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## ABSTRACT

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## Intergroup Contact via Robotic Telepresence

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### ABSTRACT

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### Introduction

## The Contact Hypothesis

- History of the four condition(Pettigrew and Tropp, 2005)
- Advancements since Allport. (Kenworthy et al., 2005; Brown and Hewstone, 2005)
  - Contact should focus on the combination between forming a personal connection and maintaining group salience and representation.
  - anxiety and other emotions play an important role.
  - Long-term effects, meta-analytics (Pettigrew and Tropp, 2006)
  - Different types of contact (Direct/indirect, structured/unstructured, extended/vicarious..?).

(Amichai-Hamburger et al., 2015; Vezzali et al., 2014)

### Robotic telepresence

- History and current uses of robotic telepresence (Tsui et al., 2011).
  - Social robots: health, education, day-to-day communication
  - Industry robots: surgical, factory.
  - Examples from Japan and my MA.
- Terminology and the asymmetry of telepresence Telepresence communication is by nature asymmetrical, in a sense that the experience of signal transmission is very different than that of reception. Transmission is mediated through a control interface but reception immediate in a shared physical space. Terminology:
  - Controller: controller of the robot.
  - Interlocutor: Person interacting with the robot.
- About the senses of presence, agency, and owner-ship.

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- From my MA
- About intercorporeality
  - From my MA

## Robotic telepresence as a medium for contact

### Mediatization of politics

• Mediatization of the lifeworld changes the nature of politics and political discussion (Hepp and Krotz, 2014; Thimm et al., 2014)

#### Online and virtual mediation

- Review of online and virtual contact attempts, advantages and disadvantages (Ho and McLeod, 2008; Sassenberg et al., 2005; Hasler and Amichai-Hamburger, 2013; Robinson, 2007; Hasler and Amichai-Hamburger, 2013; Postmes et al., 2001; Amichai-Hamburger and McKenna, 2006)
- Mention immersive environments

### Telepresence as a midway

- On the controller side, telepresence provides the benefits of online communication: accessibility, anonymity, re-embodiment, along with disadvantages regarding the dis-association of ownership.
- On the interlocutor side there are some of the benefits of face-to-face conversation, intercorporeality

## Intergroup power relations

## Strategies of status

- Does the contact situation need to:
  - reflect existing power relations (to avoid subtyping)?
  - 'normalize' them, to increase friendship and reduce anxiety?
  - reverse the power relations for empowerment and empathy?

(Maoz, 2011; @ Shnabel and Nadler, 2008; Saguy et al., 2013)

## Different conformations of telepresence contact:

- \* Person <-> Robot <-> Robot <-> Person
- \* Person -> Robot <-> Person
- \* Person, Person -> Robot
- \* Person <-> Person with Robot.

# Group salience: how to increase via telepresence robots?

### Group markers via custom robot design.

• Include group-identifying markers in the robot design, or encourage group members to include them in their own custom design. (Suguitan and Hoffman, 2019)

#### Interaction content

- Anonymity vs self-disclosure? Is the real person behind the robot is perceived as a protoypical palestinian or not and what is revealed about the person
- Encourage conflict related interaction?

# Emotional and personal connection with telepresence robots.

## On the controller side: Reduction of anxiety via anonymity and imagery

- Same from online interaction (Hasler and Amichai-Hamburger, 2013; Postmes et al., 2001; Sassenberg et al., 2005).
- Addition of re-embodied avatar imagery
- Therapeutic material engagement if you make your own avatar (March, 2019; Sholt and Gavron, 2006)
- Bodily Expression

## On the interlocutor side: Physical interaction and intimacy

- Touch and cognition (Influs et al., 2018; Feldman et al., 2014; Goodwin, 2017)
- Uncanny valley and anxiety (Mori et al., 2012)

### Design considerations

### Appearance: Human vs nonhuman

• More about the uncanny?

## Materiality and movement

- Importance of movement (Hoffman and Ju, 2014)
- Soft robotics

## The importance of feedback

• Audio and visual feedback for actions (Caldwell et al., 1994; Dolezal, 2009)

### Autonomous vs controlled functions

\* AI and Augmentation vs Expressiveness and intentional

### Real-world conflict considerations

## Empowerment via education in robotics Legal and ethical considerations Israel-Palestine test case Conclusions

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