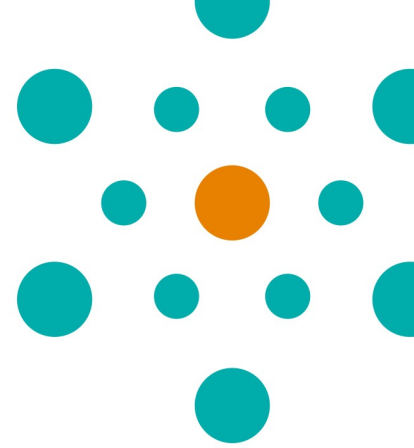


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# How social is VR?

Opportunities and risks of training social skills in VR

# Virtual Skills Lab



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# How social is VR?

## Virtual Skills Lab

- How to effectively use VR for training social skills
- Technology-mediated simulation of human-human interaction



# How social is VR?

## Structure of the Talk

- Solutions
- Sociality in VR
- The case against using VR for training social skills
- Why and how to use VR for training social skills



# How social is VR?

## Solutions

- 360° video: immersive
- CGI/Avatars: interactive/RPG
- CGI/Socially interactive agents (NPC): Replace human interaction partners (?)



# How social is VR?

## Sociality in VR: interaction vs. structure

- Avatar solution: *direct social interaction* (platforms, communities)
- Building friendship, intimate relationships
- Downside: abusive behaviors; Sociality implies also negative *structural aspects*.



# How social is VR?

## The Case Against VR for Training Social Skills

- Many applications for diversity training
- Walk a mile in another's shoes? → Ambiguous results
- Brief experience of perspective taking does not bridge structural divide in sociobiographical experience



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## Why and how to use VR for Training Social Skills

- Experience combined with reflection → “as-if” mode
- Comprehensive training concept
- Learning cycle (Kolb):
  - (1) Concrete Experience
  - (2) Reflexive Observation
  - (3) Abstract Conceptualization
  - (4) Active Experimentation





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## References

- Bailenson J (2018) Experience on Demand. New York: Norton & Company.
- Center for Countering Digital Hate (2022) Facebook's Metaverse is Unsafe. <https://www.counterhate.com/metaverse>
- Kolb A Y and Kolb D A (2017) The Experiential Educator. Hawaii: Kaunakakai.
- Omokha R (2021) VR Trainings are not going to fix corporate racism. <https://www.wired.com/story/vr-trainings-corporate-racism/>
- Rubin P (2018) Future Presence. New York: Harper Collins.
- Wolfangel E (2020) What I learned about Reality in VR. <https://immerse.news/what-i-learned-about-reality-in-vr-336b7933184f>.
- App Bodyswaps: <https://bodyswaps.co/>
- Project Beanotherlab: <http://beanotherlab.org/home/the-lab/>



# How social is VR?

## Publications Virtual Skills Lab (as of 2022-03-08)

- Neundlinger, K. (2021) Digitale Empathie. Virtual Reality als Medium zur Entwicklung sozialer Kompetenzen. *Medienimpulse*, Jg. 59, Nr. 2, 2021  
<https://journals.univie.ac.at/index.php/mp/article/view/6202/6131>
- Neundlinger, K., Oancea, C. (2021) Borderland encounters – evolving professional identities between human and machine learning processes. In: Cole, N. L., Jahrbacher, M., Getzinger, G. (eds.) Conference Proceedings of the STS Conference Graz 2021, 3-5 May 2021, 289-307.  
<https://openlib.tugraz.at/download.php?id=6183caf9523cc&location=browse>
- Neundlinger, K., Mühlegger, M., Kriglstein, S., Layer-Wagner, T. Regal, G. (2022) Training Social Skills in Virtual Reality Machine Learning as a Process of Co-Creation. *Lecture Notes in Networks and Systems*, Vol. 382, Alexiei Dingli et al. (Eds): *Disruptive Technologies in Media, Arts and Design*. Berlin: Springer Nature, pp. 139-156. [https://link.springer.com/chapter/10.1007/978-3-030-93780-5\\_10](https://link.springer.com/chapter/10.1007/978-3-030-93780-5_10)
- Frankus, E., Neundlinger, K., Schmid, J., Gerhardus, A. (2021) Co-creating interactive virtual reality training environments. Reflections on a model for a participatory design process. *ICCGI 2021. The Sixteenth International Multi-Conference on Computing in the Global Information Technology*.  
[https://www.thinkmind.org/index.php?view=article&articleid=iccgi\\_2021\\_1\\_10\\_18001](https://www.thinkmind.org/index.php?view=article&articleid=iccgi_2021_1_10_18001)

