**Neural processes underlying context binding in visual working memory**

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Working memory tasks typically involve the presentation of one or more to-be-remembered items, then retrieval of the item(s) after a short delay. Although not always explicitly noted, success on these tasks often requires not only the retention of the identity of the to-be-remembered items, but also the retention of each item’s context, such as the location at which each was presented, and/or the order in which it was presented. In two recent fMRI studies, we dissociated the effects of memory load from those of context binding by having participants remember one vs. three sample items, with 3-item sets composed of items drawn from either the same or different categories. In one study, items were presented centrally, serially, and an ordinal-position cue indicated the item to recall (Gosseries, Yu, et al., 2018). In the second study, items were presented simultaneously in different locations, and a location cue indicated the item to recall. In both studies, delay-period BOLD activity in parietal cortex, including intraparietal sulcus, tracked the demands of context binding rather than memory load (i.e., 1 = 3-heterogeneous < 3-homogeneous). The current study was designed to investigate whether binding to context from different domains draws on a common mechanism. We recorded the EEG while participants performed delayed recognition of one of three orientation stimuli that had been presented sequentially at different locations, with trial type varying by context binding demands: one tested memory for item-in-location, one for item-in-ordinal-position, and one for item regardless of context. Our analyses revealed elevated alpha-band power at bilateral parietal electrodes during memory delay, for both context-binding conditions relative to the no-context-binding condition. Together, these results suggest that parietal cortex supports domain-general mechanisms that contribute to the retention of stimulus context in visual working memory.