

Pro**v**ocations and more-than-human perspectives in design

Summary

This teaching activity introduces students to *what* provocations are in relation to more-than-human perspectives in design. We distinguish between *provotypes*, as the materialisation of provocations in design artefacts, and *provotyping* as a process to trigger and pose tensions and dilemmas of current everyday practices. We illustrate *how* provocations can be materialised and experimented with and *why* designerly provocations complements current design methods to cultivate design explorations that accommodate alternative approaches for embracing more-than-human perspective.

Learning outcomes

After the teaching activity students should be able to:

- Describe provotyping and provotypes in more-than-human perspectives in design.
- Construct provotypes in more-than-human perspectives in design.
- Evaluate and reflect on provotypes and provotyping in more-than-human perspectives in design.

Outline/Content

- What are provocations in design
- Why provocations and more-than-human perspectives
- How to provotype
- When to provotype
- Group work

Key readings

Jensen, R. H., Nilsson, E. M., Hansen, AM., Yoo, D. & Eriksson, E. (2025). Provocations and More-Than-Human Perspectives in Human-Computer Interaction. Interacting with Computers, 2025. iwaf020, <https://doi.org/10.1093/iwc/iwaf020>

Jensen, R. H., Encinas, E., & Raptis, D. (2022). Spicing It Up: From Ubiquitous Devices to Tangible Things Through Provocation. In TEI 2022 - Proceedings of the 16th International Conference on Tangible, Embedded, and Embodied Interaction: TEI '22 (pp. 1-15). Article 33 Association for Computing Machinery (ACM). <https://dl.acm.org/doi/10.1145/3490149.3502257>

What are provocations,
provotypes and provotyping?

Provocations as critical encounters

... provocation has for centuries proven a powerful means for artists and activists to challenge what we take for granted ...

Critical Design and Critical Theory: The Challenge of Designing for Provocation (Bardzell et al., 2012)

The Sydney Morning Herald

World Europe Visual art

Jens was loaned \$115,000 to use in an exhibit. Instead, he kept the cash and called that art.

By Scott Gleeson
September 29, 2021 — 11.30am

What is art, anyway? From one Danish artist's point of view, it's pocketing 534,000 kroner in commission (\$115,000 in Australian money) from a museum.

The Kunsten Museum of Art in Aalborg, Denmark paid artist Jens Haaning in advance to re-create two older sculptures. Instead, he kept the money without doing the job and called it conceptual art.



"Take the Money and Run," by artist Jens Haaning. Photographer: Mette Kirstine Goddixsen/Kunsten Museum of Modern Art Aalborg

<https://www.smh.com.au/world/europe/jens-was-loaned-115-000-to-use-in-an-exhibit-instead-he-kept-the-cash-and-called-that-art-20210929-p58vlh.html>

Provocations in design

“... to promote critical engagement and reactions from participants, including around subject matters that are hard to articulate or envision...”

Provocative design for unprovocative designers: Strategies for triggering personal dilemmas. (Ozkaramanli & Desmet, 2016)

Why Provocations in design

- help **explore** complex topics (e.g., sustainability, more-than-human perspectives)
- **challenge** and disrupt existing social and cultural norms by articulating topics seen as taboo
- **promote** debate around design ideas within a design team
- help **generate** new ideas

Provotypes (designerly artefacts)

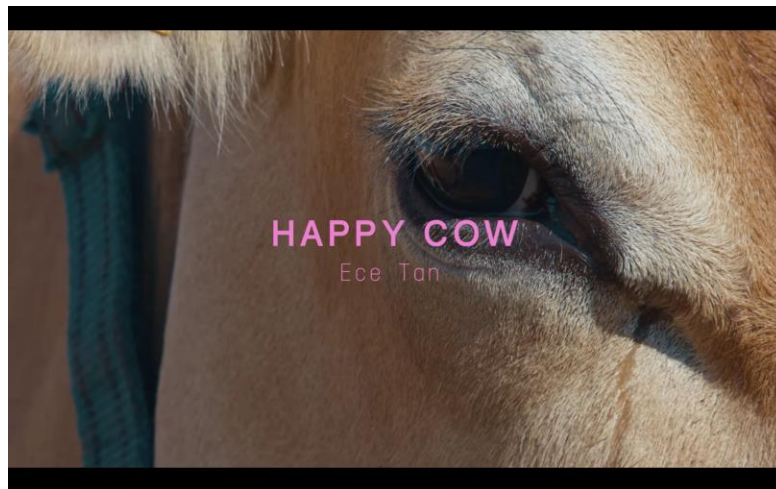
.... a **provotype** (from "provocation" and "prototype") is a tangible or intangible **design artefact** aimed at provoking discussions and reflections among different users and stakeholders in a design project

... unlike *prototypes* that focus on solving problems, **provotypes** explore potential (**more-than-human**) futures, challenge expectations, mediate concepts and ideas, and intervene in people's everyday life

Provotypes and more-than-human perspectives

The Happy Cow Project

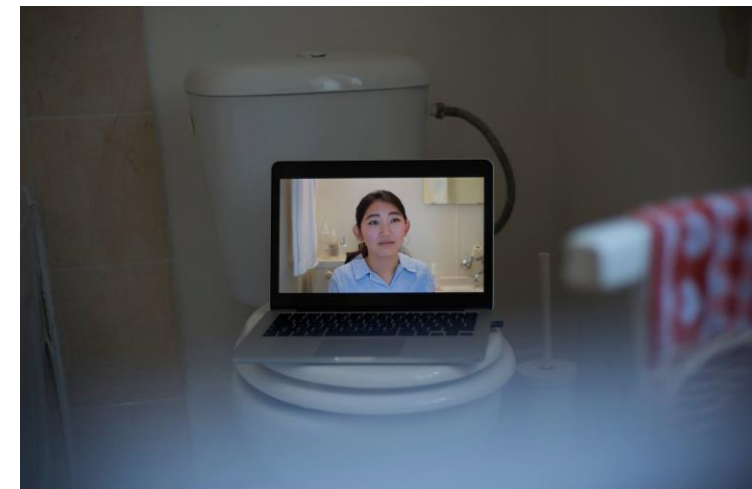
'the toys are meant to serve as "critical and provocative tools" to remind desensitised consumers of the range of emotions that animals can feel.'



<https://www.youtube.com/watch?v=OUQse8InSqg>

U - your smart toilet assistant

"What if we would stretch the idea of a Siri in the bathroom? A voice assistant connected to the toilet? How would it sound and feel? What would it do? Which kind of relation would you have with it? Which problems might arise?"



<https://mljuul.com/U>

<https://vimeo.com/258780690>

How to provotype?

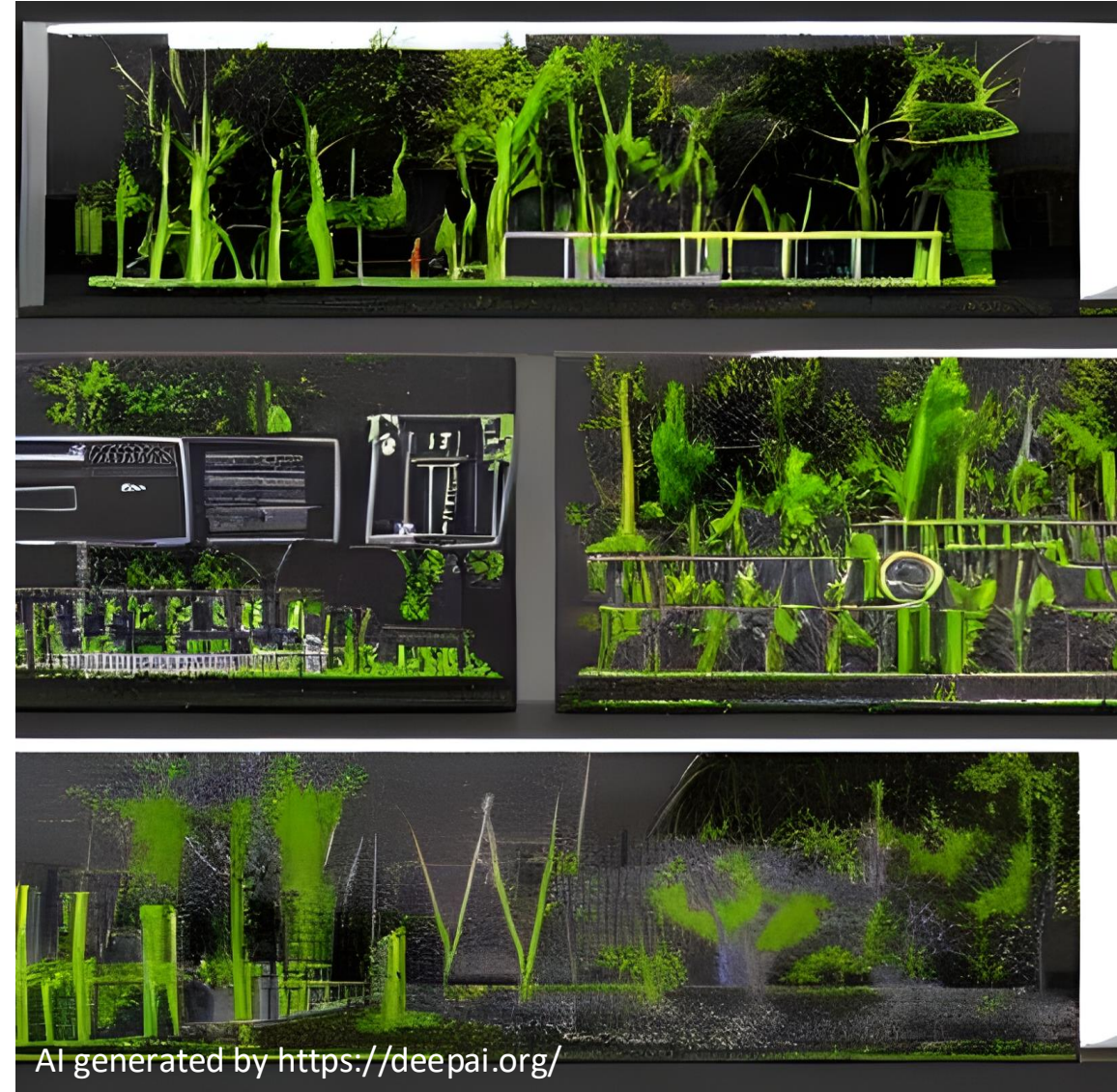
Provocative design dimensions

- **Conceptual** is about an idea/belief/concept to be challenged or critiqued through design
- **Functional** deals with how far from the expected norm the design is intended to function and operate
- **Aesthetics** is about how cultural and social meanings inscribed in the design can spark debate and reflection (e.g., more-than-human perspectives)

Prototyping (future desires)

... prototyping is primarily directed towards the **construction** of the future

Various prototypes enable and encourage prospective users to get concrete experience with a prospective computer system/interactive design.



Pro**v**otyping (troubling mundane everyday life)

Provotyping (troubling mundane everyday life)

... to **expose** tension and problems in **current practice** by getting participants to experience new ways of **doing it** in **alternative ways...**

Towards a Provotyping Approach in Systems Development
(Mogensen, 1992)

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... design to challenge **the status quo** to expose assumptions and **trigger reflective discussions** on the design space...

Design in the Absence of Practice: Breaching Experiments.
(Crabtree, 2004)

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... by asking what can be done to make **trouble** we trigger the well-known and make it **visible** and **account-able...**

Studies of the Routine Grounds of Everyday Activities
Social Problem. (Garfinkel , 1964)

... provotyping can be viewed as the staging of socially-shared practices, through which the problematic is made visible by design and the experience is rendered account-able...

Provotyping and more-than-human perspectives

The BOX Project

"How can a design engage households to use renewable energy? Not by making this effortless, but more disruptive by provocations. We choose to intervene in laundry practices, because it is a practice rich of household routines and social norms."



https://pure.au.dk/ws/portalfiles/portal/369030200/TI22_FINAL_GOOD.mp4

The Gossiper Fridge

"The Gossiper Fridge tells stories about the animals involved in creating the produce currently in the fridge to cultivate a deeper connection with the natural world and raise awareness about the interconnectedness of human consumption and animal lives"

Example Scenario

Human Opens Fridge:

- Trigger:** The fridge door is opened.
- Story:** "Did you know that the almonds in your fridge were pollinated by bees? Bees are crucial for the production of many crops, but their populations are declining due to habitat loss and pesticides. By choosing organic almonds, you're supporting bee-friendly farming practices."
- Interactive Element:** A short animation shows bees pollinating almond trees, followed by a quiz question: "How many crops rely on bee pollination?"

When to provotype

Prototyping

Exploring and materialising user needs

Solution-oriented

Evaluating usability, features & affordances

Convenient and functional benefits

Provotyping

Triggering practices

Problem-oriented

Staging dilemmas & tensions

Slight-strangeness and de-familiarness

Group Work

1: Describe

Choose a **more-than-human** topic you would like to raise questions and promote debate about.

Describe to your group why the chosen topic is relevant.

2: Design

Consider how to design a **provotype** reflecting on the three provocative design dimensions (conceptual, functional, and aesthetic to help raise awareness of your more-than-human topic.

Feel free to draw a picture of this design and discuss the design with your group

3: Reflect

Reflect on the situations where this design can trigger more-than-human concerns in mundane everyday.

Feel free to draw a picture of different situations and discuss possible intended and **unintended** consequences of your design with your group

References

Jensen, R. H., Nilsson, E. M., Hansen, AM., Yoo, D. & Eriksson, E. (2025). Provocations and More-Than-Human Perspectives in Human-Computer Interaction. Interacting with Computers, 2025. iwaf020, <https://doi.org/10.1093/iwc/iwaf020>

Casnati, F., Ianniello, A., Romani, A. (2024). Provocation Through Narratives: New Speculative Design Tools for Human-Non-Human Collaborations. In: Zanella, F., et al. Multidisciplinary Aspects of Design. Design! OPEN 2022. Springer Series in Design and Innovation , vol 37. Springer, Cham. https://doi.org/10.1007/978-3-031-49811-4_71

Jensen, R. H., Encinas, E., & Raptis, D. (2022). Spicing It Up: From Ubiquitous Devices to Tangible Things Through Provocation. In TEI 2022 - Proceedings of the 16th International Conference on Tangible, Embedded, and Embodied Interaction: TEI '22 (pp. 1-15). Article 33 Association for Computing Machinery (ACM). <https://doi.org/10.1145/3490149.3502257>

Bardzell, S., Bardzell, J., Forlizzi, J., Zimmerman, J., & Antanitis, J. (2012). Critical design and critical theory: the challenge of designing for provocation. In Proceedings of the Designing Interactive Systems Conference (DIS '12), ACM <https://doi.org/10.1145/2317956.2318001>

Raptis, D., Jensen, R. H., Kjeldskov, J., & Skov, M. (2017). Aesthetic, Functional and Conceptual Provocation in Research Through Design. In DIS '17, Proceedings of the 2017 Conference on Designing Interactive Systems (pp. 29-41). Association for Computing Machinery (ACM). <https://doi.org/10.1145/3064663.3064739>

Ozkaramanli, D., & Desmet, P. (2016). Provocative design for unprovocative designers: Strategies for triggering personal dilemmas. In 2016 Design Research Society 50 Anniversary Conference (pp. 2001-2016). The Design Research Society. https://pure.tudelft.nl/ws/portalfiles/portal/5019548/165_Ozkaramanli.pdf

Jensen, R. H., Encinas, E., Strengers, Y., Dannesboe, C., Kruuse, E., Skovby, J., Bach, M., Tietze, P., & Christensen, S. (2023). Provotyping Accountability: Exploring Smartphone Use in the Home through Design. In Proceedings of the 2023 ACM Designing Interactive Systems Conference (DIS '23) (pp. 1595–1609). Association for Computing Machinery (ACM). <https://doi.org/10.1145/3563657.3596024>

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<https://mova.uni.mau.se/>



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