ARSV

Augmented Reality Speakers View

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Interaction Engineering WS19/20
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Motivation

Related work

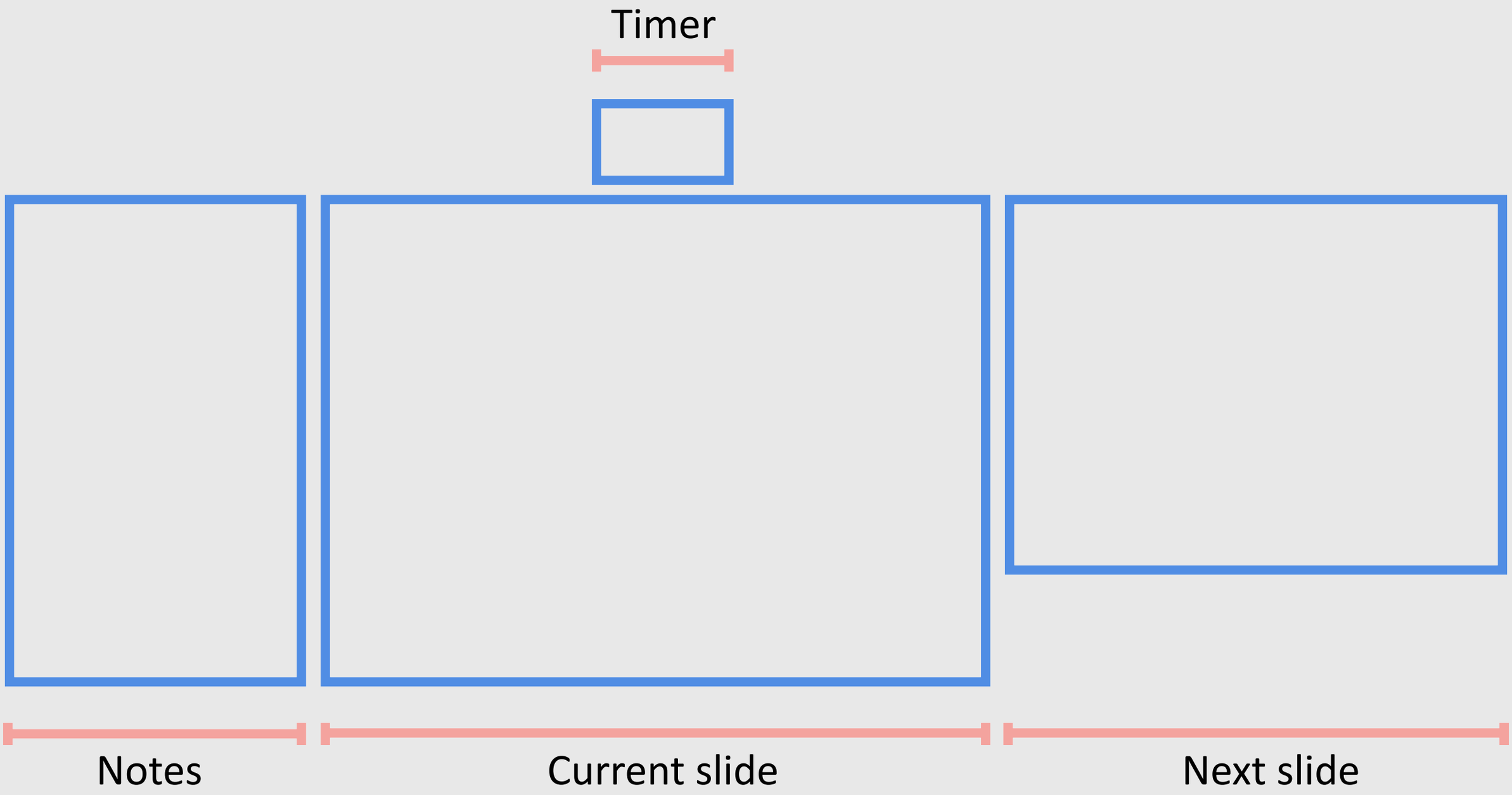
- Hyrskykari, Istance, Vickers:
  Gaze gestures or dwell-based interaction?

- Tönnis, Plavšić:
  Survey and Classification of Head-Up Display Presentation Principles

Concept

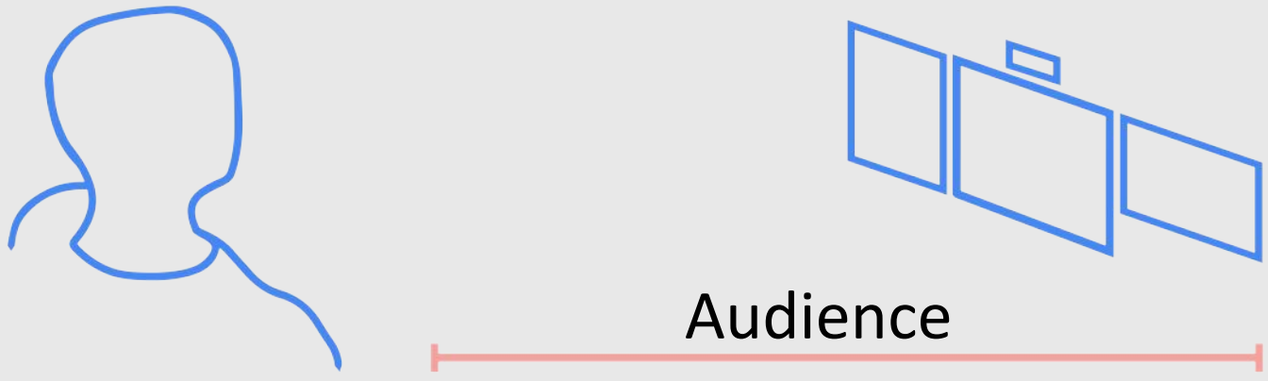
A **novel way of presenting**, allowing the speaker to **present freely** without looking at a screen or using a keyboard or clicker to change slides.

Concept Layout



Concept Layout Variation 1

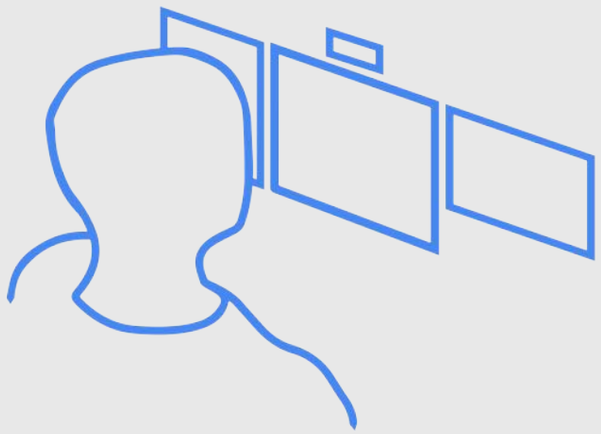
Spatial



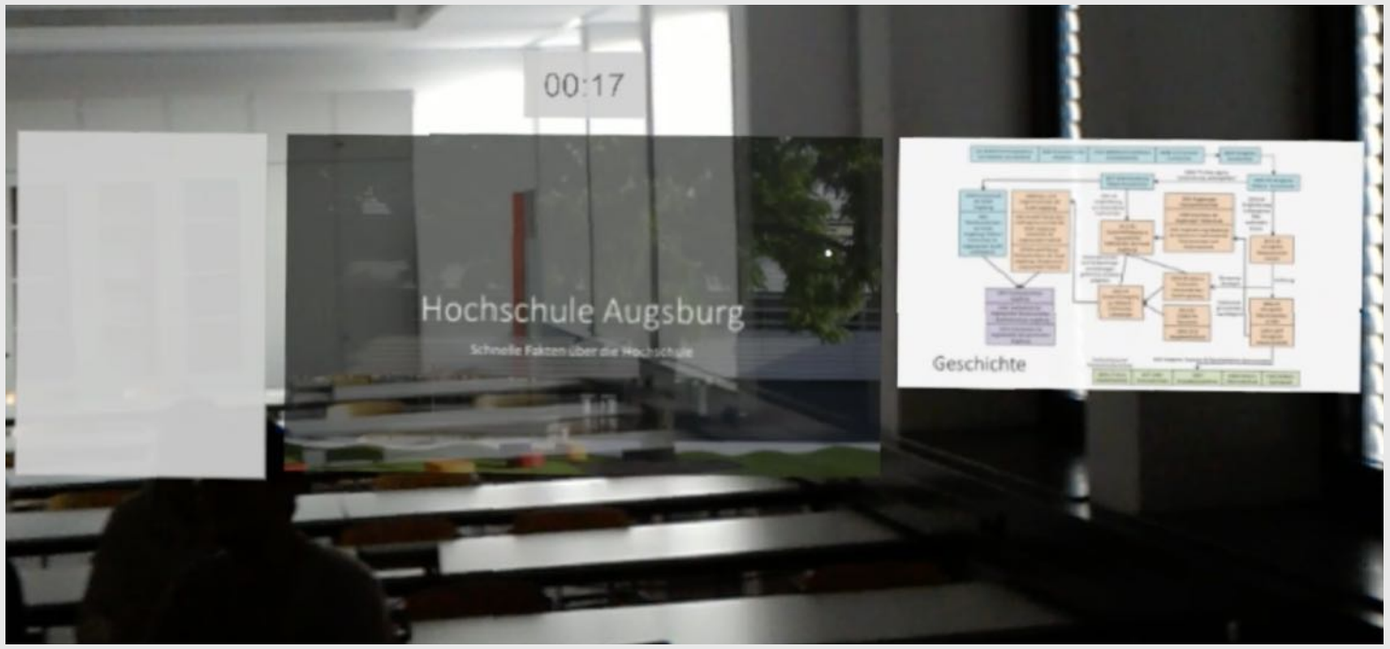
- Elements fixed in space
- Located in depth of the room
- Elements can be emphasized

Concept Layout Variation 2

Head-Up-Display (HUD)



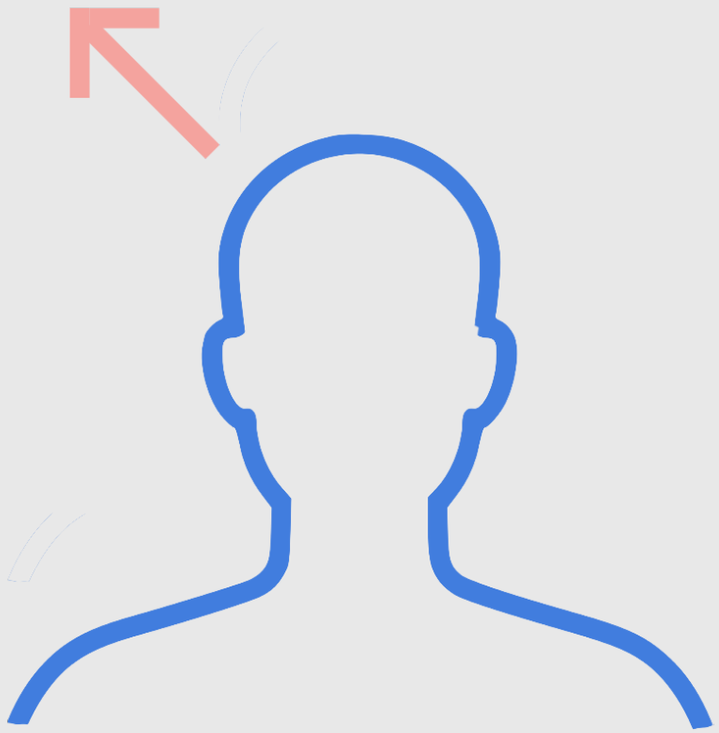
Audience



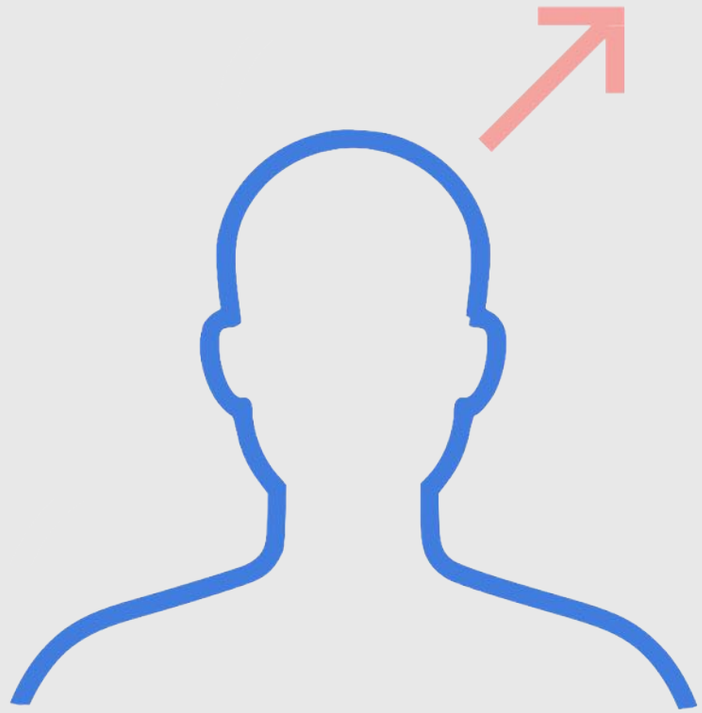
- Elements linked to user
- Moved alongside sight of user
- Elements can’t be emphasized

Concept Interactions

Slide changing



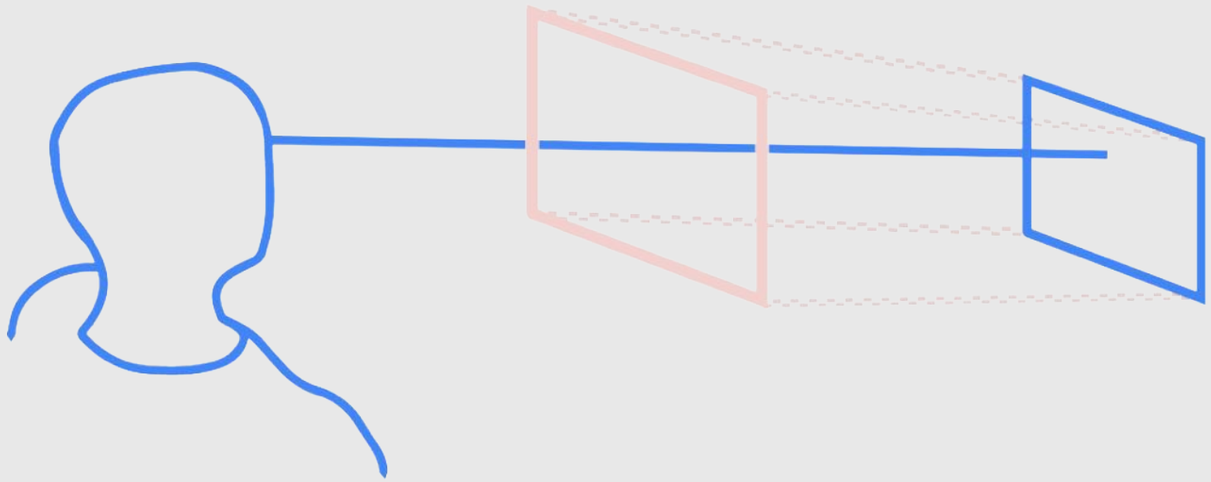
Previous Slide



Next Slide

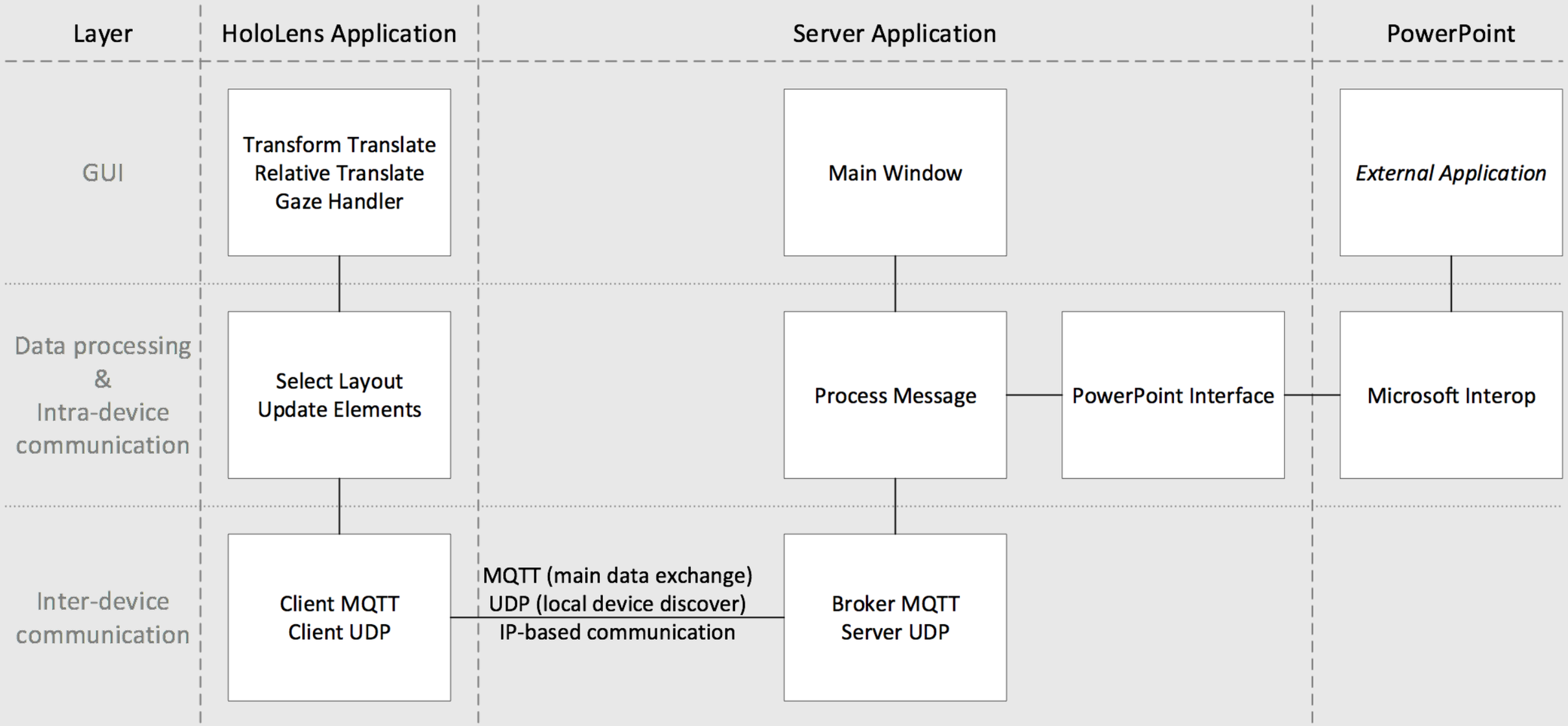
Concept Interactions

Emphasizing (Spatial layout)



- Moves elements towards user
- Triggered by dwell-based focus onto green area
- Reset if focus outside element

Technical Realisation



User Tests Setting

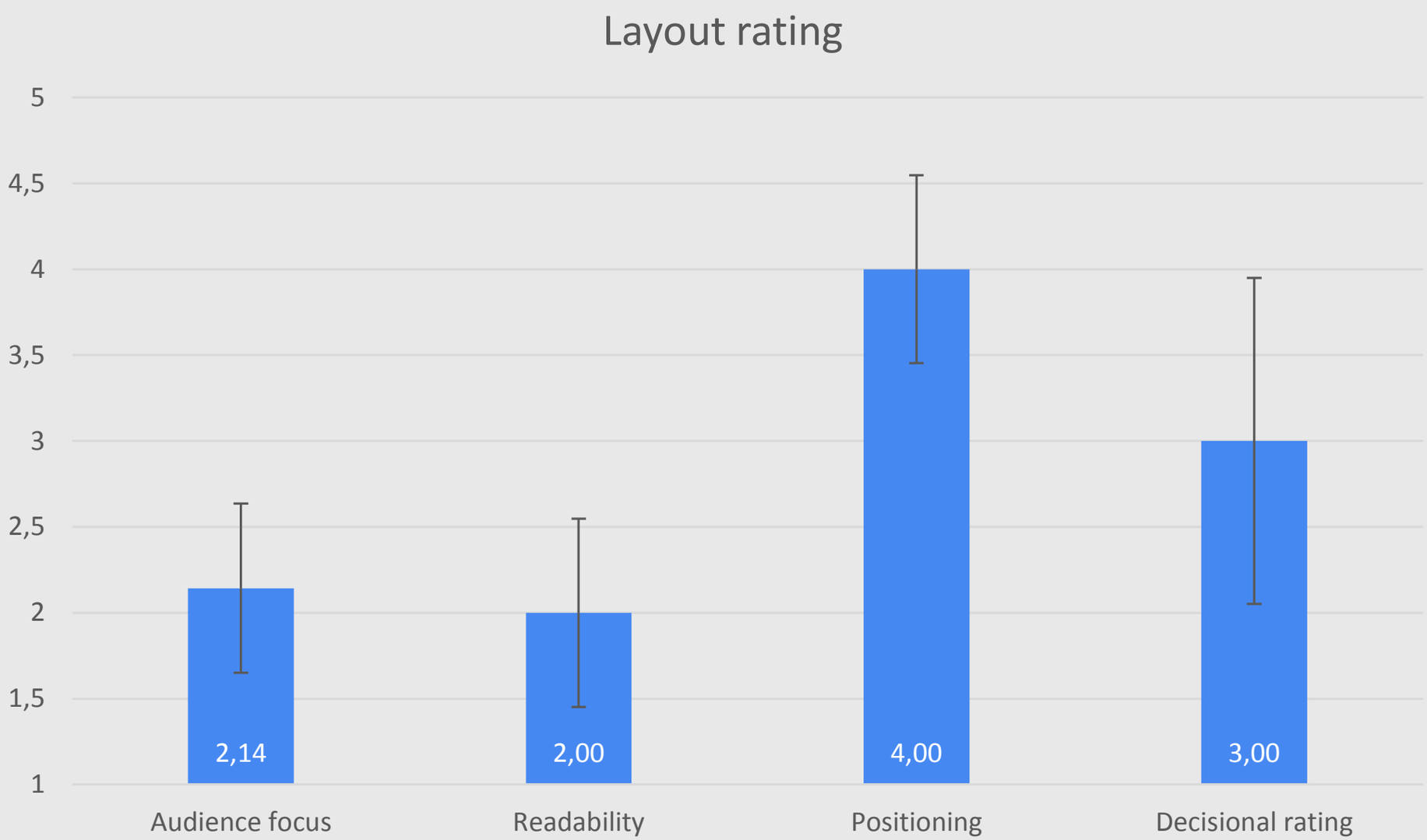
7 Participants (20 - 30 yo)

2 Presentations (Augsburg + University)

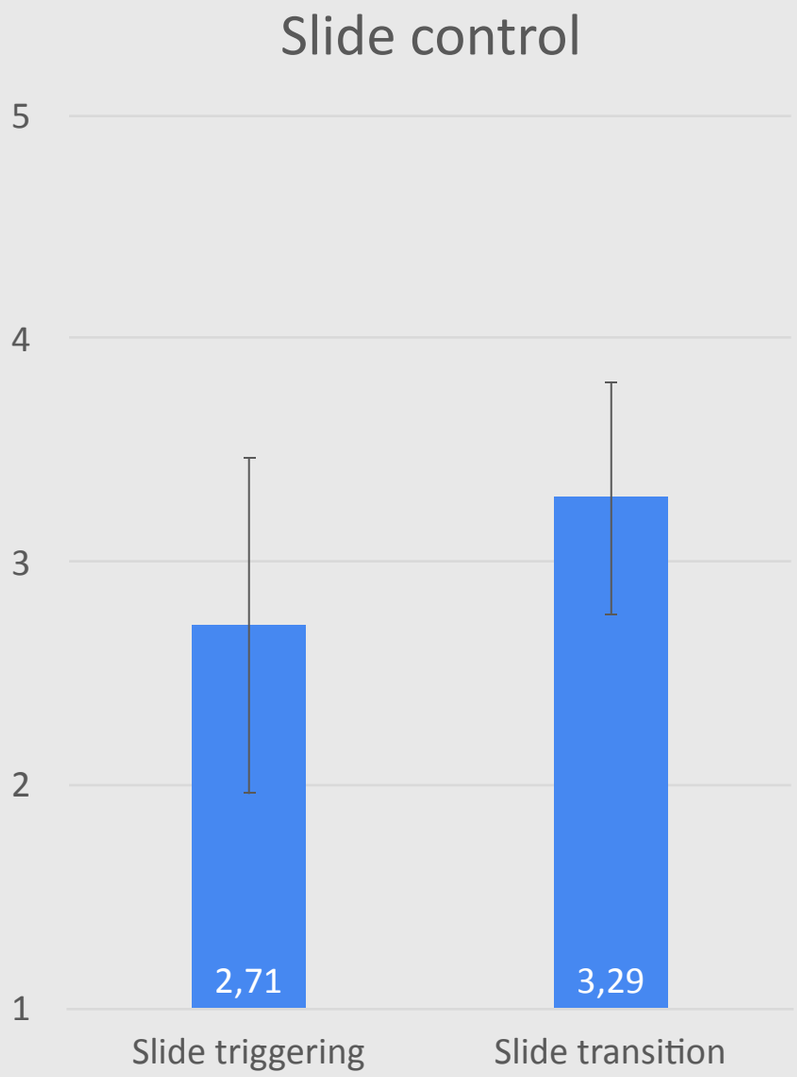
2 Layouts

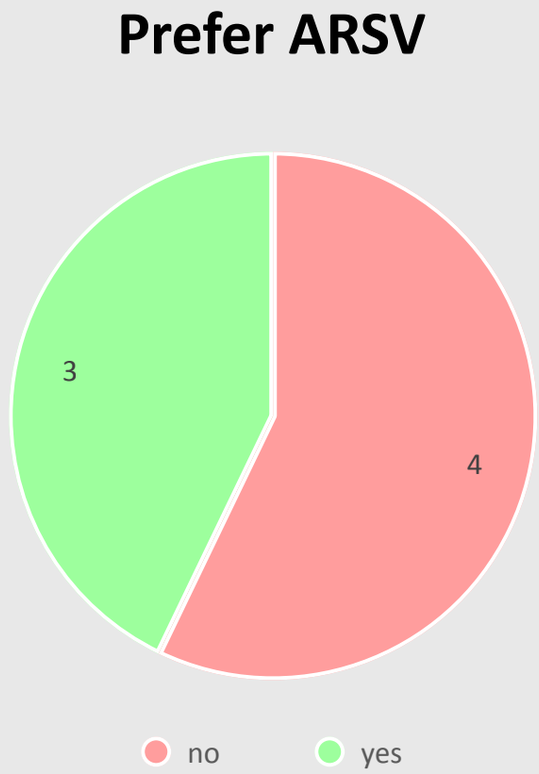
2 Questionnaires (Speaker + Audience)

User Tests Results

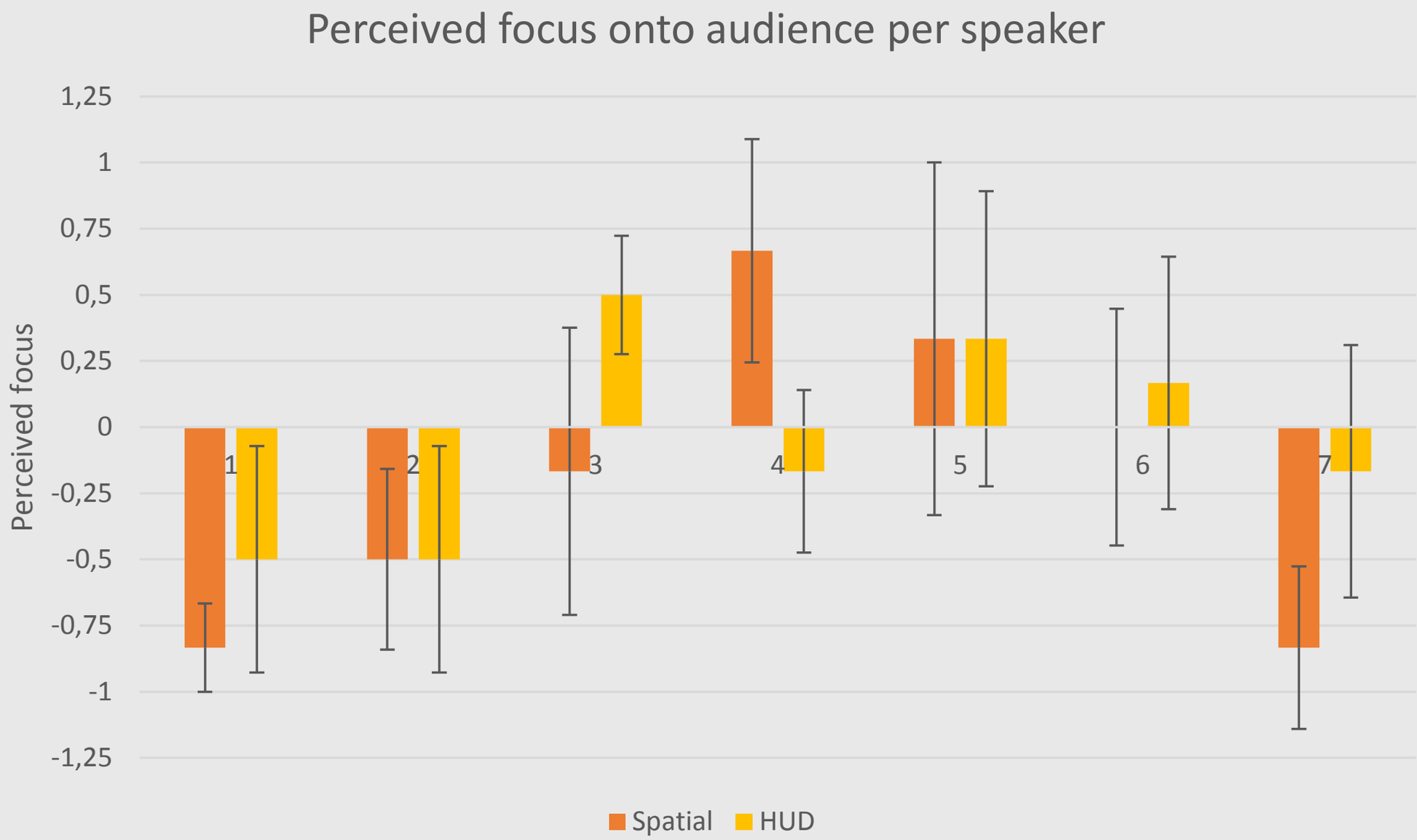


User Tests Results





User Tests Results



Conclusion Summary

+ Positioning of elements

- Readability and focus on audience

- Slide control

Conclusion Future work

HoloLens 2

- Wider field of view
- Gaze Tracking

Merge of Layouts

- Avoiding overlay of the main focal point
- Combination of perceiving slide transitions while performing head-driven control gestures and emphasizing elements (Notes)

Live Demo