

kompott

telepresence through a robotic agent

Human-Robot Interaction

Concept for Bachelor Thesis
University of the Arts Zurich

"Fachtheorie V - Interaction Design Research" held by Gerhard Buurman & Karin Franinovic
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Research:

In our extensive research we looked at the history of robotics, as well as recent developments in human robot interaction.

Most interessting finding:

//A study conducted by the MIT showed that users are more likely to bond with a robotic agent rather than a purely screen based agent.

A robot, people can relate to, needs to convey a sense of aliveness. Aliveness very often is created by a refined artificial intelligence system. To make things easier we decided to animate our robot by giving it someone else's aliveness and intelligence.

>>telepresence

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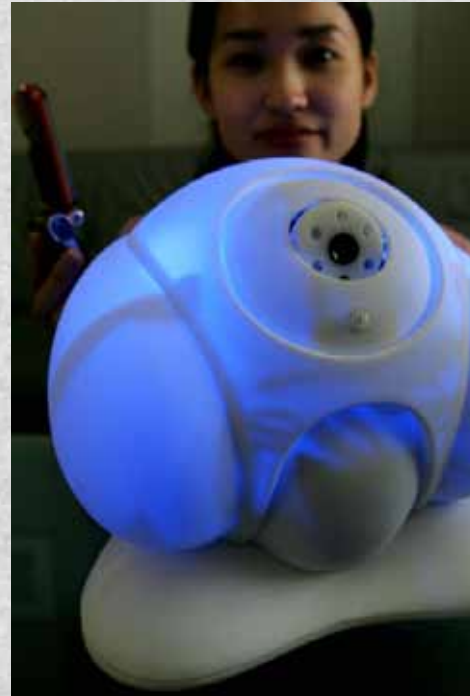
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business

//anybot

commercial telepresence robot



home

//roborior

the housesitting robot



art

//social telepresence

blind dating, voyeurism, remote
tourism

telepresence

Telepresence describes the possibility to appear present at a location other than your current one, through technology. In an ideal case, conversational partners have the impression of sharing the same space.

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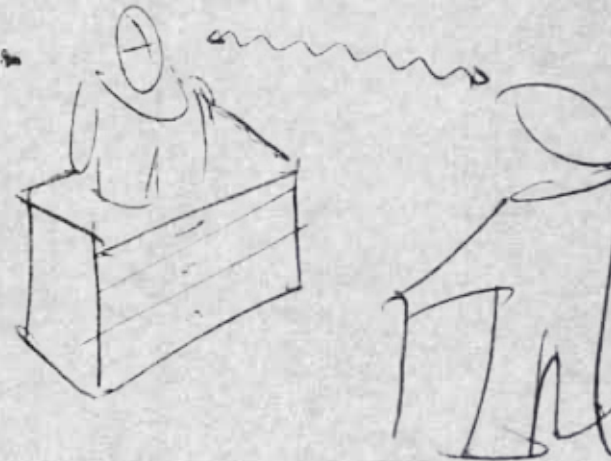
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David | Zürich



Urs - Davids Grandpa | Davos

Scenario

Davids Grandpa is not very much into new technologies, but wishes to stay in contact with his family. David and his grandpa`s generation are not using the same channels of communication, which leaves them hardly communicating at all.

Project sketch

Giving Urs the possibility to communicate with his loved ones in a native uncomplicated way - through a robotic agent.

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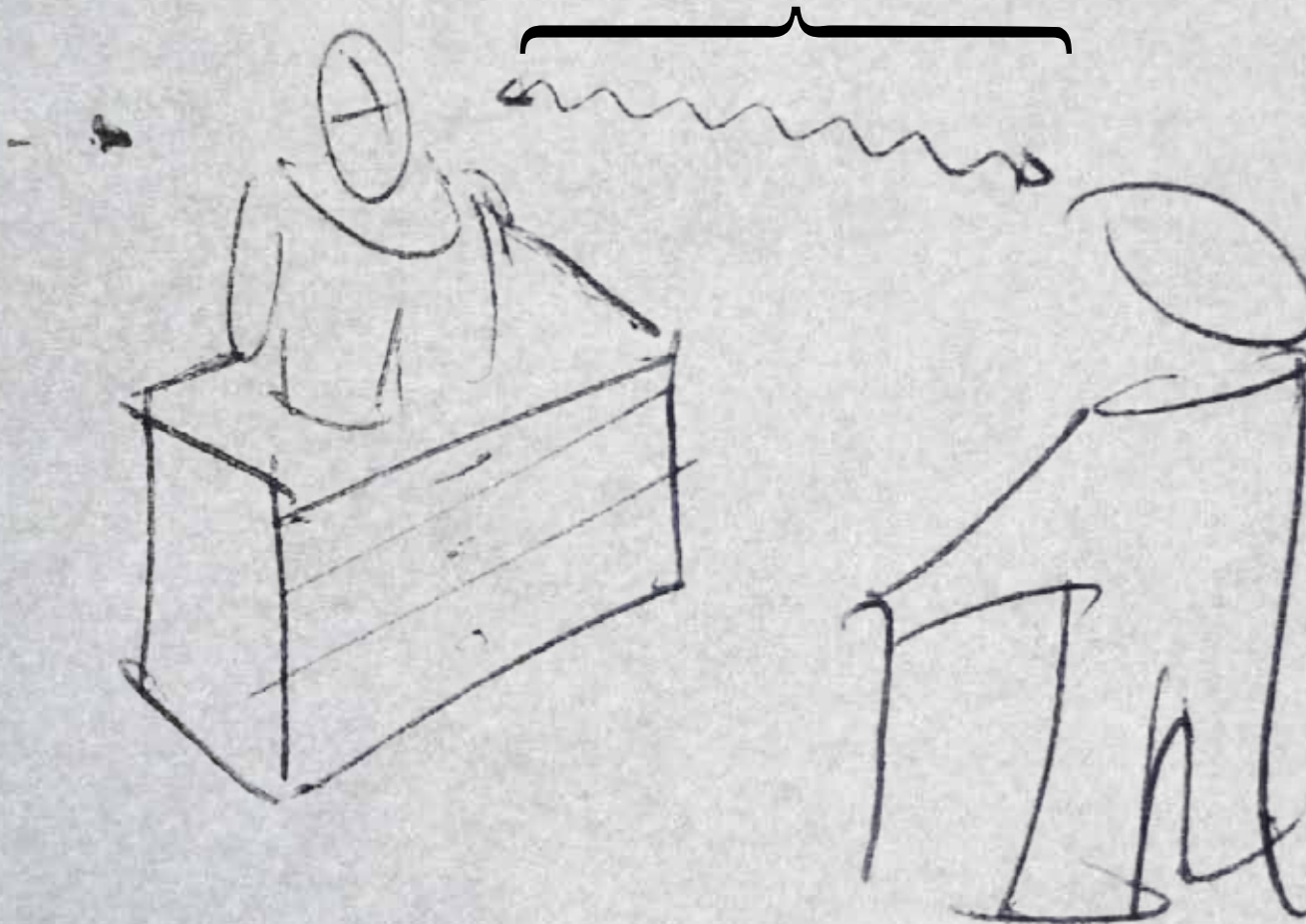
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area of interest - hri



Design question:

How should a robotic agent for telepresence be designed, to appeal to users who are not familiar with technology?

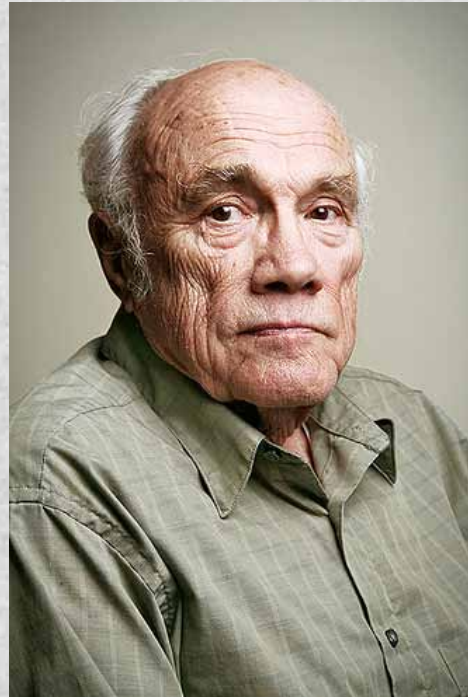
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typical users

Senior citizens have a big need to communicate with others. But a lot of the newly available technology is too complicated for them.

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methodology

Inspired by IDEO methodcards we intend to observe elderly people.

// How do they stay in contact with beloved ones.

// How are their regular communication partners manifested in their living environment.



Learn Look Ask Try

Guided Tours

HOW: Accompany participants on a guided tour of the project-relevant spaces and activities they experience.

WHY: Making an exploration of objects and actions in situ helps people recall their intentions and values.

By following users through their homes, the IDEO team understood the various motivations behind ways photographs are used and stored.

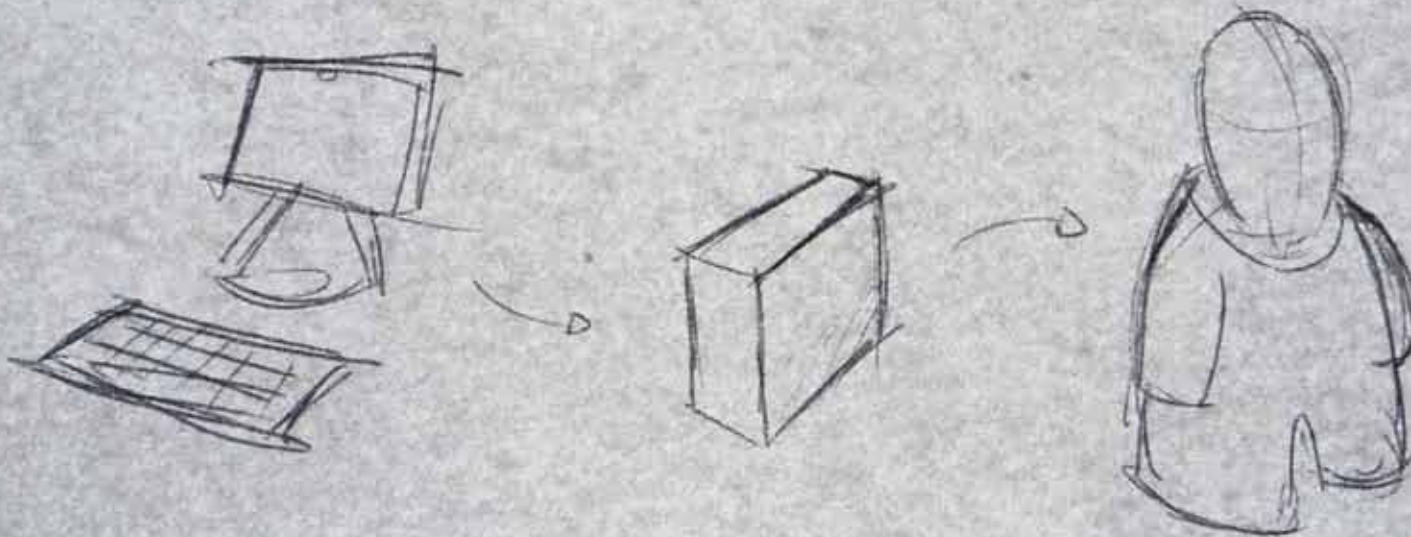
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//partner

An ordinary pc, equipped with a webcam should do the job.

//server

to keep the robot light and scalable, the processing should be done by a server.

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is receiving the servers commands - thus embodying partner a.

infrastructure

we want to focus on the robotic device - making it possible to operate without any further technical infrastructure on the side of the other communication partner

next steps

Getting in contact with retirement homes. Spending an afternoon with elderly people.

Zürich

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