

viewing (a) only left-handed or (b) only right-handed or (c) alternately left- and right-handed tools. Accuracy and reaction times of manual yes responses were analyzed. Additionally, hand-relatedness of sentences was rated. *Results:* Replicating Ostarek et al. (2019), the classical SPV congruency effect appeared without noise and vanished when alternately handled tools were presented. Crucially, it re-appeared when noise objects were consistently either left- or right-handed. Higher hand-relatedness of sentence content reduced SPV performance and accuracy was lower with right-handed noise. *Conclusion:* First, we demonstrated an interaction between motor-related language, visual affordances and motor responses in SPV. This result supports the embodied view of language processing. Second, we identified a motor process not previously known in SPV. This extends our understanding of mental simulation and calls for methodological controls in future studies.

## TALKS: Submission 59

### City exploration through the eyes of the visually impaired

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Is urban space something seen, experienced and perceived only with eyes? If we remove the sense of sight from this experience, will this experience be incomplete? Based on these questions, we will find the answer to what an urban experience would be like without the sense of sight by exploring the city together with the congenital visually impaired participant. The main hypothesis is to reveal and embody tactical spaces, creative productions and ideas of visually impaired individual in everyday life and show this creative production/relationship that the visually impaired establishes with the urban space. We try to understand the tactics developed by the visually impaired to reveal the other dimensions and codes of the city while navigating seven different walking routes determined by the researcher in the city (İzmir/Turkey). The visually impaired participant, who received photography training for 1 month before the study, walks each of these routes with the researcher on the specified days. During this photowalk, the visually impaired participant is expected to verbally describe the experience. The photograph has been chosen as a tool of communication with the sighted and visually impaired. Among the expected results of the study, it will be shown how tactical ideas and productions in daily life are applied to the urban space and how they transform the urban space. By looking at the tactics formed by the visually impaired individual against the strategies, it can be determined that these are productions that shape and transform the urban place in a spatial sense.

## TALKS: Submission 61

### Paradigm constraints on moral decision space: a model fit to mouse-tracking data

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*Background:* A multitude of factors may influence moral decisions, leading to complex dynamics that call for nuance. Yet, experimental paradigms are often restricted to two-alternative forced choice tasks, with alternatives placed in opposite corners of the screen space. *Aims:* Could paradigm response mode (two-alternatives or continuous scale) influence how morality is cognitively represented and processed, either relying on continuums or categories? *Methods:* We built a computational model of (moral) decision-making based on differential equations (dynamic neural fields coupled with sensorimotor control, extending classical drift diffusion models) in which a 1D population of neuronal units maps a moral judgment scale (discrete or continuous). Neural fields usually operate on continuous spaces (e.g., sensorimotor), but allow the emergence of spatially localized attractors. Spatiotemporally coherent activity across the neural field reflects convergence in the decision space, while generating (mouse) trajectories aiming at on-screen response locations. *Results:* Simulated data were fitted to mouse-tracking data previously collected on human participants, where the dynamics of participants' judgments on moral statements was recorded using the computer mouse. Based on paradigmatic constraints implemented in the model, it successfully produced adequate mouse trajectories in both binary and continuous response modes, possibly reflecting how the spatial representation of responses impact decision-making. *Conclusion:* Adjusting parameters in our model based on empirical data allowed us to bridge the gap between two-alternative forced choice and continuous scale paradigms, possibly giving insights into processes underlying human decision-making, and whether moral decision dynamics would differ depending on response mode.

## TALKS: Submission 62

### The role of spatio-temporal components in egocentric and allocentric encoding

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*Background:* The ability to represent everyday events requires the integration of spatial and temporal information. Studies about spatial memory have mainly used static layouts and have neglected the relationship between spatial and temporal components in spatial encoding according to frames of reference (FoRs). *Aims:* We explore the relationship between temporal information and spatial information based on egocentric (subject-to-object) and allocentric (object-to-object) FoRs. *Methods:* Thirty-six participants had to memorize as accurately as possible two stimuli (geometric 3D objects) that were presented one after another (400 msec each) on a virtual panel with an allocentric stable marker (a black bar). Participants judged what stimulus appeared closest to them (egocentric condition) or to the bar (allocentric condition). In both conditions, participants also judged which stimulus appeared first. *Results:* Egocentric judgments were more accurate when the object closest to the body appeared first than second, suggesting a primacy effect. In contrast, allocentric judgments were more accurate when the object closest to the bar appeared second than first, suggesting a recency effect. Moreover, participants performed better with temporal than spatial judgments. *Conclusion:* The opposite effect of temporal order on FoRs suggests that temporal mechanisms might have a specific and differential effect on spatial encoding. Furthermore, the body-based anchoring of egocentric encoding leads to the representation of an episodic event that links what appears first with what appears closest to the body; as for