Has half the time passed?
Investigating time perception at long time scales

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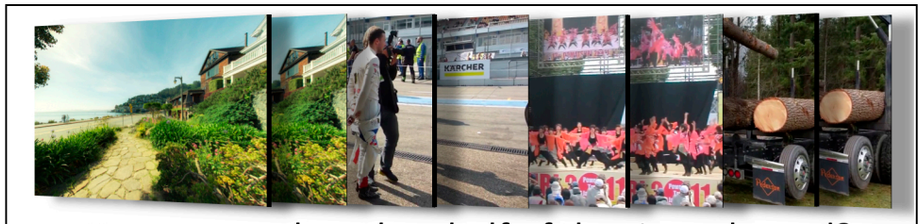
Glossary CD: conventional display, HMD: head-mounted display, LVC: low visual complexity, HVC: high visual complexity, CON: contrast, FRQ: frequency, FoV: field of view, L-XXX: low level, H-XXX: high level.

Experimental design



Has more or less than half of the time elapsed?

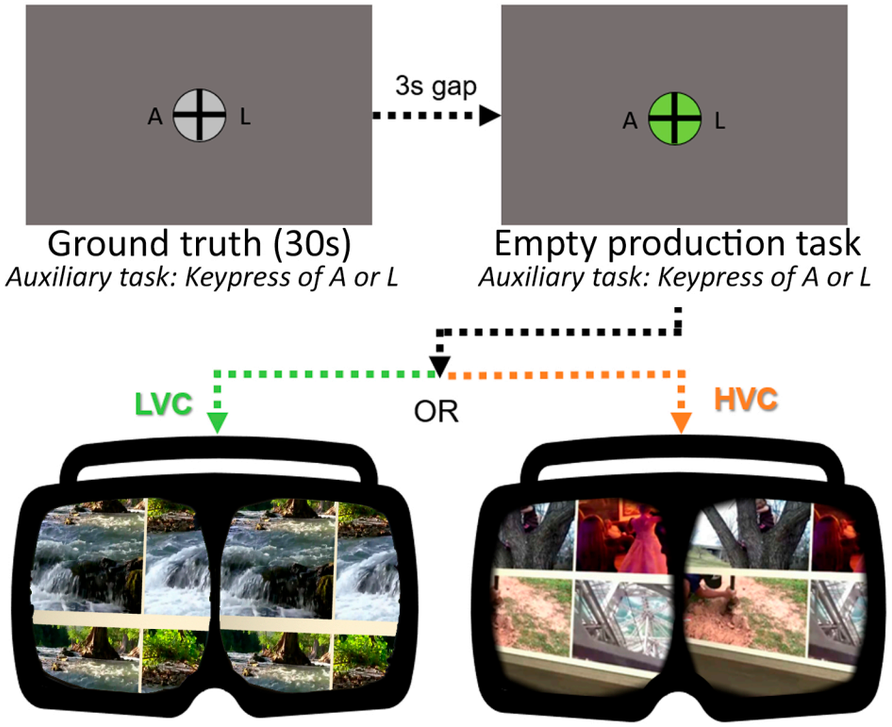
Time

45% 55%

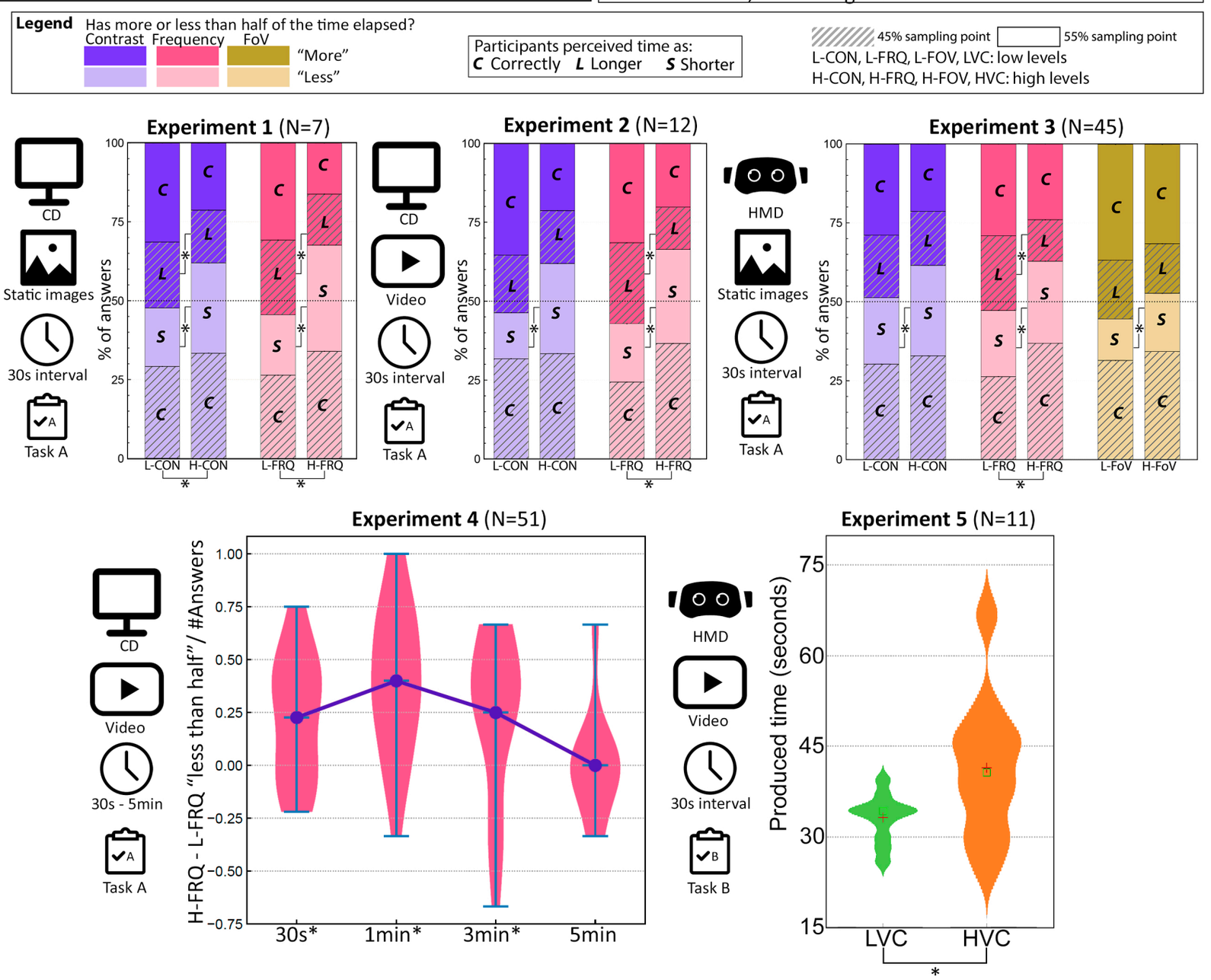
Sampling points

Factors: Luminance contrast, temporal frequency, FoV

Task A) Binary task (CD and HMD), using naturalistic image or video sequences



Task B) Double production task (HMD), using video sequences



Main findings

Time is perceived as shorter in prospective judgements when **larger visual changes** are perceived (H-CON, H-FRQ, H-FOV and HVC). This effect is consistent with changes in display (conventional and head mounted display), stimulus type (static images or videos), and visual factors of varying abstraction levels: contrast (Exp. 1-3), frequency (Exp. 1-4), field of view (Exp. 3) and visual complexity (Exp. 5). The effect replicates up until three minutes of viewing duration (Exp. 4).