Intergroup Contact via Robotic Telepresence

Avner Peled

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# Introduction

## The Contact Hypothesis

* History of the four condition(Pettigrew & Tropp, 2005)
* Advancements since Allport. (Brown & Hewstone, 2005; Kenworthy, Turner, Hewstone, & Voci, 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 & Tropp, 2006)
  + Different types of contact (Direct/indirect, structured/unstructured, extended/vicarious..?).
* (Amichai-Hamburger, Hasler, & Shani-Sherman, 2015; Vezzali, Hewstone, Capozza, Giovannini, & Wölfer, 2014)

## Robotic telepresence

* History and current uses of robotic telepresence (Tsui, Desai, Yanco, & Uhlik, 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 ownership.
  + 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 & Krotz, 2014; Thimm, Dang-Anh, & Einspänner, 2014)

## Online and virtual mediation

* Review of online and virtual contact attempts, advantages and disadvantages (Amichai-Hamburger & McKenna, 2006; Hasler & Amichai-Hamburger, 2013, 2013; Ho & McLeod, 2008; Postmes, Spears, Sakhel, & de Groot, 2001; Robinson, 2007; Sassenberg, Boos, & Rabung, 2005)
* 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 & Nadler, 2008; Saguy, Tropp, & Hawi, 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 & 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 & 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 & Gavron, 2006)
* Bodily Expression

## On the interlocutor side: Physical interaction and intimacy

* Touch and cognition (Feldman, Rosenthal, & Eidelman, 2014; Goodwin, 2017; Influs, Pratt, Masalha, Zagoory-Sharon, & Feldman, 2018)
* Uncanny valley and anxiety (Mori, MacDorman, & Kageki, 2012)

# Design considerations

## Appearance: Human vs nonhuman

* More about the uncanny?

## Materiality and movement

* Importance of movement (Hoffman & Ju, 2014)
* Soft robotics

## The importance of feedback

* Audio and visual feedback for actions (Caldwell, Wardle, & Goodwin, 1994; Dolezal, 2009)

## Autonomous vs controlled functions

\* AI and Augmentation vs Expressiveness and intentionality

# Real-world conflict considerations

## Empowerment via education in robotics

## Legal and ethical considerations

## Israel-Palestine test case

# Conclusions

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