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Sommario	<p>When in time a response is made seems critically important in defining whether visual selection is driven by physical stimulus-salience or goal-driven control. In study 1 we investigated whether observers are able to control the timing of selection and regulate the trade-off between stimulus- and goal-driven influences. Participants were instructed to make a saccade to an orientation target while a cue instructed them to do so either 'fast' or 'accurate'. Relative salience of the target and an irrelevant distractor was manipulated. Performance in the fast-cue condition appeared to be driven by stimulus salience, while in the accurate-cue condition saccades were guided by the search template. A main effect of cue suggests that preparation can bias mechanisms of selection prior to saccadic execution. In study 2, using spontaneous response time variability, we tested the hypothesis that alpha-oscillations (8-12 Hz) occurring in the prestimulus period may influence performance and saccadic reaction times in a visual search task. Using a similar design, MEG and eye movements were measured concurrently. Results revealed that slow oculomotor reaction times in the non-salient target condition were predicted by an overall increase of power in the alpha range. Additionally, higher alpha pre-stimulus activity seems to predict erroneous response similarly for fast and slow saccadic reaction times. When further decomposing the source of the difference between correct and incorrect responses for fast and slow</p>

saccadic reaction times, analyses revealed two main sources of activity. Wrong responses for fast saccadic reaction times were anticipated by higher alpha activity occurring in the parietal regions, with sources located in the lateral intraparietal area. The source of alpha activity for the errors occurring in the slow responses was instead located more in the frontal lobes and specifically around the dorsolateral prefrontal cortex.

Localizzazioni e accesso

http://memoria.depositolegale.it/*/http://eprints-phd.biblio.unitn.it/1764/1/Thesis_PhD_Davide_Paoletti.pdf
