

## **P5.21.**

### **Visual cortical processing in the right hemisphere is suppressed during left-to-right reading**

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Reading critically depends on efficient selection of the relevant and suppression of the irrelevant part of the text for visual processing. Based on this we predicted that visual cortical processing in the right hemisphere - which represents the part of the text in the left visual field that has already been read - will be suppressed during left-to-right reading. To test this we measured occipital alpha oscillations as an index of suppression of visual cortical processing while subjects were reading left-to-right horizontal as well as vertical texts. Alpha activity was significantly higher over the right compared with the left occipito-temporal cortex during left-to-right but not during vertical reading. Importantly, in a control experiment where subjects were reading individually presented words we failed to find increased alpha activity in the right hemisphere. These results provide evidence that visual cortical processing in the right hemisphere is suppressed during left-to-right reading.