group 1 session 1 – What challenges do see-through bring to UX and IxD

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challenges (1/2)

- brains are not designed for transparency
- the transparent thing (in nature) is an obstacle / something to try to ignore
- the info you put will remove something
  - *same as in classical UI*
  - *but different because you are blocking out (potentially more critical) real-world phenomena*
- scaling challenge: need to match size and form of digital info to real-world scale
- AR registration problem needs to be minimized
- missing design heuristics for what should be transparent and what should be opaque
  - *far away => blurry (optical cues)*
  - *risk for conflicts in depth cues etc.*
challenges (2/2)

- potential privacy issue but also potential benefit that people around you can see (in part) what you are doing

- (not yet) socially acceptable form factor (hand-held and head-mounted displays)
  - problem not shared by backside(nearfield UI)

- can we interact with transparency itself? -no says jens: its a property! ;-)

- hard to find suitable input modalities (HMD)

- transparency is associated with fragility

- hard to represent correct viewing angle and viewing distance (focal point) for more than one person
  - we need “reverse light field photography”

- learning treshold – completely new interaction paradigm – its literally more fuzzy where the interface focus is

- how to accommodate for people with impaired vision – known ways don’t work