

# NEW RELATIONS WITH GENERATIVE THINGS

UTRECHT, 4 JUNE 2024

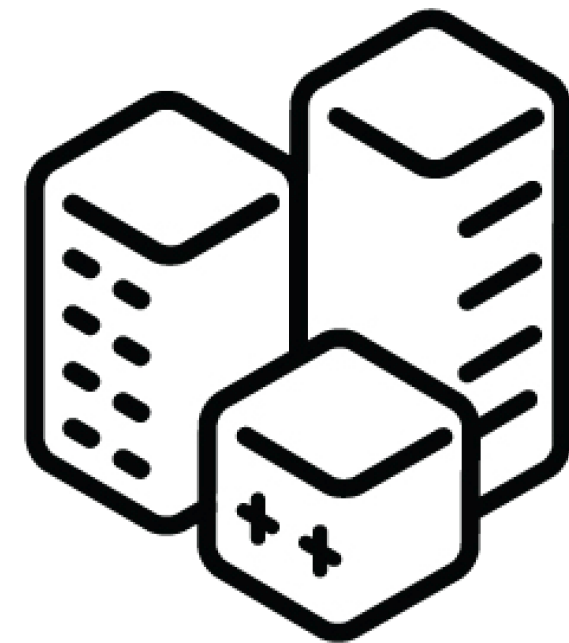


- Iskander Smit -

making sense of  
unpredictable futures in  
human-AI partnerships



Target\_is\_New  
targetisnew.com



Cities of Things  
citiesofthings.org

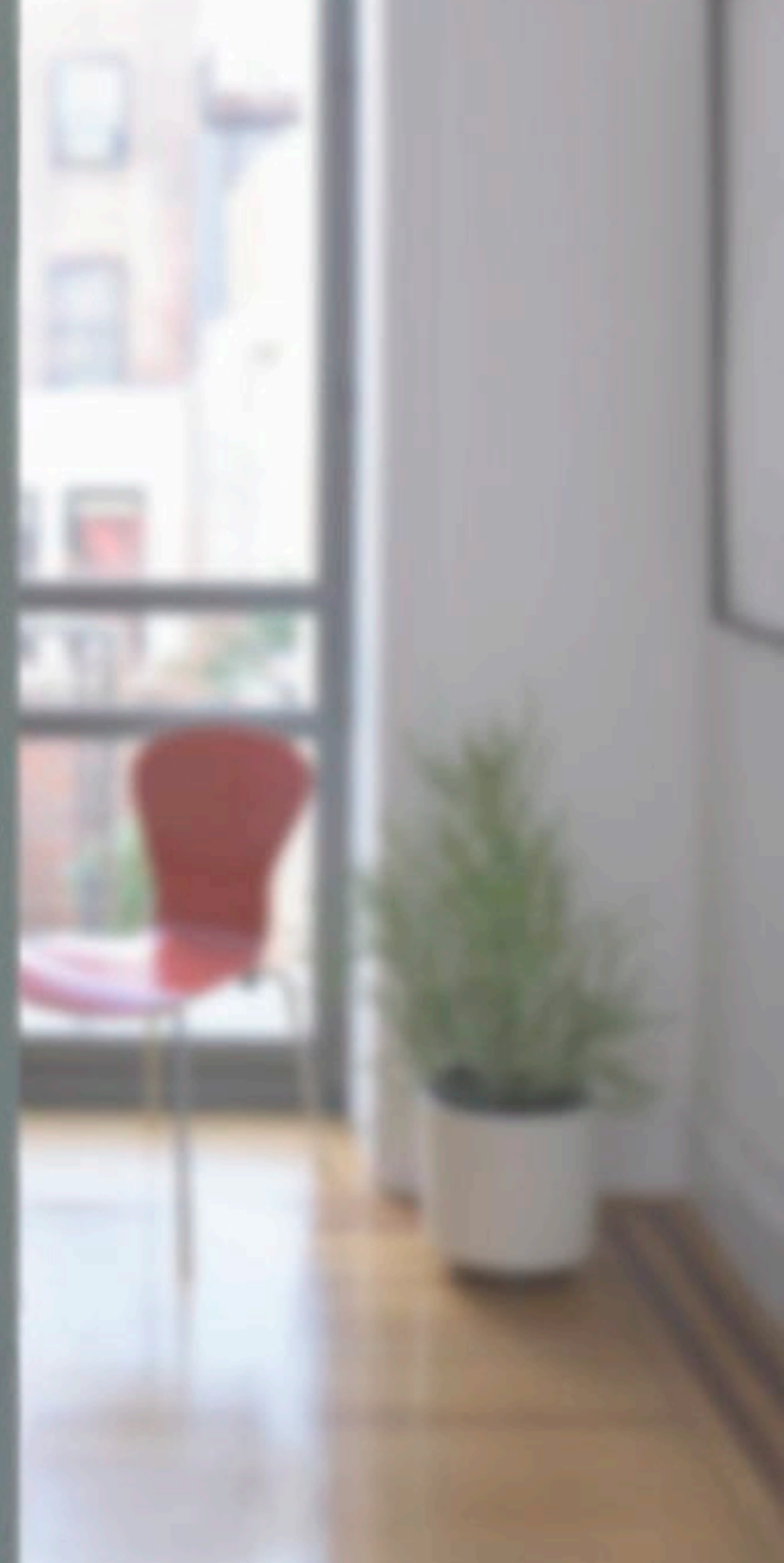


Wijkbot (Hoodbot)  
wijkbot.nl



ThingsCon  
thingscon.org

**NO FUTURE  
WITHOUT  
A PAST**



Co-performing with AI in the physical world: how we can design visualizations and interactions for generative outputs

# **3 QUESTIONS**

**THAT INSPIRED THIS PRESENTATION...**

**What will the generative things be like?**

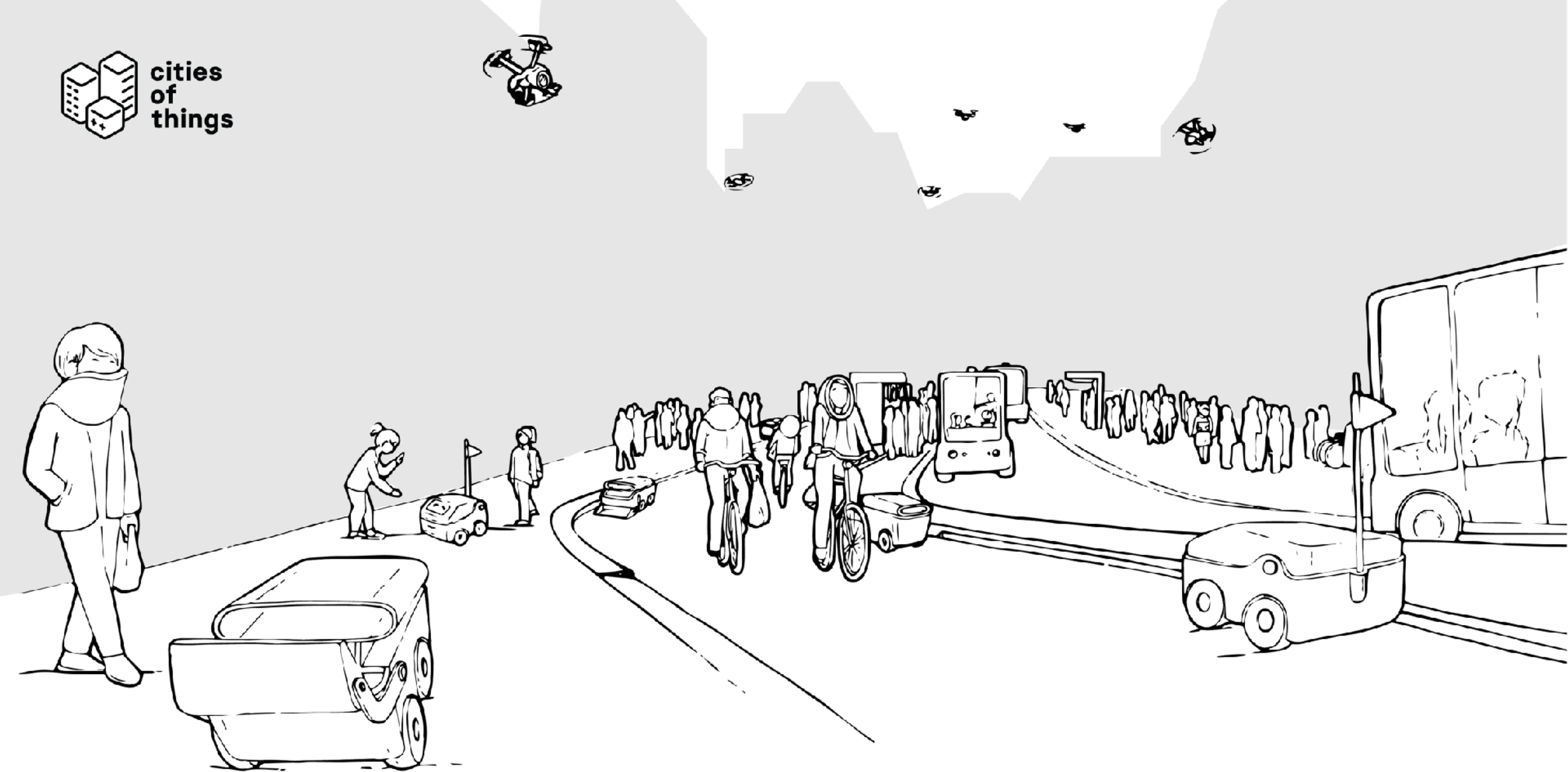
**How will we understand the intentions of these new co-performing generative things?**

**What will this mean for designers of generative things?**





**cities  
of  
things**



**How will we live together with intelligent things?**



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## Near Future Cities of Things: Addressing Dilemmas through Design Fiction

**Maria Luce Lupetti**

Delft University of Technology  
The Netherlands  
m.l.lupetti@tudelft.nl

**Nazli Cila**

Amsterdam University of Applied  
Sciences, The Netherlands  
n.cila@hva.nl

**Iskander Smit**

Delft University of Technology  
The Netherlands  
i.r.smit@tudelft.nl

**Abstract**

The smart city infrastructure will soon start to include smart agents, i.e., agentic things, which co-exist and co-perform with human citizens. This near-future scenario explores the flexible types of collaborations and relationships between the human and nonhuman citizens. Drawing on current technology forecasts and AI/robotics literature, we created five fictional concepts for reflecting on themes we deem important for such collaborations: responsibility, delegation, relationship, priority, and adaptation. The promises, challenges and threats of these themes are discussed in this paper, together with the new questions that were opened up through the use of design fiction as a method.

**Author Keywords**

Design fiction; future scenario; smart cities; co-performance; agentic things; dilemmas.

**ACM Classification Keywords**

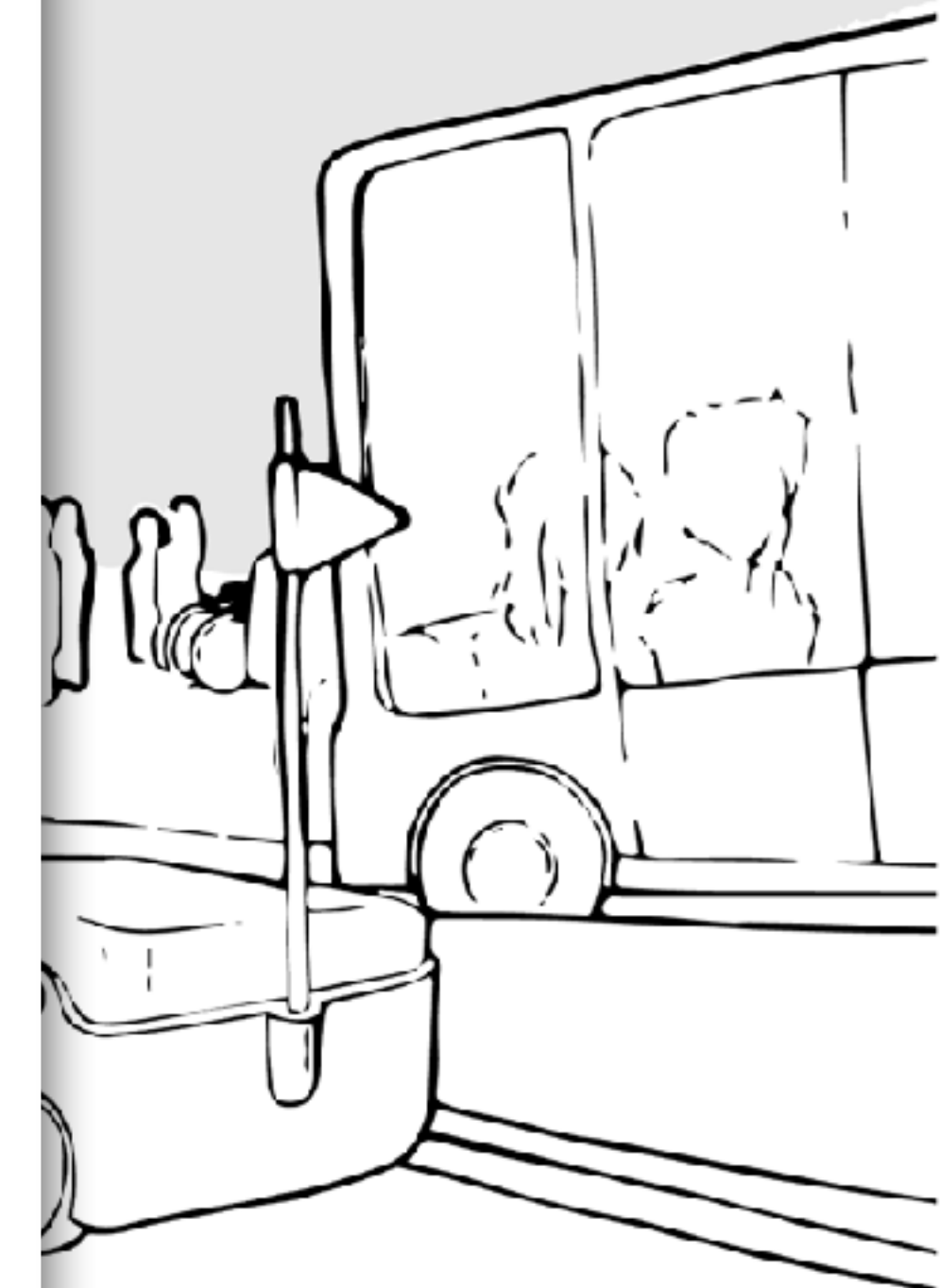
H.5.m. Information interfaces and presentation: Miscellaneous.

**Introduction**

The smart cities operate with sensors embedded in the urban infrastructure to collect all sorts of data, a digital

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*NordiCHI'18*, September 29-October 3, 2018, Oslo, Norway  
© 2018 Association for Computing Machinery.  
ACM ISBN 978-1-4503-6437-9/18/09 \$15.00  
<https://doi.org/10.1145/3240167.3240273>





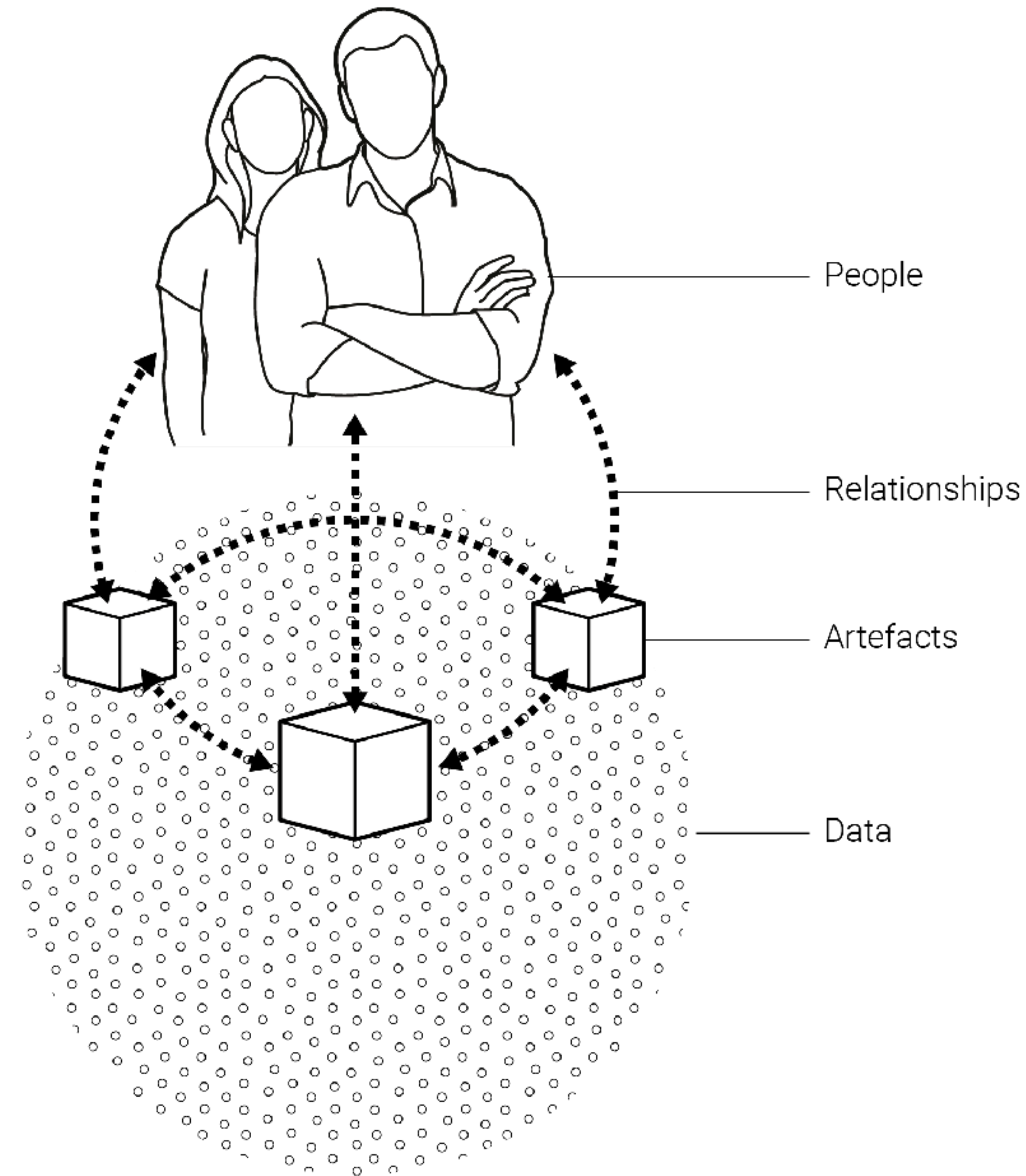
# THINGS AS CITIZENS

## THINGS AS SOCIAL ENTITIES

Data-enabled artefacts with performing capabilities

Able to:

- Connect with existing networks of data
- Sense and collect real time data
- Act proactively
- Behave socially



# Dilemmas

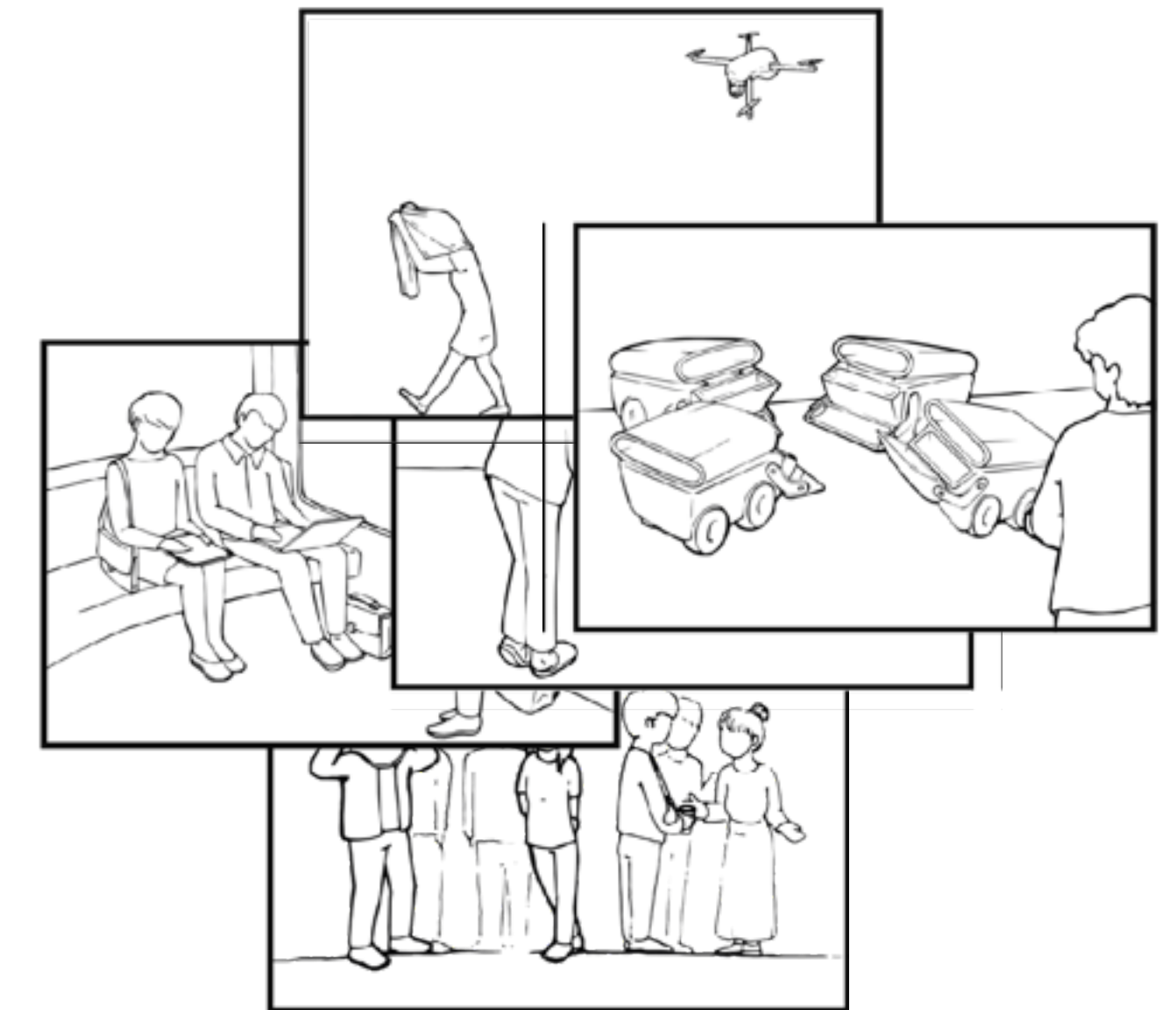
**Responsibility**  
private – public

**Priority**  
human – system

**Relationship**  
tool – social partner

**Adaptation**  
human – thing

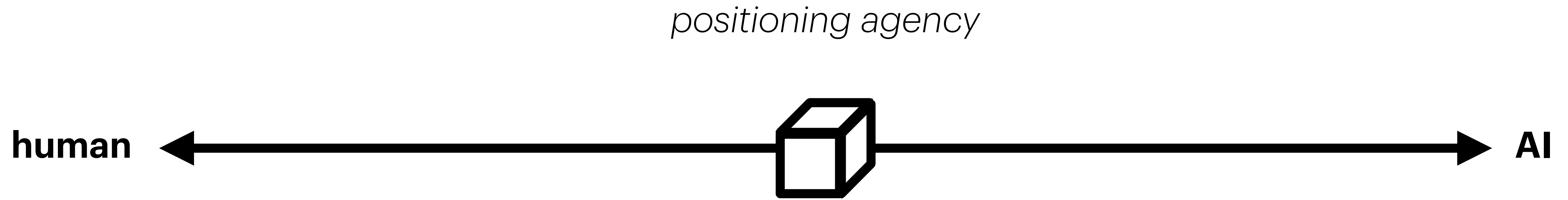
**Delegation**  
partial - total





# CO-PERFORMANCE

LIVING IN CONCERT WITH THINGS WITH AGENCY



## **Co-performance: Conceptualizing the Role of Artificial Agency in the Design of Everyday Life**

**Lenneke Kuijer**

Eindhoven University of Technology,  
Department of Industrial Design  
Eindhoven, the Netherlands  
s.c.kuijer@tue.nl

**Elisa Giaccardi**

Delft University of Technology,  
Department of Industrial Design  
Delft, the Netherlands  
e.giaccardi@tudelft.nl

### **ABSTRACT**

This paper introduces the notion of *co-performance*, with the aim to offer Human-Computer Interaction (HCI) researchers and practitioners a new perspective on the role of artificial agency in everyday life, from automated systems to autonomous devices. In contrast to 'smartness,' which focuses on a supposed autonomy of artifacts, *co-performance* considers artifacts as capable of learning and performing next to people. This shifts the locus of design from matters of distributions of agency at design time, to matters of embodied learning in everyday practice for both human and artificial performers. From this perspective *co-*

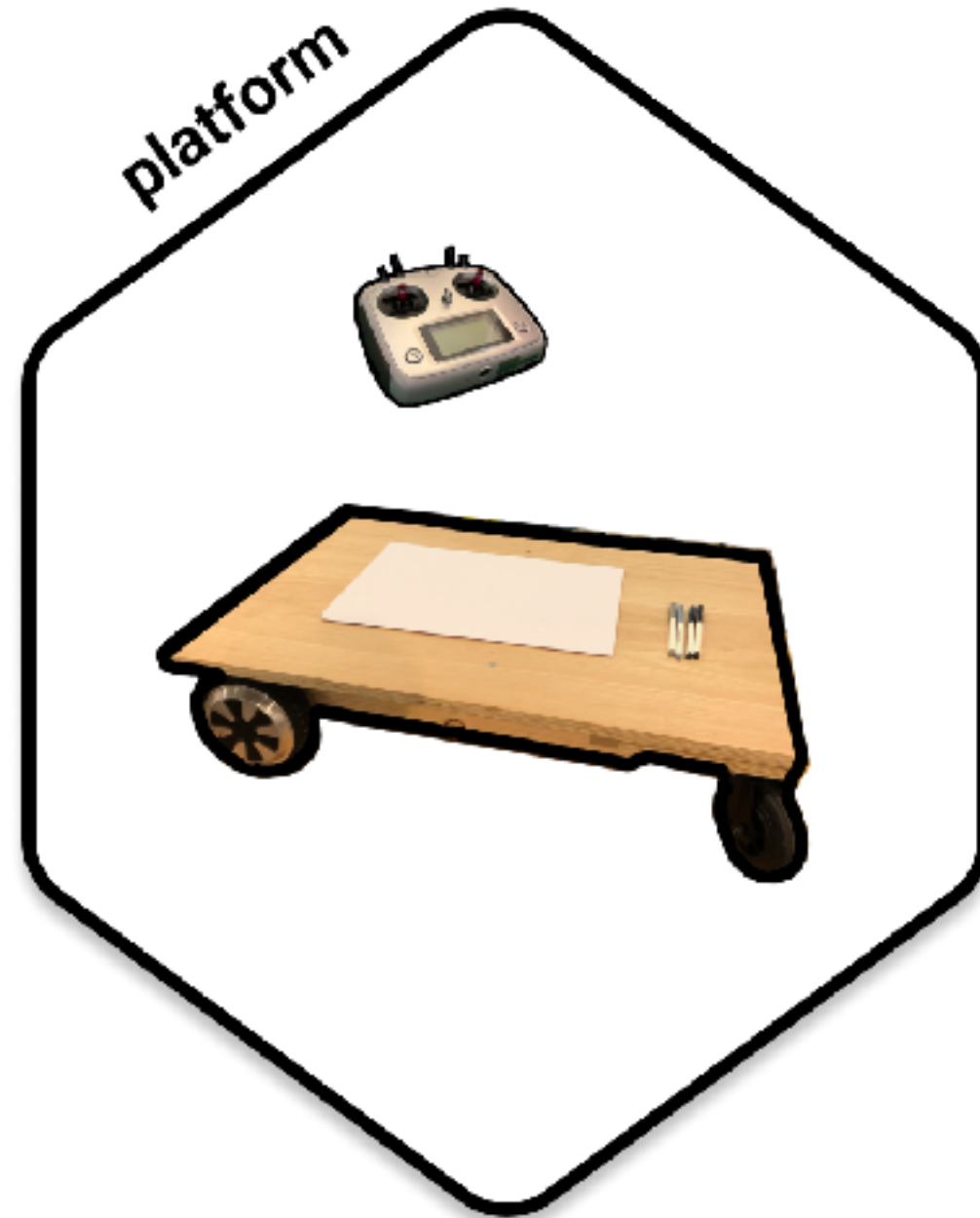
shown to have unintended consequences on everyday life (e.g. [3, 4, 11, 17, 44, 57, 80]). In order for design to be sensitive to its impact, better understanding is needed of the role played in everyday life by the artefacts we make. For HCI researchers and practitioners, this means a better understanding of the decisions made in the design process about (a) the role of the *artificial agency* of computational artefacts, and (b) how this role should be allowed to *change*, under the idiosyncratic and varied circumstances of everyday life.

The turn to practice in Human-Computer Interaction (HCI)



**cities**  
**of**  
**things**  
**hood**  
**bot**

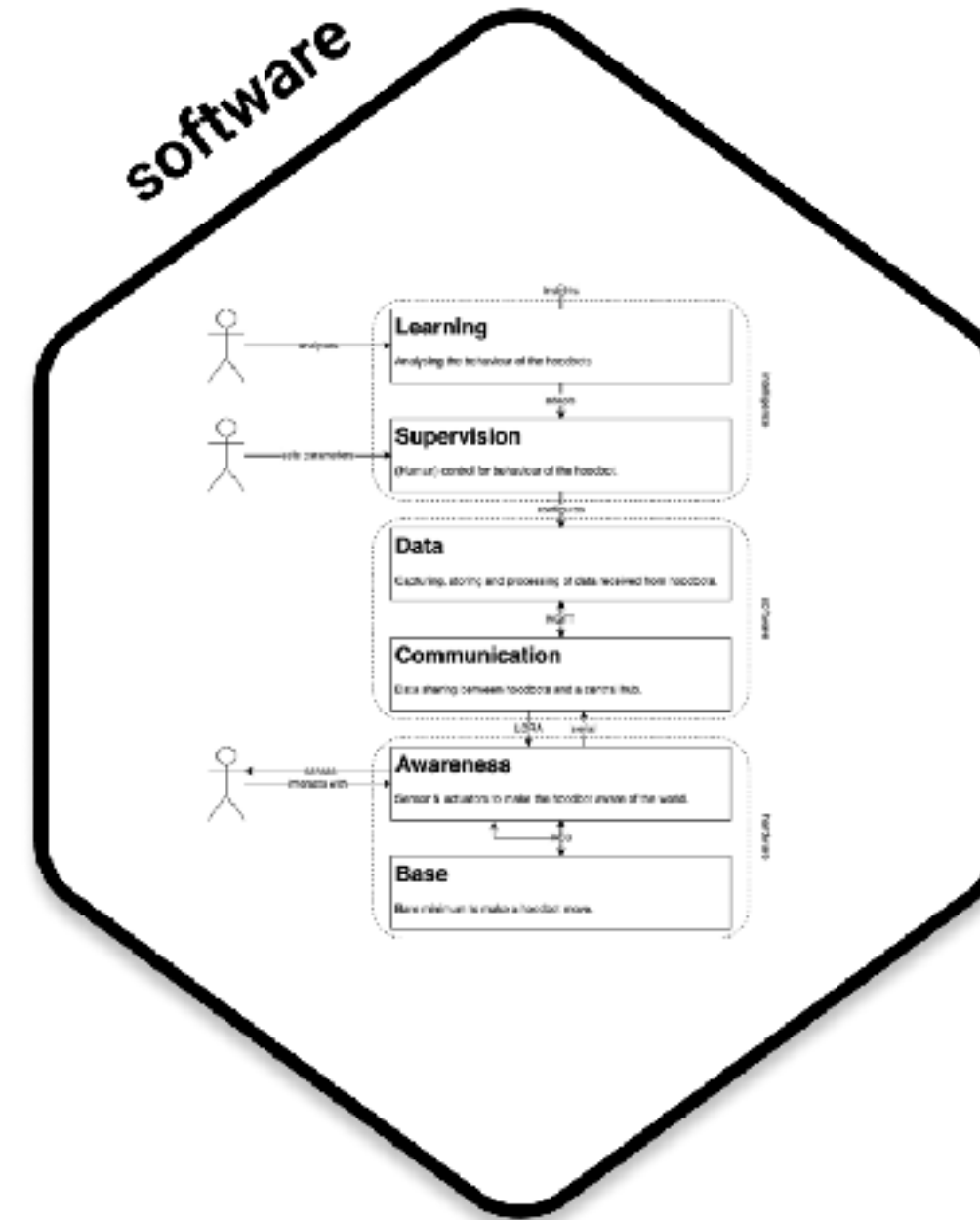
# Wijkbot Kit



+

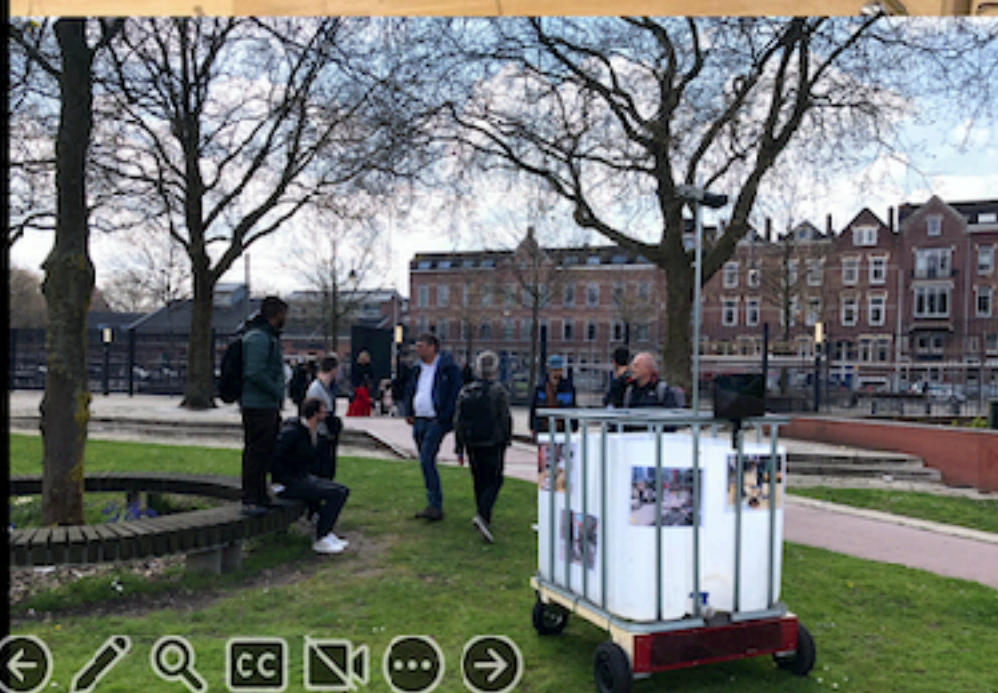


+



+







MBESI  
DE HOUTSTUUF  
WASTUIN DAT, YOUR PERSONAL GARDEN BUDDY  
TAKEN & BOTTLE  
GET PROBABLY SOME COFFEE





# WE LIVE A DIGITAL LIFE

THAT TOOK OVER OUR IRL

Top Kwaliteit Rijnschool & Goedkoop.  
Rijles vanaf €20,- per les. Bel nu!



# AND NOW...

MORE THAN DIGITAL





# **THE CHATGPT MOMENT**

**30 NOVEMBER 2022**

New Thread



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- What is generative...
- how does the Dutch...
- contemporary...
- what is the phase...

# What is generative wisdom?

## Sources

What is Generative Listening? And Why You...  
kripalu · 1

Generative Collective Wisdom: A Scholarly...  
PQ proquest · 2

ANLP Council of Generative Wisdom - Th...  
anlp · 3

View 2 more

## Answer

Generative wisdom refers to the ability to perceive and understand emerging possibilities, patterns, and insights that can lead to transformative change and new solutions. It involves cultivating a state of open awareness and deep listening to sense what is emerging in a given situation or system, rather than being limited by preconceived notions or fixed perspectives. <sup>1 2</sup>

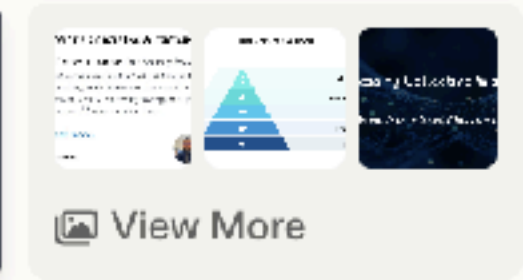
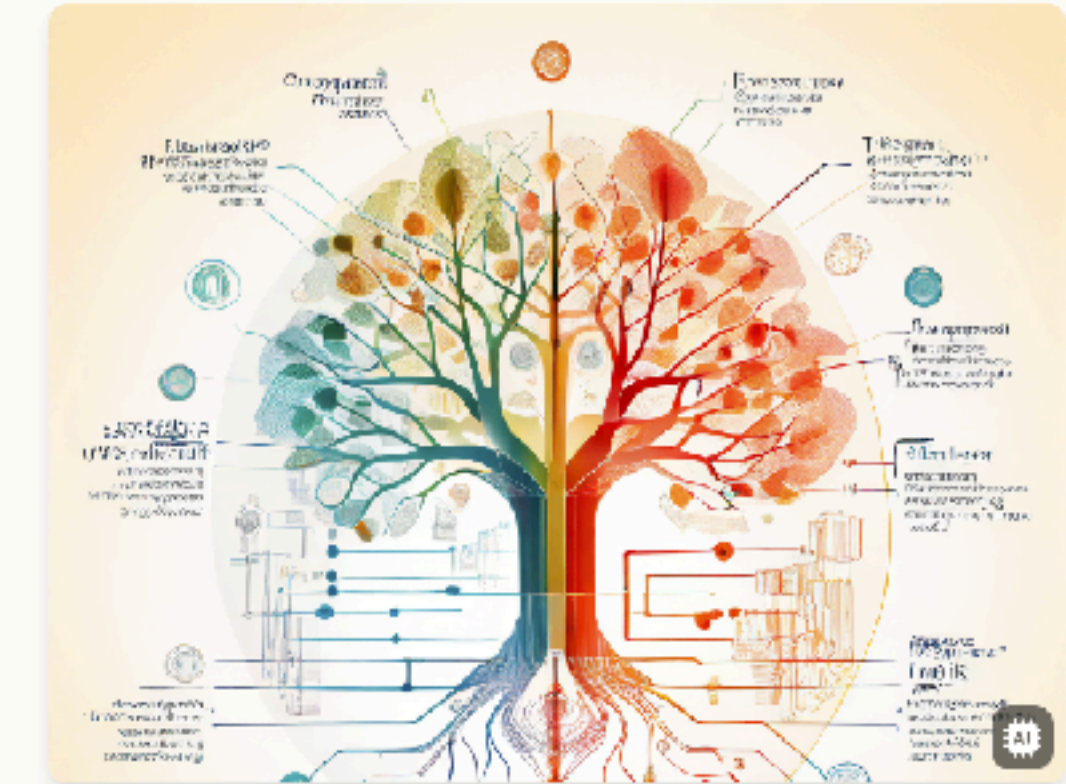
Some key aspects of generative wisdom include:

### Expanding Awareness

Generative wisdom requires expanding one's awareness beyond the individual self to perceive the interconnected web of relationships and the larger field or system at play. <sup>1</sup> This allows for a more holistic understanding of the situation and the potential for collective wisdom to emerge.

### Deep Listening

mind, tuning into subtle cues, and sensing the underlying patterns and potentials that are trying to emerge. <sup>1 2</sup>



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What is generative...

how does the Dutch...

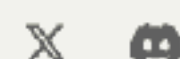
contemporary...

what is the phase...

iskandr



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# What is generative wisdom?

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What is Generative Listening? And Why You...

kripalu · 1

Generative Collective Wisdom: A Scholarly...

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anlp · 3

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Some key aspects of generative wisdom include:

### Expanding Awareness

Generative wisdom requires expanding one's awareness beyond to perceive the interconnected web of relationships and the larger. This allows for a more holistic understanding of the situation and collective wisdom to emerge.

### Deep Listening

Ask follow-up

mind, tuning into subtle cues, and sensing the underlying patterns trying to emerge. <sup>1</sup> <sup>2</sup>

SUBSCRIBE

SEARCH SIGN IN

GUIDED BY VOICES —

# Google's AI Overview is flawed by design, and a new company blog post hints at why

Google: "There are bound to be some oddities and errors" in system that told people to eat rocks.

BENJ EDWARDS · 5/31/2024, 9:47 PM



Enlarge / The Google "G" logo surrounded by whimsical characters, all of which look stunned and surprised.

On Thursday, Google capped off a rough week of providing inaccurate and sometimes dangerous answers through its experimental AI Overview feature by authoring a follow-up blog post titled, "AI Overviews: About last week." In the post, attributed to Google VP Liz Reid, head of Google Search, the firm formally acknowledged issues with the feature and outlined steps taken to improve a system that appears flawed by design, even if it doesn't realize it is admitting it.

To recap, the AI Overview feature—which the company showed off at Google I/O a few weeks ago—aims to provide search users with summarized answers to questions by using an AI model integrated with Google's web ranking systems.



#### FURTHER READING

Google's "AI Overview" can give false, misleading, and dangerous

Model



GPT-4o

Newest and most advanced model



GPT-4

Advanced model for complex tasks



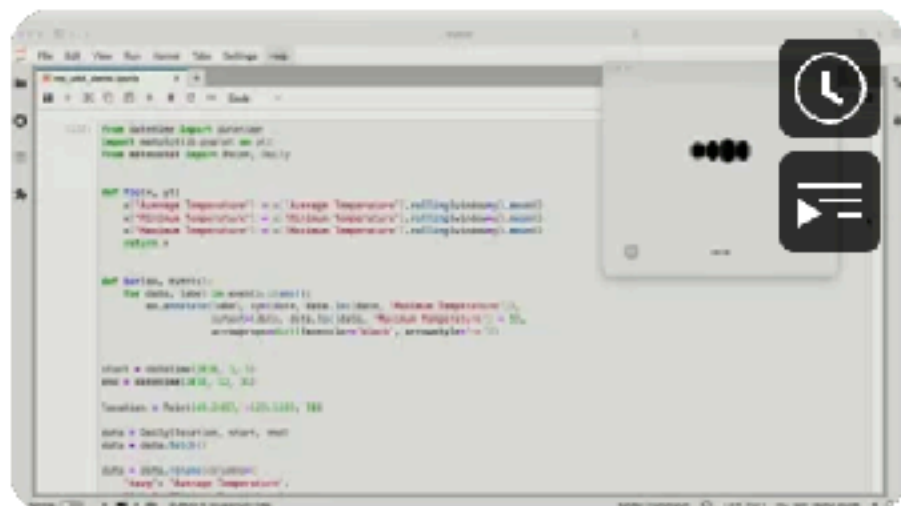
GPT-3.5

Great for everyday tasks



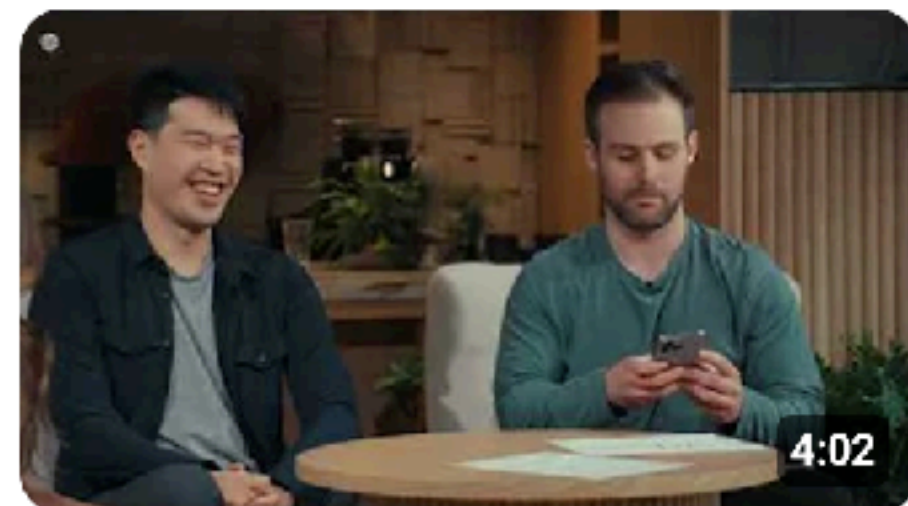
Temporary chat





**Live demo of GPT-4o coding assistant and desktop app**

359K views • 2 weeks ago



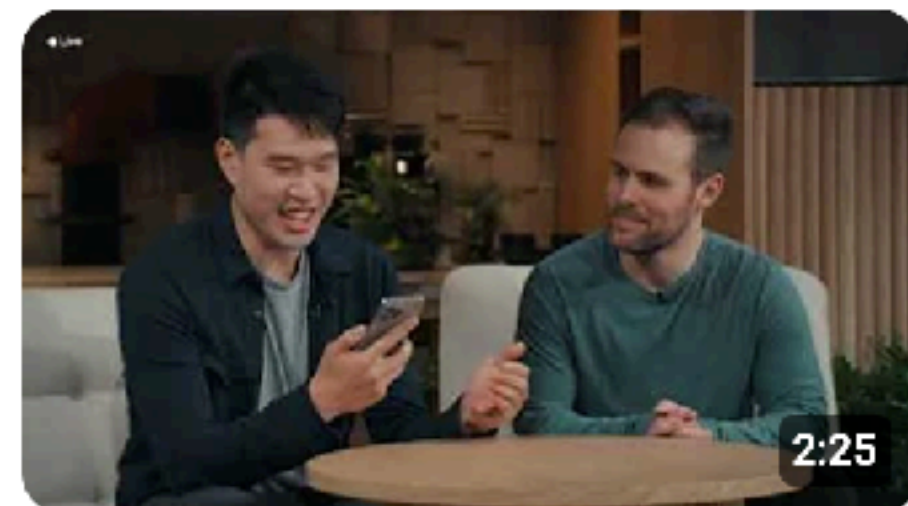
**Live demo of GPT-4o vision capabilities**

176K views • 2 weeks ago



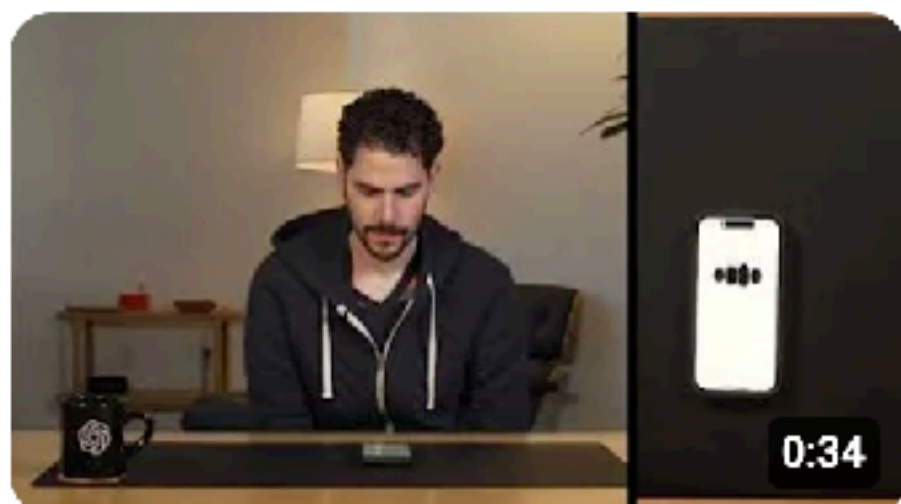
**Live demo of GPT4-o voice variation**

221K views • 2 weeks ago



**Live demo of GPT-4o realtime conversational speech**

174K views • 2 weeks ago



**Fast counting with GPT-4o**

417K views • 2 weeks ago



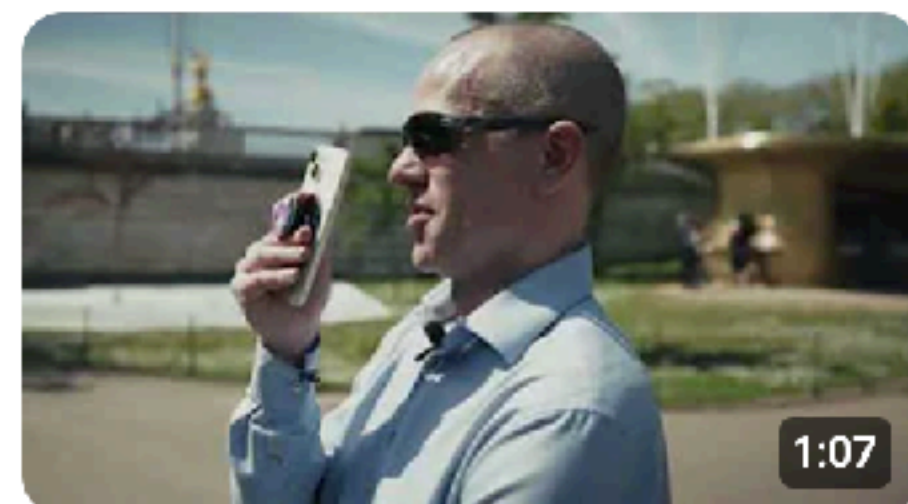
**Dad jokes with GPT-4o**

207K views • 2 weeks ago



**Happy Birthday with GPT-4o**

175K views • 2 weeks ago



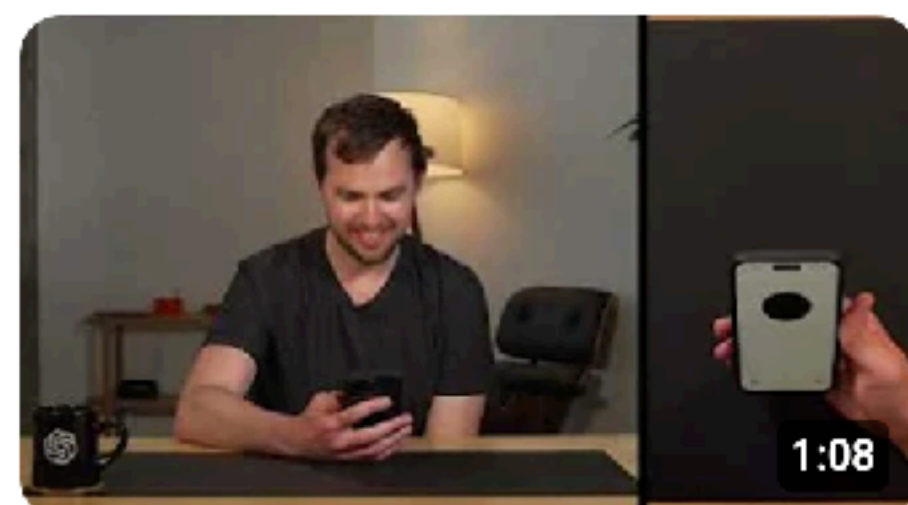
**Be My Eyes Accessibility with GPT-4o**

450K views • 2 weeks ago



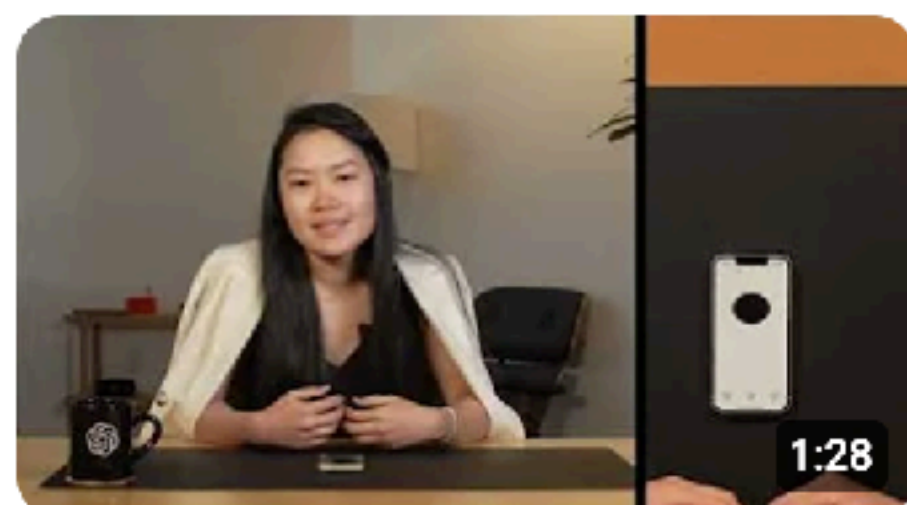
**Dog meets GPT-4o**

301K views • 2 weeks ago



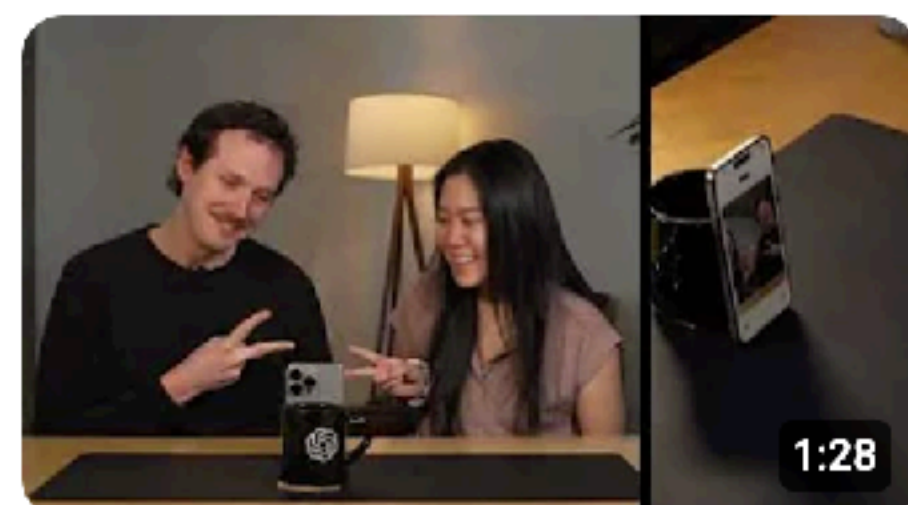
**Interview Prep with GPT-4o**

509K views • 2 weeks ago



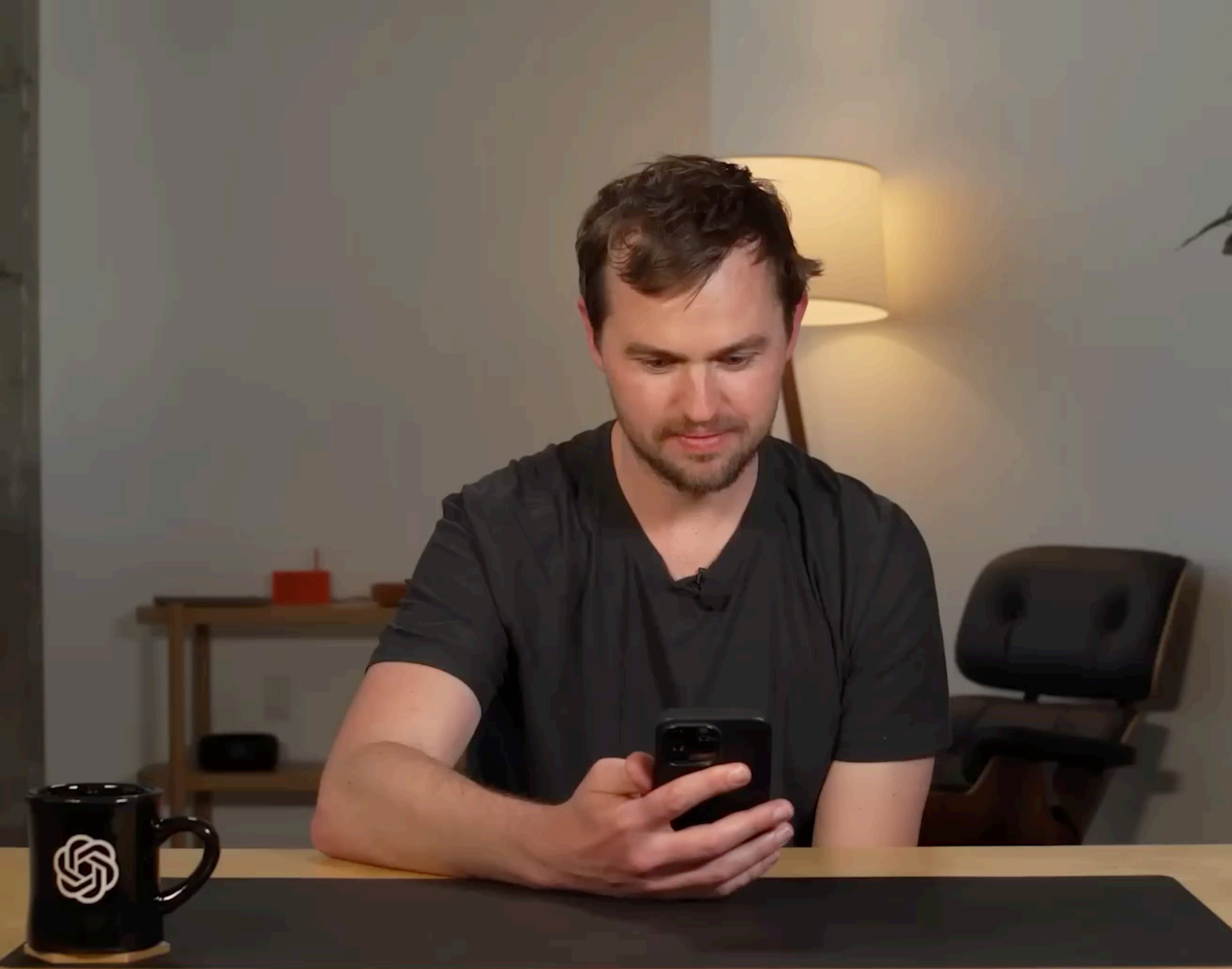
**Harmonizing with two GPT-4os**

150K views • 2 weeks ago



**Rock, Paper, Scissors with GPT-4o**

257K views • 2 weeks ago



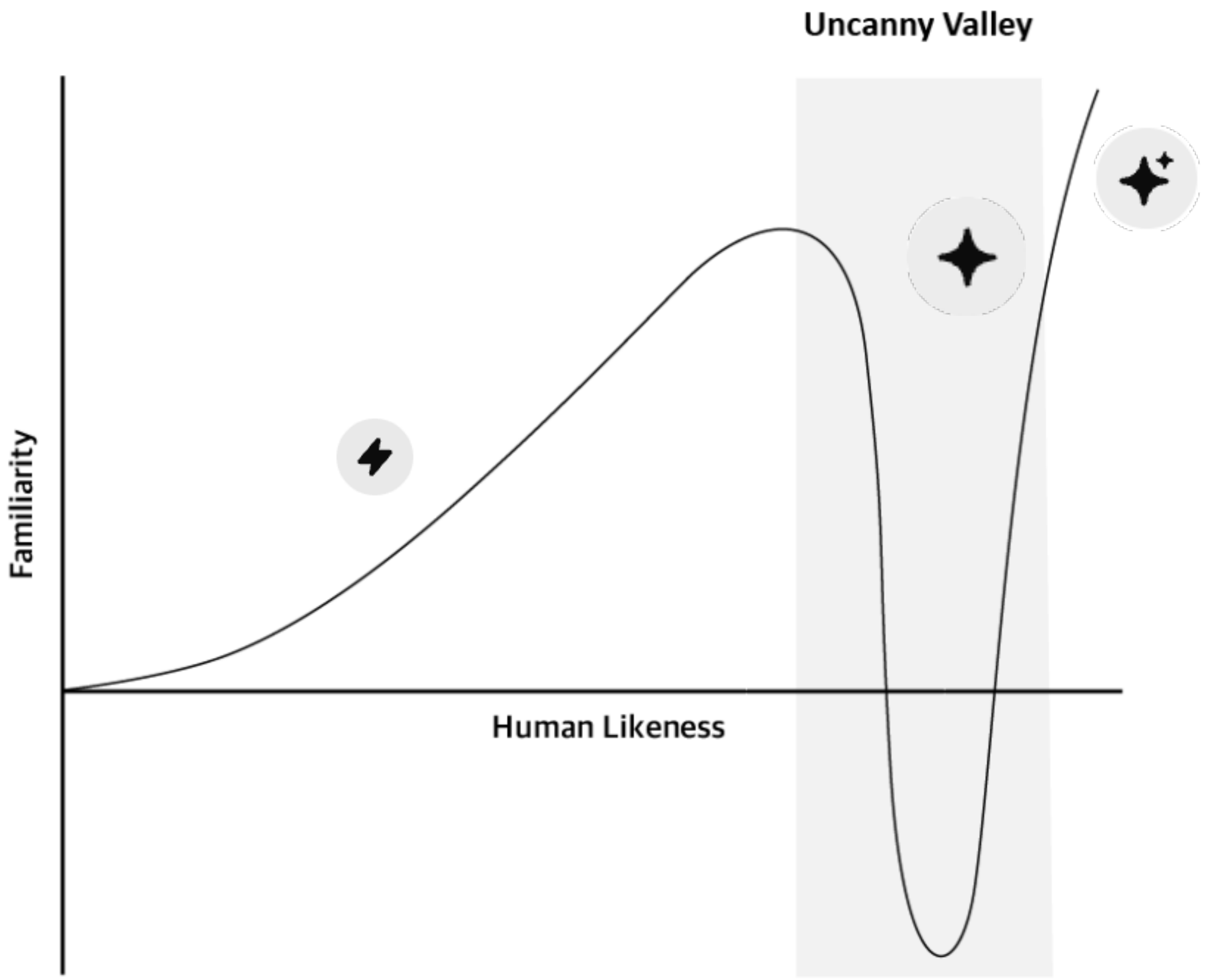


Model ⓘ

- ⚡ **GPT-4o**  
Newest and most advanced model ✓
- ✦ **GPT-4**  
Advanced model for complex tasks
- ⚡ **GPT-3.5**  
Great for everyday tasks

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🔄 Temporary chat 🔴



A young man with dark, curly hair and a light beard is looking intently at a glowing, translucent digital cube he is holding in his hands. The cube is filled with a complex, glowing blue and white data structure, resembling a neural network or a complex algorithm. The background is a blurred city street at night, with warm yellow and orange bokeh lights from street lamps and buildings. The overall color palette is dominated by cool blues and teals, with the warm bokeh lights providing a contrast. The man's face has faint, glowing blue lines and dots, suggesting a futuristic or augmented reality theme.

**ARE GENERATIVE THINGS  
THE NEXT ITERATION?**

# MULTIMODEL & AI CLOSEBY

A PROMISE IN NEED FOR FORFILLING



**Failed  
promises  
for now...**





**WHAT WILL BE OUR  
RELATION WITH AI PALS?**

# MUNDANE TECHNOLOGIES



**SNEAKY AI?**

**IS WHAT IT WILL BE...**



# CHILLING EFFECT OF A SYNTHETIC REALITY

MODIFY YOUR BEHAVIOUR ON PERCEIVED CONSEQUENCES OF BEING OBSERVED

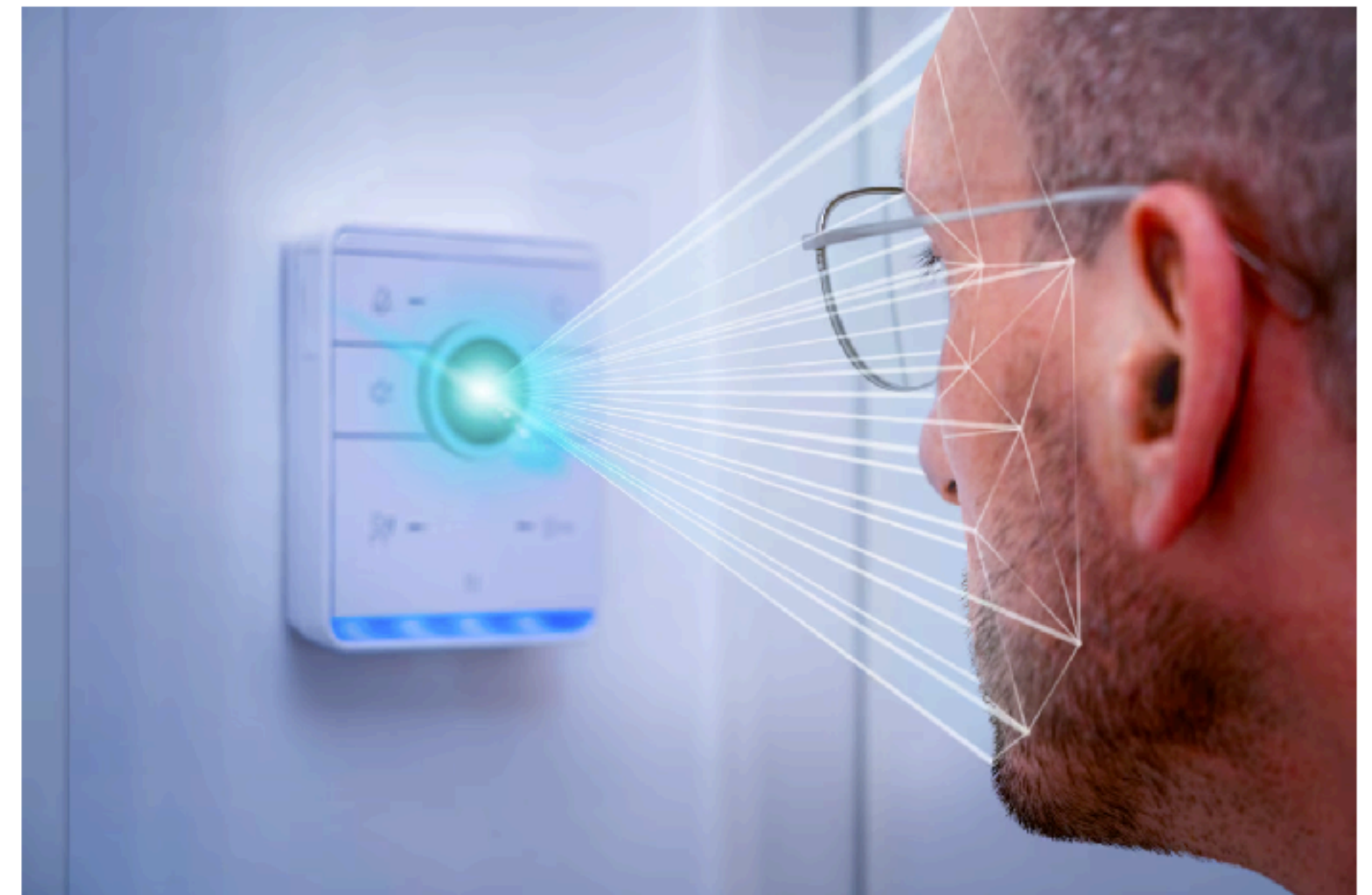


# CHILLING EFFECT SYNTHETIC REALITY

MODIFY YOUR BEHAVIOUR ON PERCEIVED CONSEQUENCE

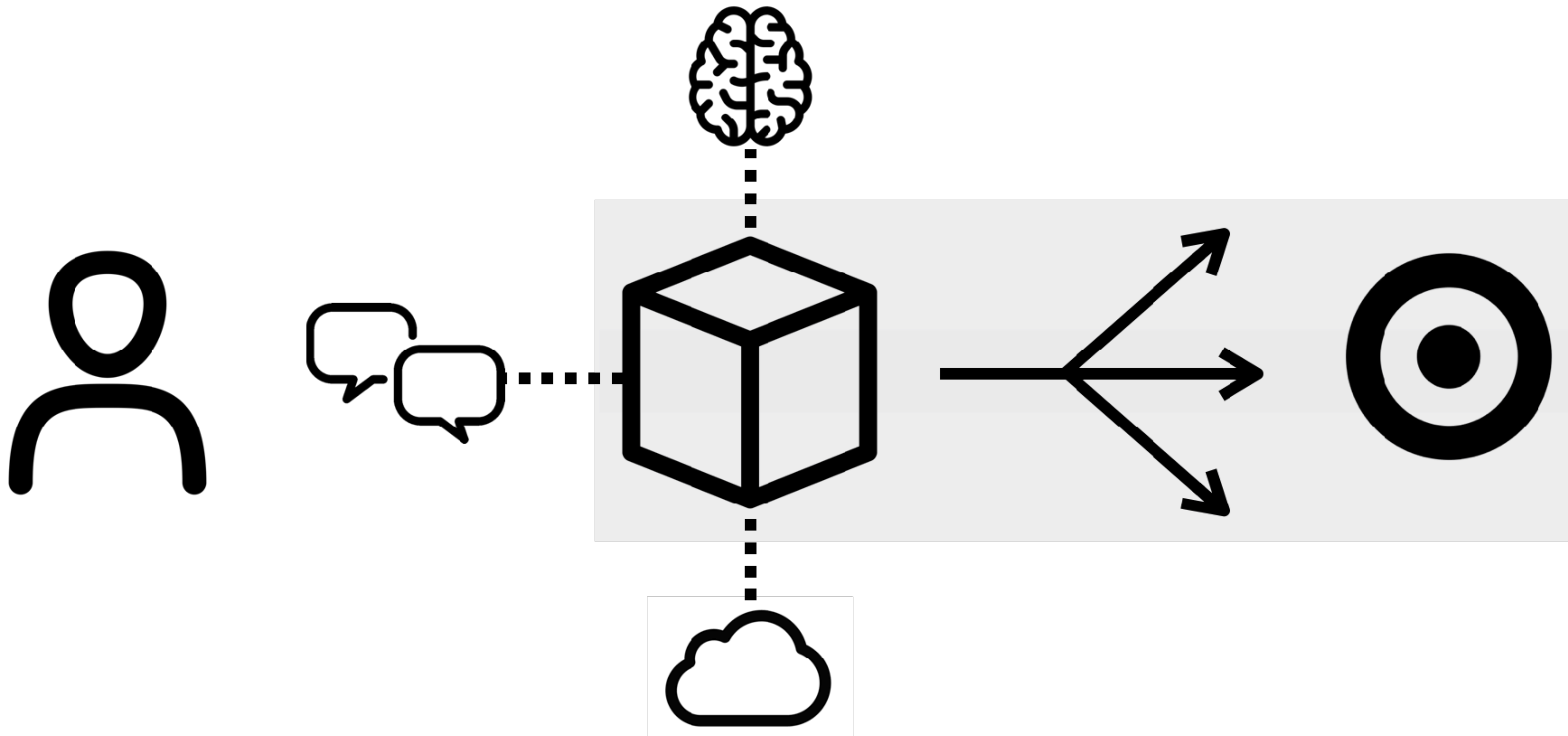
Opinie Privacy

## Slimme deurbellen zijn een gevaar voor onze samenleving




Beeld Getty Images

Wie kijkt er allemaal mee met de slimme deurbel? Geef meer informatie over dit zorgelijke fenomeen, stelt Thijs



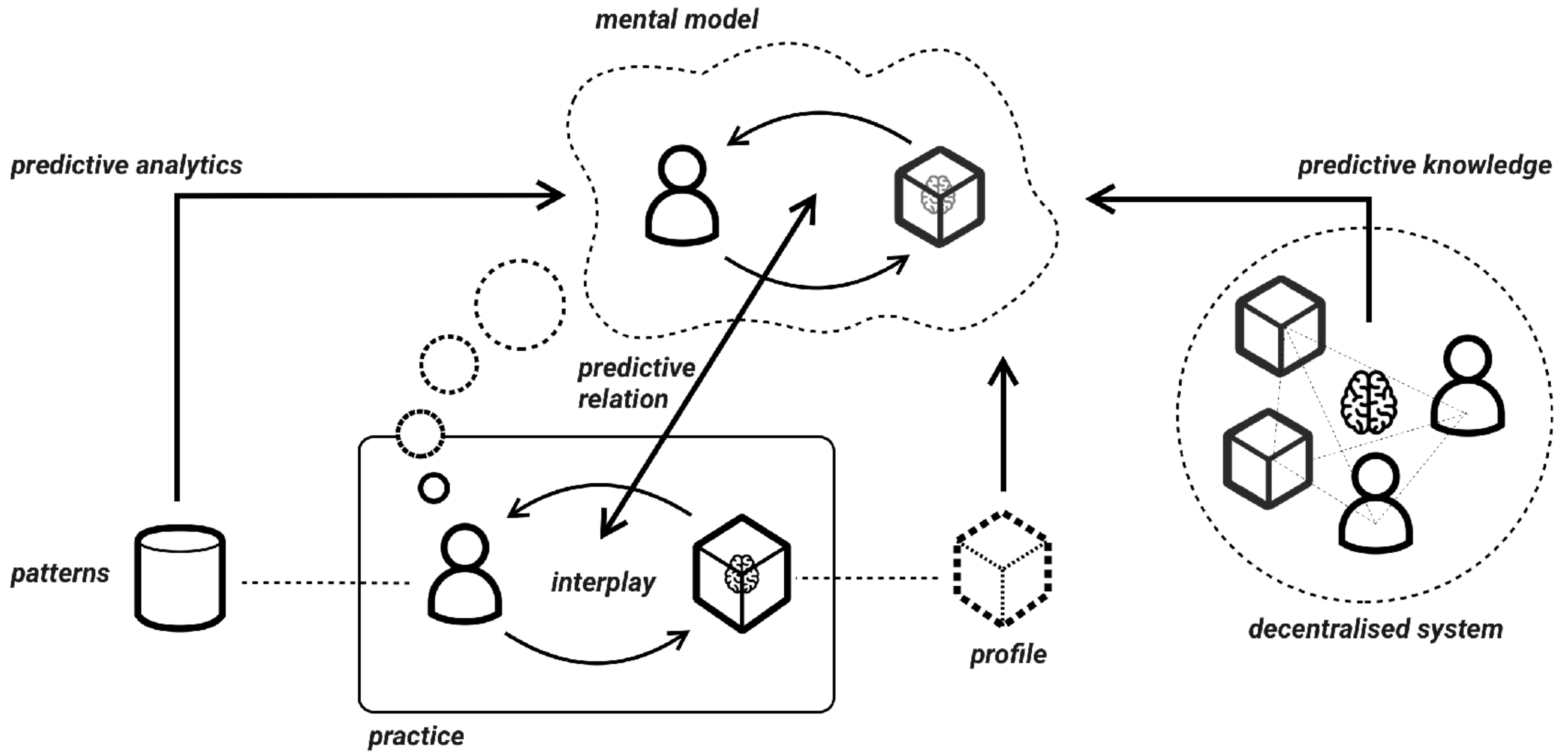
## Things with agency

Intelligent, fed by the cloud, in initiating conversation with humans



# CONTINUOUS SWITCHING BETWEEN SIMULATED FUTURE AND THE NOW

OUR FUTURE...



# PREDICTIVE RELATIONS

DESIGN FOR...



**WE NEED A NEW LANGUAGE  
FOR UNDERSTANDING**

image by Philip Toledano



# TRACKING BEHAVIOR

STRATEGIES FOR INTERACTIONS

CO2 ppm scales: 0 - 5000



Temperature scales: -10° - 40°



Humidity scales: 0% - 100%



Light lux Intensity scales: 0 - 750



▸ Setup Background

Close Controls

# A NEW DIALOGUE LANGUAGE IS NEEDED

THAT COMMUNICATES LEARNINGS AND INTENTIONS, AND HAS CLEAR ANCHORS FOR CONTINUOUS REINFORCEMENT LEARNING FROM HUMAN FEEDBACK

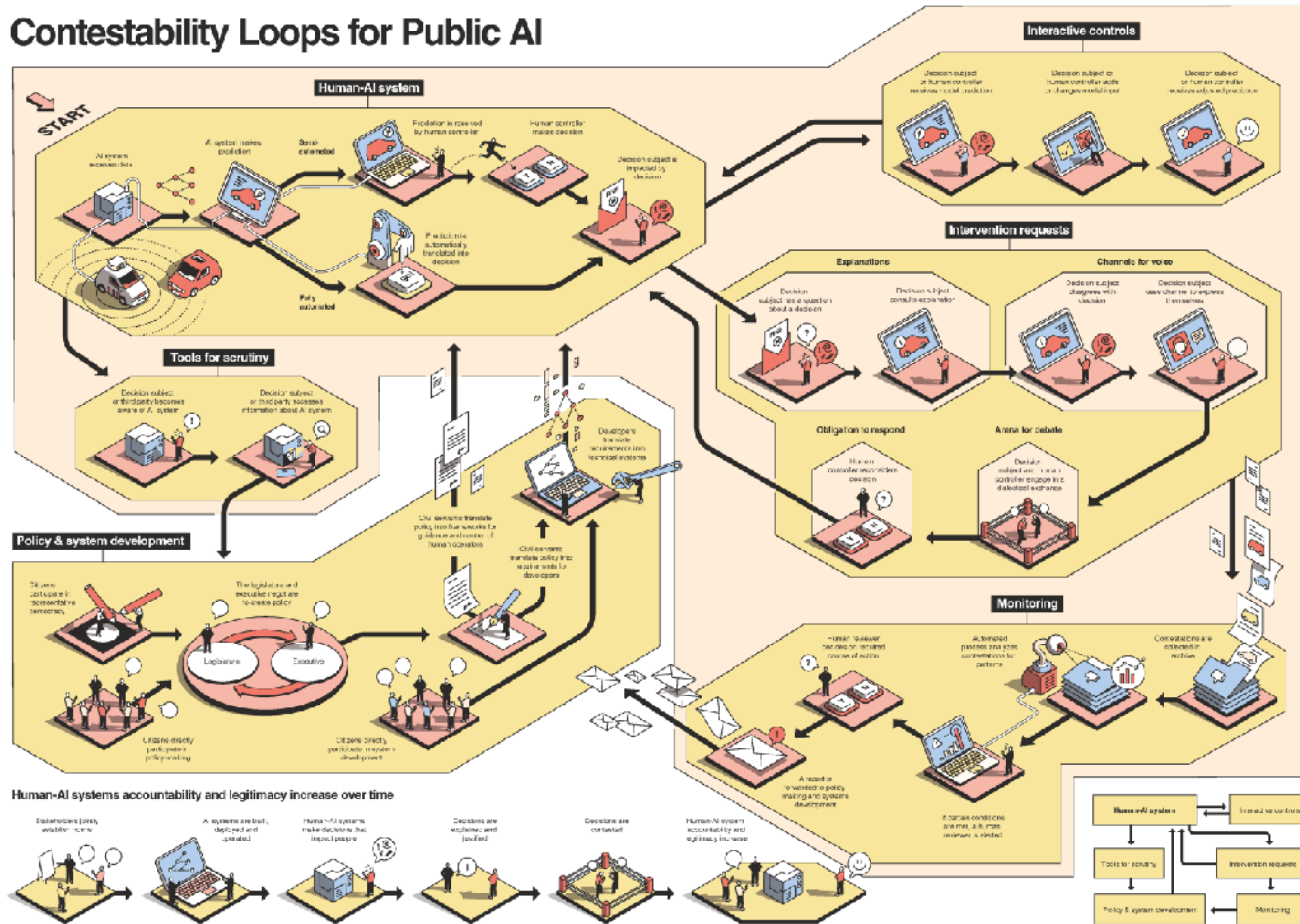
*Geen  
transparantie,  
maar  
tegenspraak*

**NO TRANSPARENCY,  
CONTESTABILITY!**

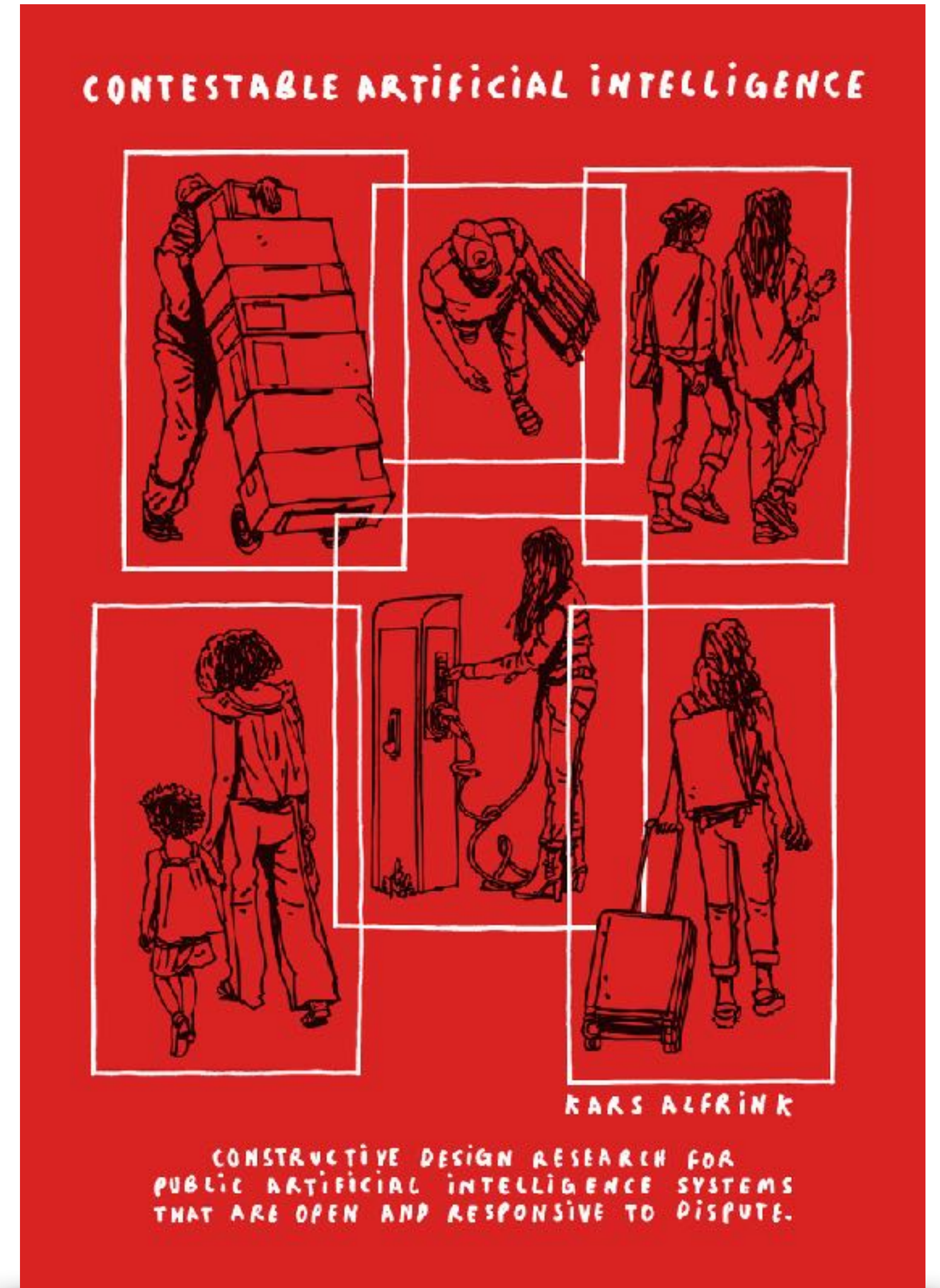
**DESIGN CONFLICT SYSTEMS BASED ON DEMOCRATIC PRINCIPLES**



# Contestability Loops for Public AI



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# DESIGN FOR CONTESTATION

# PRINCIPLES

**ETHAN MOLLICK, 2024**

- 1: Always invite AI to the table**
- 2: Be the human in the loop**
- 3: Treat AI like a person  
(but tell it what kind of person it is)**
- 4: Assume this is the worst AI you will ever use**





# DESIGNING FOR UNKNOWN UNKNOWNNS

NEW THINKING NEEDED

KNOWN

KN  
KNOWN

KNOWN

IRL

AI

KN  
KNOWN

Iot

GT



# THANKS!

**TARGET  
is NEW** ✦



THINGS

