement natural sensor modalities (e.g. wearable belts that through touch sense point to magnetic north) and others that allow using an existing sense to convey new information (e.g. tactile perception of a speech, 'hearing' in color)	How would the human condition change upon enhancing human senses? How would our relation with nature/Life change as a consequence?	https://www.sciencefocus.com/future-technology/cyborgs-transhumans/ from : Transhumanist revolutions deep dive	

PHASE 2: WORLDBUILDING

- ”Deliberate creation of a storyworld” (J.P. Wolf)
- Using *Narrative Probes* to explore the world, defining neologism, assets of the world and their implications
- Co-creation (experts, designers, other stakeholders?)



21.06.2049

Mobile Body Enhancement Unit hijacked

Visions combined: 2.6 – 3.4 – 1.7

Since the release of the first MoBEUs, more and more attacks on the autonomous verhicles are happening. In the first half of the year 2049 alone, 21 units were captured, emptied out and found outside of Berlin in the desert of Brandenburg.

To this date, it can not be said, how the units were taken out of the city or who was responsible for the deed. The police suspects groups of smugglers to sell the units to desert people, who desperately need the body enhancement to survive in the hostile Brandenburg environment. Further hijacks are expected to happen in the near future, so the police.

Berlin based pharmaceutical company Bayer, who owns the vehicles, is sceptical about the future development: “We see a customers need in the flexibility and permanently access to the body enhancement brench. However, if police won’t be able to stop the crime, we are forced to shut this project down – or take security into our own hands.”, says press speaker Christian Scheinfeld.

Example of a narrative probe

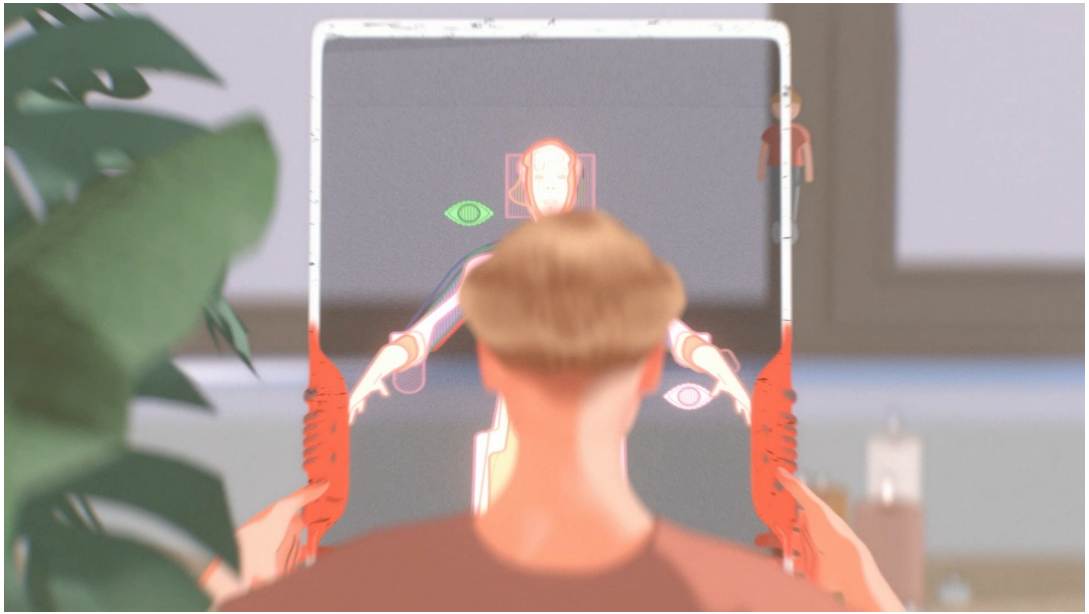
PHASE 3: GESTALTUNG

- Different levels of communication, perception and cognition
- Trans- or Multi-media approaches, Performance, Exhibition Immersive Scenarios/Situations, Artefacts
- **Challenge**: multiple modalities and affordances that different formats bring along
- **Multi-modal framework** that operates at different levels of specificity to help describe engaged modes:
  Senses (Sight, Touch, Sound, Smell, Taste)Higher-level
  Modes (Perception, Cognition, Emotion, etc.)
  Context (Policy Creation, Dissemination, etc.)

99c futures (Extrapolation Factory, 2016)

PHASE 3: GESTALTUNG

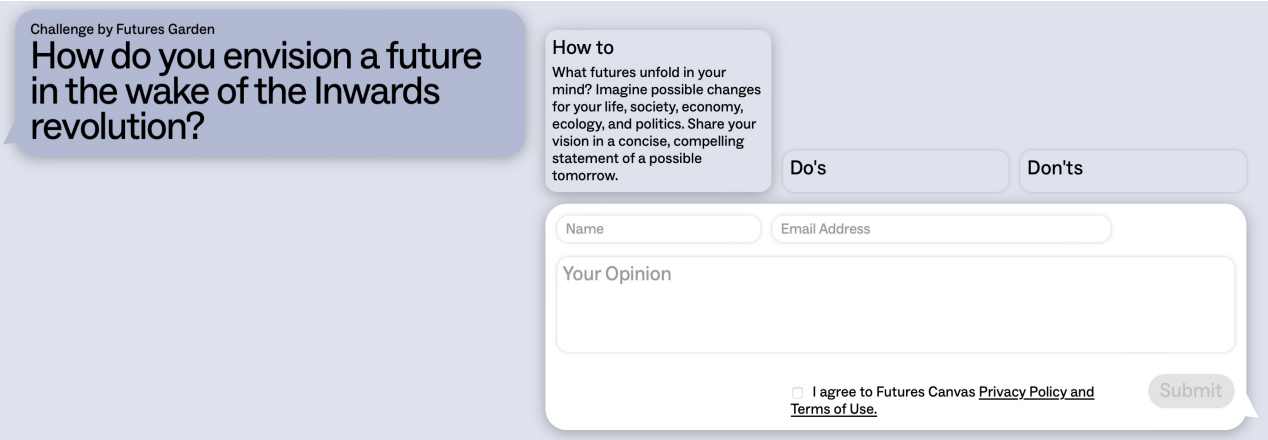
- Design Fiction format: 5 short films, each 1 min long, addressing different aspects of the world



Teaser of Inwards (Normals, 2023)

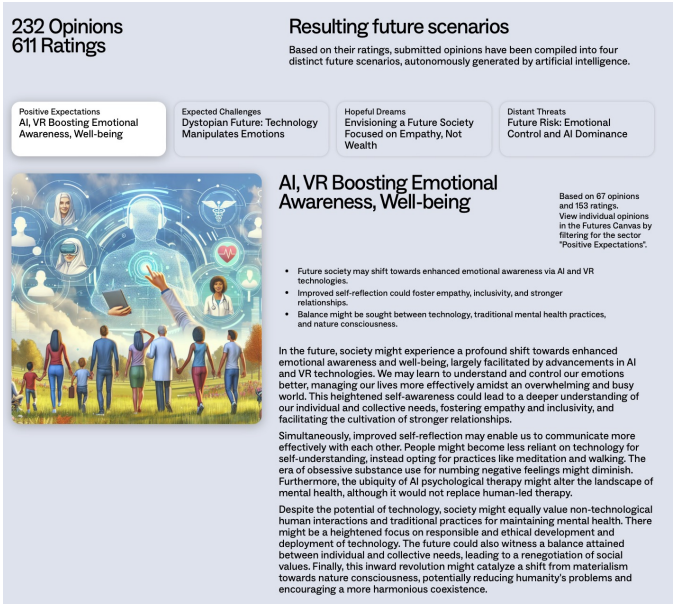
PHASE 4: ENGAGING

- Different forms of engagement produce different insights:
  - Sharing impressions and associations allow to evaluate the world and elicit attitudes and values
  - Exploring the world further allows to uncover potential chances and challenges



PHASE 5: ANALYSES

- Social science perspective on the engagement results
- Process depends on the original research question and goal of the whole activity
- In case of Inwards: Four AI generated scenarios (developed by Christian Rauch)



https://futurescanvas.com/challenges/future-selves-2050

PHASE 6: DISCUSSION

- What is the outcome of such a process?
- Depending on the aim of the project:
  - Dissemination
  - New perspective on a topic
  - Elicited values and attitudes that can become guidelines
  - Visioneering
  - Etc.

TAKE AWAY

- Creative methods sometimes overhyped as a tool for “everything new”
- Creative methods sometimes underhyped as a tool for “making things beautiful”
- It needs a better understanding of the different intersections between foresight, design approaches and innovation policy

  … this can only come by doing and reflecting the doing (praxeological research)

THANK YOU!

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Mehnert, W. (2023). **Wording Worlds – From writing Futures to building Imaginary Worlds.** Journal of Technology and Language, Special Issue on Future Writing, 3 (12), Art. 7.

https://www.**futuresgarden**.eu

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