

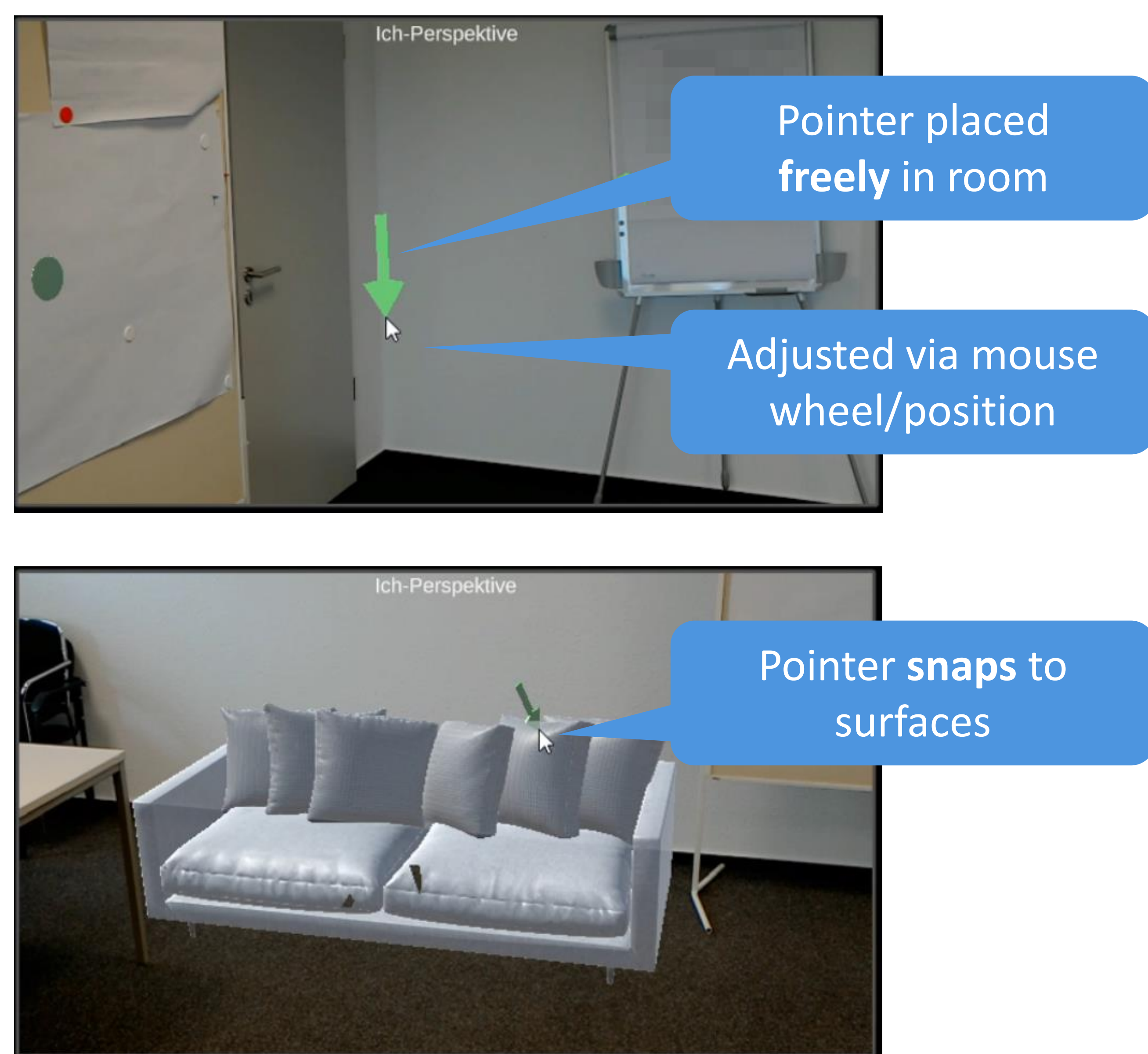
Pointing Modes and Frames of Reference for Remote, AR-Supported Furniture Consultations

Context: Remote, AR-supported furniture sales consultation setting; consultant needs tools to support customer remotely

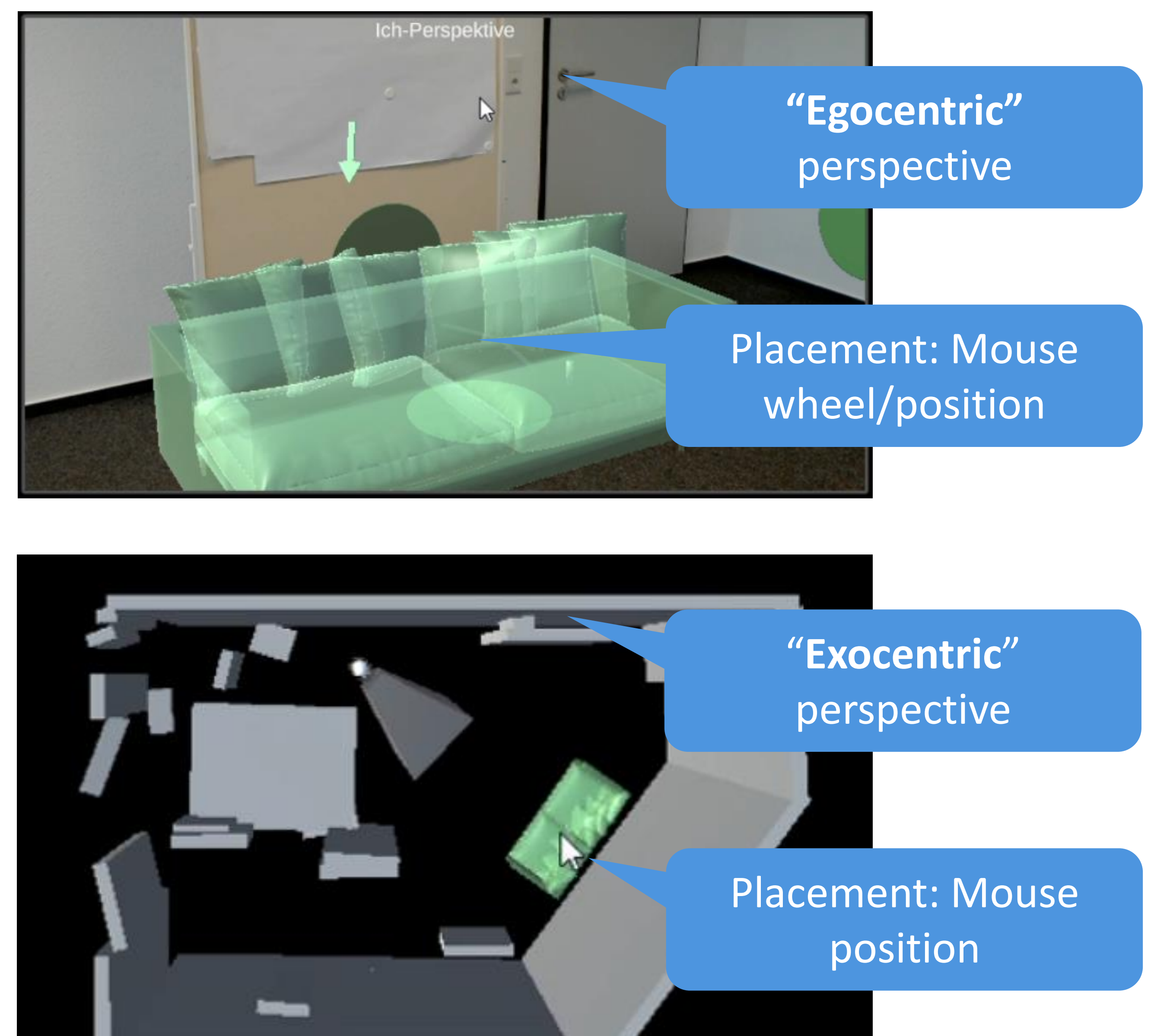
Problem 1: Find best methods for placing virtual pointers/furniture in 3D space using only 2D input

Problem 2: Find perspectives for the consultant side which work well in the same setting

Pointing Modes Tested:



Perspectives Tested:



Experiment Setup:



Comparison of each two pointing modes and two perspectives in study. Results:

Usability: No significant differences

TLX: Exocentric views showed a significant difference for perceived mental effort
→ Mental rotation of objects might need more time

Surface-snapping pointer: Preferred by consultants for all situations
→ Ease of use may have outweighed freedom

Egocentric perspective: Preferred by consultants for fulfilling customer wishes
→ Same perspective as customer may have eased adjustments

Exocentric perspective: Preferred by consultants for recommending placement spots, themselves
→ Top-down perspective may have provided better overview



Related Work:

Evaluating Pointing Modes and Frames of Reference for Remotely Supporting an Augmented Reality User in a Collaborative (Virtual) Environment

DOI: <https://doi.org/10.1145/3340764.3344896> or scan QR code



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