

Expanding Performance: Theatre and Social Robotics



Brief Introductions

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Schedule Lecture

17:30 – 17:35 Introduction

17:35 – 17:45 Collaboration VU + UU

17:45 – 18:00 Performing Arts and Social Robotics

18:00 – 18:15 Break

18:15 – 18:30 Dramaturgy for Devices

18:30 – 18:45 Case Study

18:45 – 19:00 Discussion

19:00 – 19:15 Q&A

Collaboration UU + VU

2 visits: groups of 2-3 people visit several VU groups

2 assignments: moodboard + robot review

Aim: providing inspiration, giving feedback, introducing the dramaturgical perspective in HRI design and analysis

Extra events!

De Brakke Grond
15:00-17:00 + Double
Bill (23 Nov)

TiM Seminar Ethics of
AI 15:00 - 17:00 (14
Dec)

The Performing Arts and Social Robotics



Theatre Techniques: Interaction Dynamics



Li et al. (2019). Communicating Dominance in a Nonanthropomorphic Robot Using Locomotion

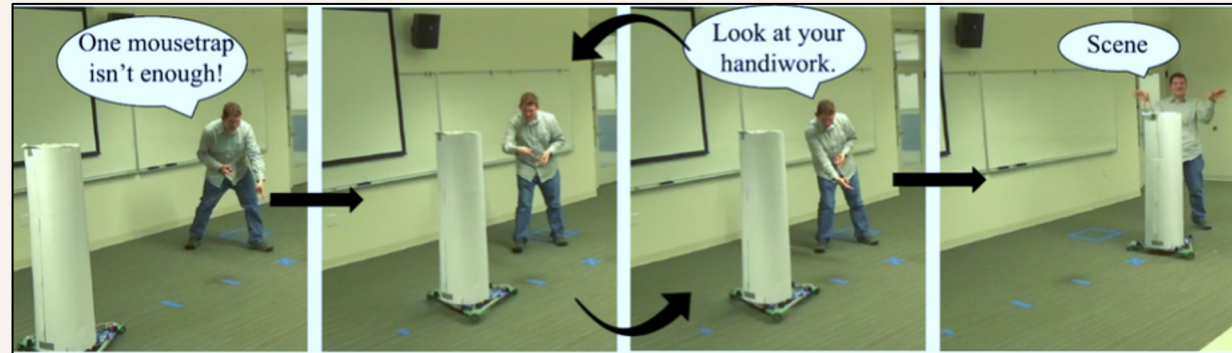
Theatre Workshops to Awaken Creativity



LaViers et al. (2017). Choreographic and Somatic Approaches for the Development of Expressive Robotic Systems

Sirkin, D., & Ju, W. (2014). Using Embodied Design Improvisation as a Design Research Tool

Theatre as a Space to Explore Robot Behaviour



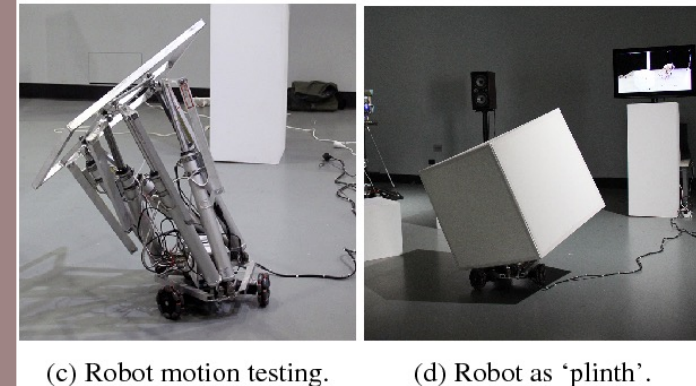
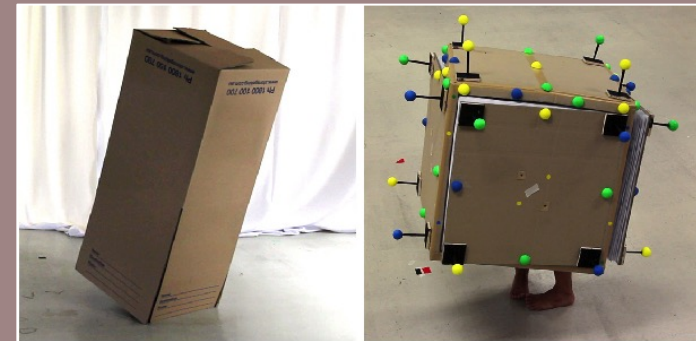
Rond et al. (2019). Improv with Robots: Creativity, Inspiration, Co-Performance

Jochum and Derks (2019). Tonight we Improvise!

Implicit Knowledge of Performers



Meerbeek et al. (2009). Iterative Design Process for Robots with Personality



Petra Gemeinboek and Rob Saunders

Robot Improvisers – ALAR Project





– BREAK –

What's Dramaturgy?

"Doing dramaturgy in the context of the theatre involves paying attention to how performances do what they do as a result of how they are constructed"

Dramaturgy:

- Set of tools, terms, and insights
- Thinking through how situations are constructed and how they invite interactions and interpretations (for actors and audiences)

What the authors do:

- Dramaturgical concepts as CONCEPTUAL TOOLS
 - Understanding and designing the interaction between smart objects and humans
 - How this is embedded in an environment/context/situation
-

Dramaturgy for Devices

Design case: *Mokkop* by Josje van Beusekom.

Dramaturgical analytical terms:

- Mise-en-scène
- Performativity
- Presence
- Address



Mise-en-scène



- Arrangement of elements in space and time that invites specific actions, and produces relationships
- Mokka: layout of the hospital + actions (observations) + feelings (interviews)

Performativity

- The power of words and actions to bring about a situation
- **Mokkop**: how and what could the cup do to bring about, in a particular situation/context, the desired action of caregivers



Presence



- A way of captivating the audience
- Mokkop: glowing five times a day (light: non-invasive way of drawing attention)

Address

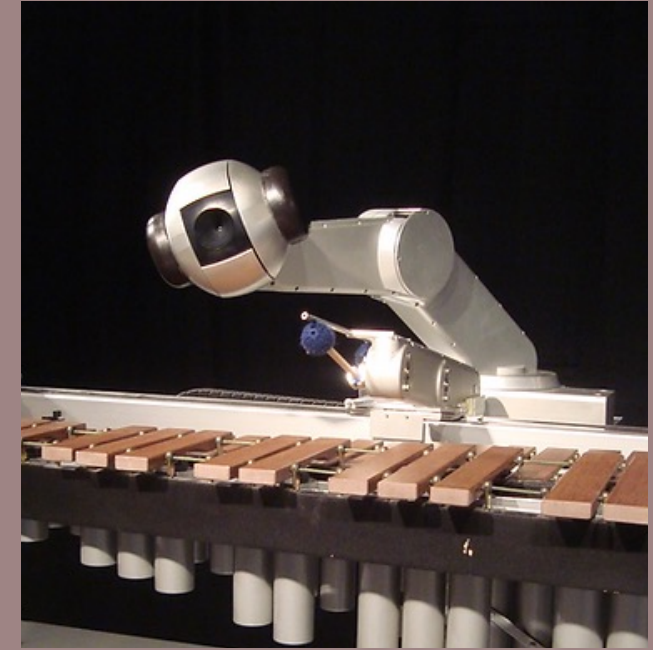


- The way one addresses fellow actors or the audience invites, triggers ways of responding
- Mokkal: caregivers feel invited for action in specific ways because of the cup's address

https://www.youtube.com/watch?v=utV1sdjr4PY&ab_channel=TED

08:50-14:54

Example: Shimon, the Marimba Player

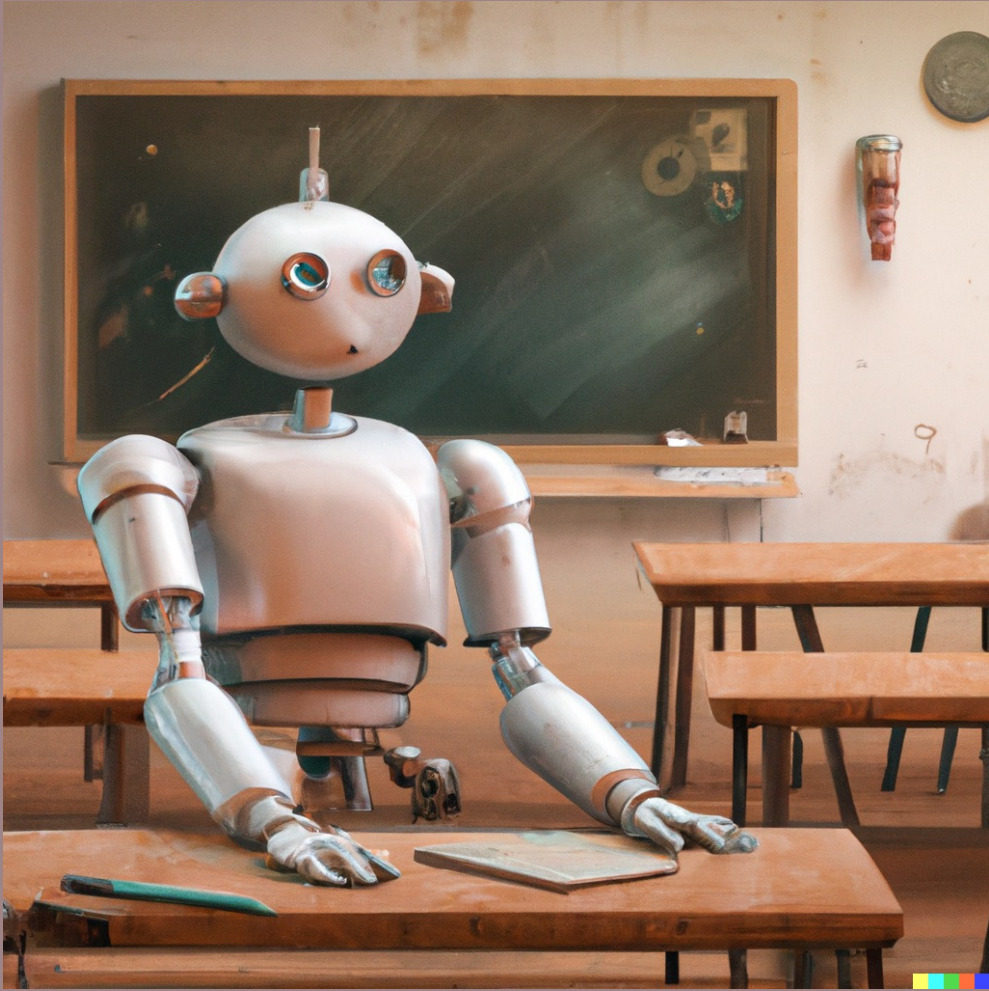


Time for Discussion!

10mn

Mise-en-scène
Performativity
Presence
Address





Any Questions?

