Goals and the Perception of Distance and Time in Virtual Spaces

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Abstract: Individuals rarely walk in an environment without a purpose. However , the influence of goals on the development of 'cognitive maps' has largely been ignored. The results of t wo experiments are reported that investigated the role of both goals and environmental structures on me mory for distance and time in Virtual Reality (VR) environments. Experiments 1 and 2 compared the effect of goals varying in urgency and desirability , on memory for distance and time in VR environments with (Experiment 1) and without turns (Experiment 2). Striking effects of goals were found for memory for distance and time in both environments. Experiment 3 examined the origins of these goals effects through the use of physiological measurement and mood scales . Results show that goals influence distance estimation as a function of the degree of urgency experienced in situ, and not as a function of overall mood state or arousal they induce.