

# Generative AI in Design Education

-a tool, not a replacement

*Image credits: Manuela Malo & Sheelynn Hickley*

# Agenda

- Introduction
- Understanding AI in Design
- Integration of AI in Student Projects
- Art and Materiality of prompting
- Exercise: “Armour of me”
- Q & A



# Vision

We refine a Danish, democratic design tradition in collaboration with users, and aim to create sustainable and inclusive solutions in a playful manner.



# Disciplines

Accessory Design

Fashion Design

Textile Design

Communication Design

Industrial Design



Design  
the things  
right!



# Strategic focus

Sustainability  
Play  
Social design



Design  
the right  
things!



Technology is a  
cornerstone in design,  
so how do we educate  
for a world with  
generative AI?



In 2023, DSKD conducted international course collaborations focusing on educating design and AI with Yonsei University in Seoul and the Pratt Institute in New York



INSTITUTE  
PRATT

# DESIGN, PLAY AND A.I.

COLLABORATION: GRAD COMM D +  
DESIGN SCHOOL KOLDING DENMARK

Image by  
Shaelynn Hickey,  
Manuella Melo

SCHOOL OF DESIGN  
MFA COMMUNICATIONS DESIGN

**Grad Comm D**  
Anmol Baliga  
Shaelynn Hickey  
Sangeetha Ramanath  
Christina Ukolov

**DSKD**  
Simon Myken Christensen  
Ornella Gianforte  
Emil Elmström Kjems  
Manuella Melo

**Facilitators**  
Tom Klinkowstein  
Sofia Klink  
Helle Marie Skovbjerg  
Barnabas Wetton

For more information and  
the Zoom link contact  
[tklinkow@pratt.edu](mailto:tklinkow@pratt.edu)

NOVEMBER 14, 2023  
9:30 AM VIA ZOOM

Pratt

design  
school  
kolding

DK

## Understanding AI in Design

While AI-generated content and art went viral in 2022, the use of generative design AI in design has quietly evolved for years.

# Understanding AI in Design

Starting around 2015 major companies like Under Armour and Autodesk began experimenting with AI algorithms for shoe and other product designs.



Image credits: Under Armour

# Understanding AI in Design

In 2017 Nutella launched 7 million unique packaging designs based on one algorithm.



# Understanding AI in Design

The chair by Philippe Stark / Kartell and Autodesk was launched in 2019 and claimed to be the first commercial product conceived by generative AI.

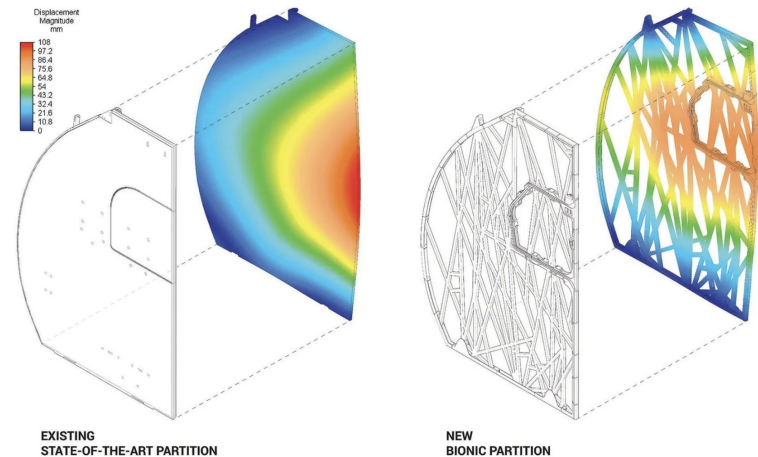


Generative Design is revolutionizing the way designers, engineers, and architects work.

This shifts the role of designers from being mere "creators" to becoming "curators" of the generated designs.

# Understanding AI in Design

Generative design is utilized to optimize Aircraft Design. Autodesk has assisted Airbus A320 in shedding weight, consequently reducing CO2 emissions



Airbus estimates that the new cabin partition design can save up to 465,000 metric tons of carbon dioxide emissions a year (Credit: Airbus)

# Understanding AI in Design

AI text-to-image software has the potential to revolutionize how architects approach the creation and conceptual stages of designing buildings and products



*Andrew Kudless creates architectural images on Midjourney*

# Understanding AI in Design



Under Armour (2023)

# Integration of AI in Student Projects

- Like with other digital tools we believe that the Integration of AI into design enhance creativity for both designers and non-designers.

# Integration of AI in Student Projects

- Like with other digital tools we believe that the Integration of AI into design enhance creativity for both designers and non-designers.
- AI initiates essential inquiries about the essence of creativity and its role in addressing challenges related to production quality and ownership.

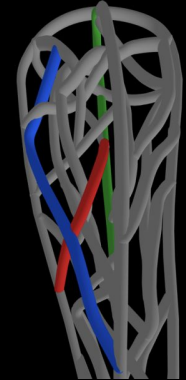
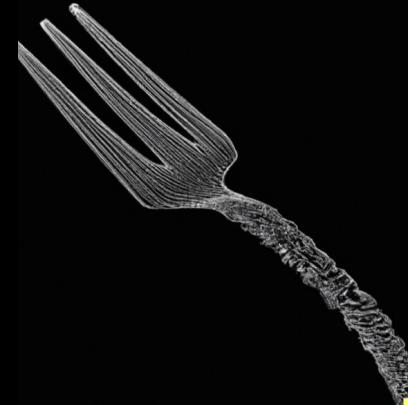
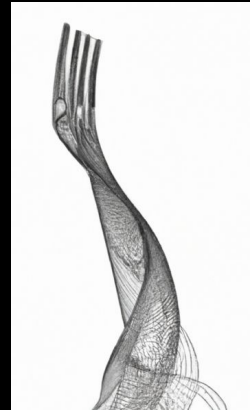
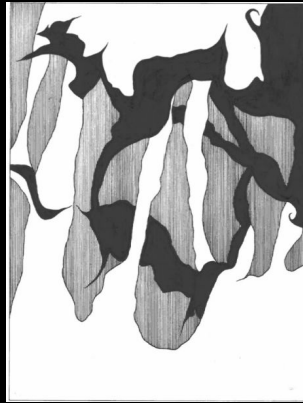
# Integration of AI in Student Projects

- Like with other digital tools we believe that the Integration of AI into design enhance creativity for both designers and non-designers.
- AI initiates essential inquiries about the essence of creativity and its role in addressing challenges related to production quality and ownership.
- Due to the extensive adoption of AI by designers and design firms, it is crucial for DSKD to lead the investigation into AI's impact on design education.

# Integration of AI in Student Projects

- Like with other digital tools we believe that the Integration of AI into design enhance creativity for both designers and non-designers.
- AI initiates essential inquiries about the essence of creativity and its role in addressing challenges related to production quality and ownership.
- Due to the extensive adoption of AI by designers and design firms, it is crucial for DSKD to lead the investigation into AI's impact on design education.
- The exploration journey is undertaken collaboratively with our students and researchers at DSKD.

# Integration of AI in Student Projects



Johanne Holm Skyum,  
Industrial Design /BA1

The formgiving of cutlery was developed through clay, paper, foam, aluminum, AI and 3D modelling in virtual reality.



# Integration of AI in Student Projects

Jannie Sloth Hansen,  
Fashion/Planet, MA1

Rasmus Trøst Simonsen,  
Fashion/Planet, MA2

Brief, one day workshop:

“Create a digital campaign for the digital fashion brand Ecoolska. It should utilize several AI tools and introduce a current or future collection”

# Art and Materiality of prompting



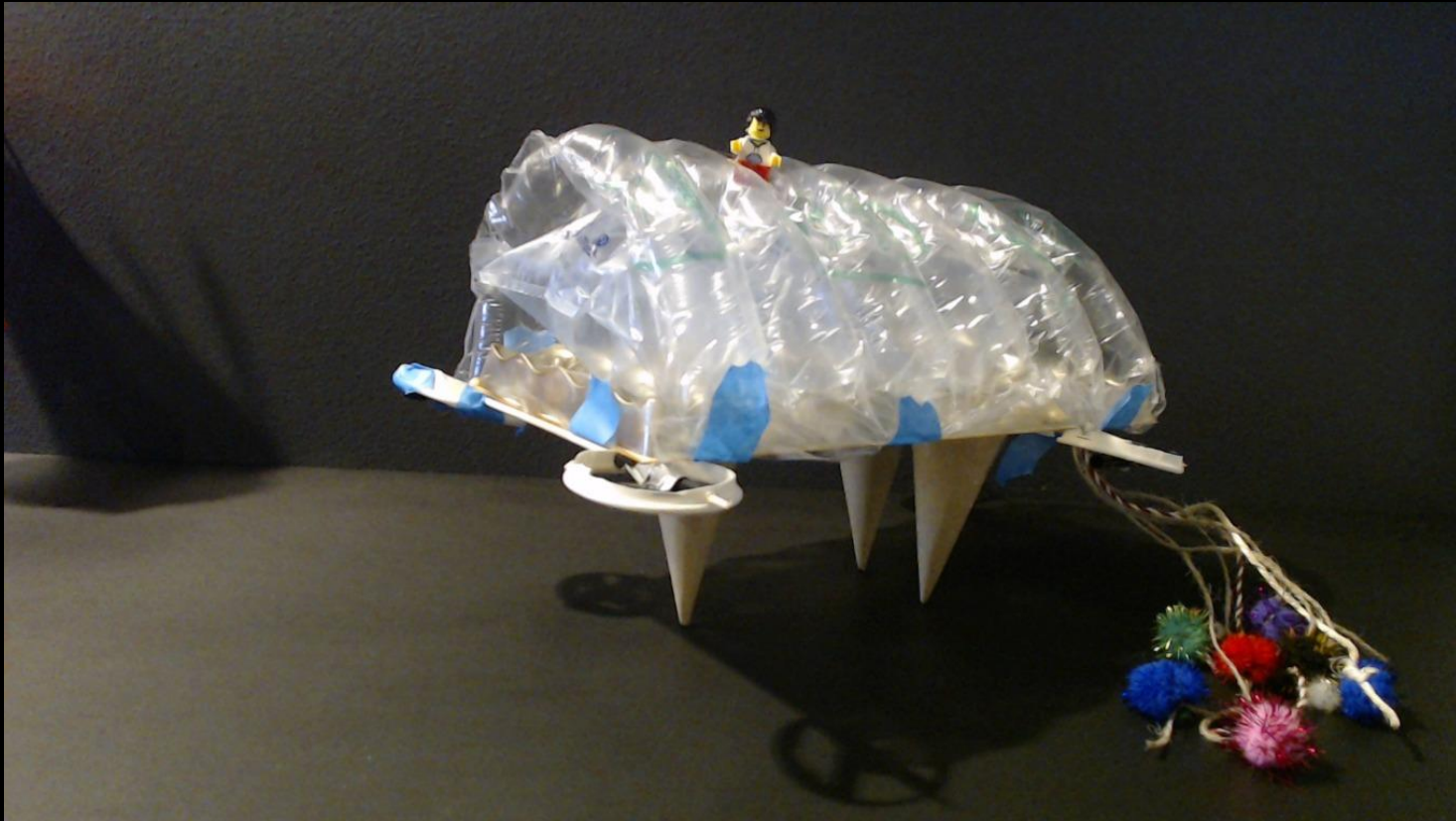
Google Deep Dream:  
Prompt: How do we look 50 years  
from now?

# Art and Materiality of prompting



Google Deep Dream:  
Prompt: How do we look 50 years  
from now?

# Art and Materiality of prompting

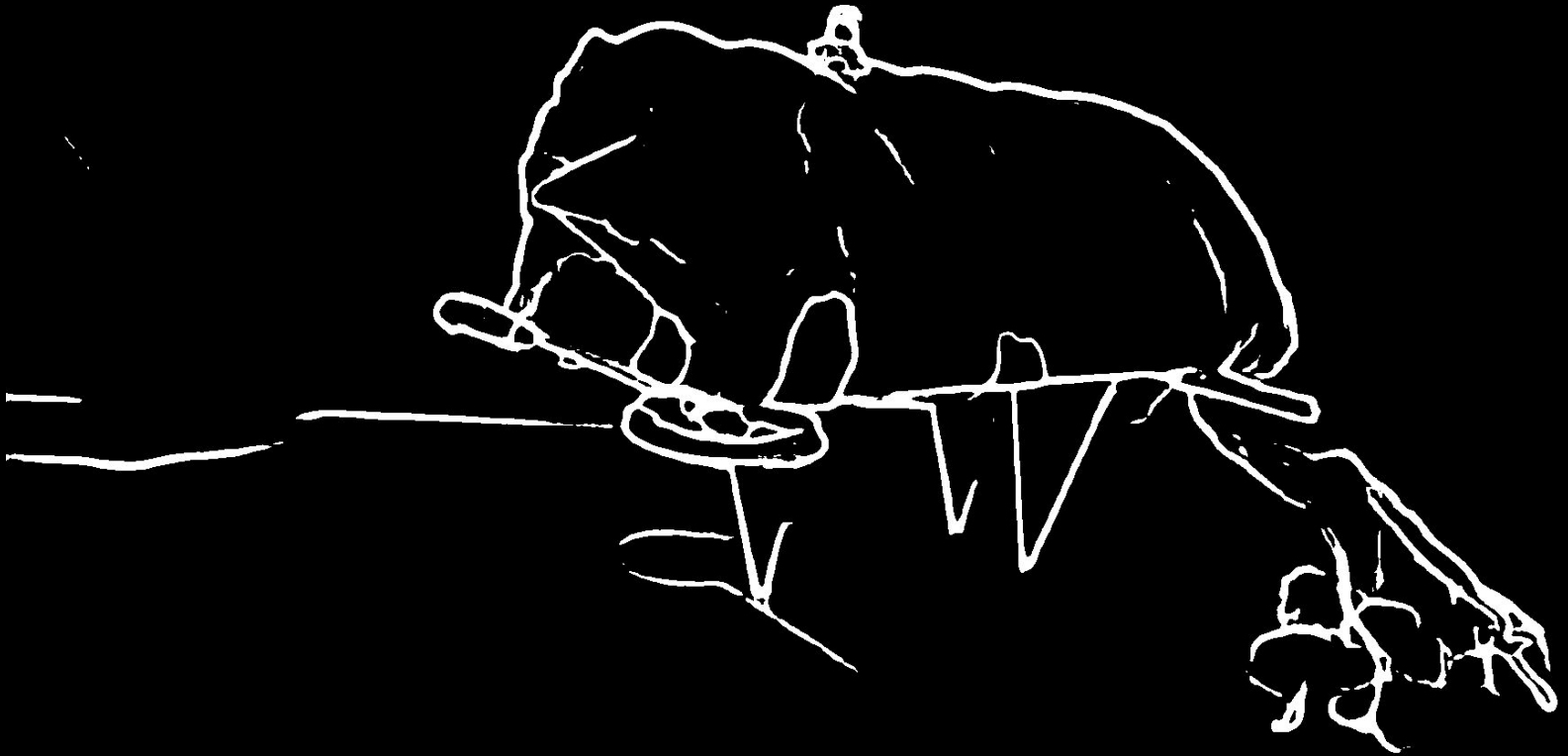


FutureMirror workshop

Andreas Refsgaard. Artist and educator

Nicklas Hansen. Copenhagen Institute of Future studies

# Art and Materiality of prompting



FutureMirror workshop

Andreas Refsgaard. Artist and educator

Nicklas Hansen. Copenhagen Institute of Future studies

# Art and Materiality of prompting



FutureMirror workshop

Andreas Refsgaard. Artist and educator

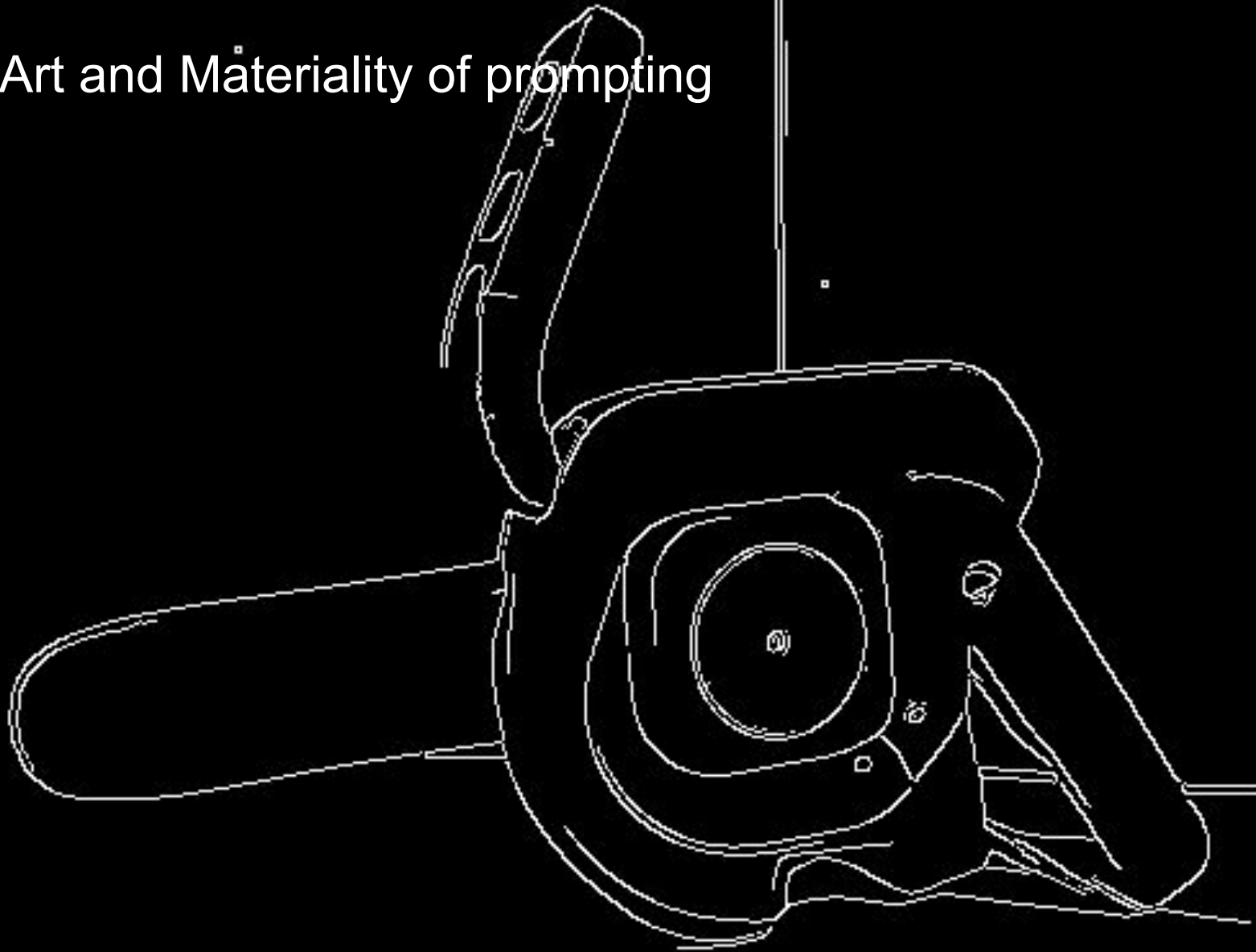
Nicklas Hansen. Copenhagen Institute of Future studies

# Art and Materiality of prompting



Barbie Chainsaw  
Tina Ferrari. Master Student at DSKD

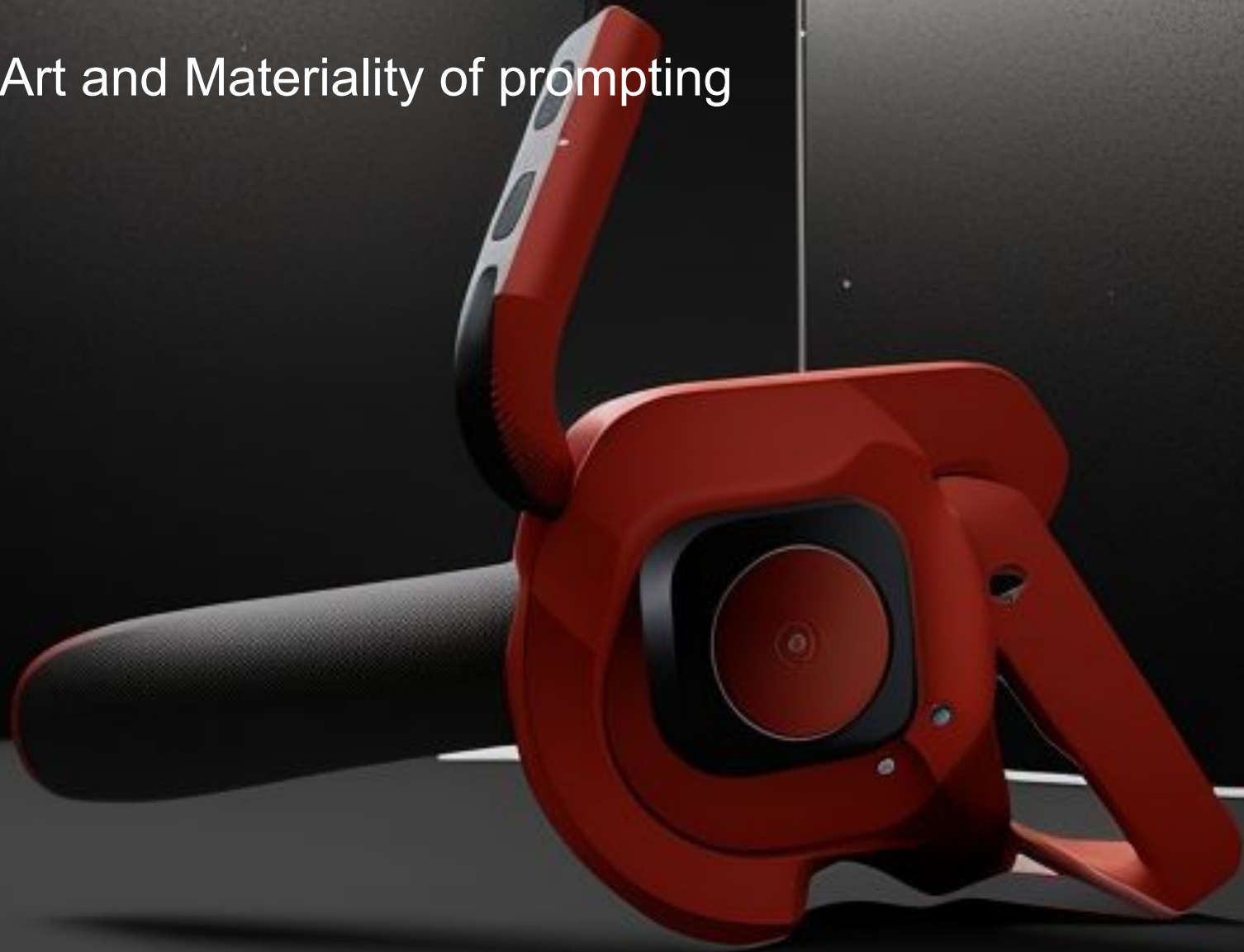
# Art and Materiality of prompting



# Art and Materiality of prompting



# Art and Materiality of prompting



# Art and Materiality of prompting



# Art and Materiality of prompting



# Art and Materiality of prompting

5 min. Prompting exercise

pair up and decide on the following:

Title?

Who is wearing this item?

Detail the color and materiality?

Supplemental details?



# Art and Materiality of prompting

5 Min

Q and A

How does AI impact your / other educational contexts?

You are most welcome to reach out  
or visit us in Kolding:

Sofie Kinch, Assistant Professor, PhD  
[sk@dskd.dk](mailto:sk@dskd.dk)

Brian Jørgensen, Teaching Assistant  
Professor  
[bj@dskd.dk](mailto:bj@dskd.dk)

