

## Tao He (何涛), PhD

School of Psychological and Cognitive Sciences, Peking University

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### **EDUCATION**

*Radboud University, Nijmegen, Netherlands* 2016 – 2020

*Donders Institute for Brain, Cognition and Behaviour*

**Ph.D. in Neuroscience (supervisor: Floris de Lange)**

*Hangzhou Normal University, Hangzhou, China* 2013 – 2016

**M.Ed. in Cognitive Neuroscience (supervisor: Zhiguo Wang)**

*Fujian Medical University, Fuzhou, China* 2009 – 2013

**B.Sc. in Psychology**

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### **RESEARCH AND PROFESSIONAL EXPERIENCES:**

**Post-doctoral fellow**, *School of Psychological and Cognitive Sciences, Peking University.* (Advisor: **Fang Fang**) 2020/10-Present

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### **RESEARCH INTERESTS**

Prediction, Perception, Visual Working Memory, Eye Movements.

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### **ACADEMIC SKILLS**

**Hardware:** 3T, 7T MRI scanner, MEG, Eyelink eye-tracker

**Software/Languages:** Python, Matlab, R, Linux, FSL, Freesurfer, MNE, et al.

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### **PUBLICATIONS**

#### **Published – peer reviewed articles**

1. He, T., Richter D., Wang Z., & de Lange FP. (2022). Spatial and temporal context jointly modulate the sensory response within ventral visual stream. **Journal of Cognitive Neuroscience**. 34(2), 332-347.
2. Yan C., He T., & Wang Z. (2021). Predictive remapping leaves a behaviorally measurable attentional trace on eye-centered brain maps. **Psychonomic Bulletin & Review**. 1-9.

3. Guo, C.CG., He, T., Grandjean, J., & Homberg J. (2021). Knockout serotonin transporter in rats moderates outcome and stimulus generalization. **Translational Psychiatry**. 11, 25.
4. He, T., Fritsche M., & de Lange FP. (2018). Predictive remapping of visual features beyond saccadic targets. **Journal of Vision**, 18(13), 20-20.
5. Ding, Y., Zhao, J., He, T., Tan, Y., Zheng, L., Zhang, X., & Wang, Z. (2016). Selective impairment of covert attention in Chinese dyslexic children. **Dyslexia**, 22(4), 362-378.
6. Yan C., He T., Raymond M. Klein & Wang Z. (2016). Predictive remapping gives rise to inhibition of return in environment-centered coordinates. **Psychonomic Bulletin & Review**, 23(6): 1860-1866.
7. Ding, Y., He, T., & Wang, Z. (2016). Inhibitory cueing effects following manual and saccadic responses to arrow cues. **Attention, Perception & Psychophysics**, 78(4): 1020–1029.
8. He, T., Ding, Y., & Wang, Z. (2015). Environment- and eye-centered inhibitory cueing effects are both observed after a methodological confound is eliminated. **Scientific Reports**, 5, 16586.
9. He, T., & Wang, Z. (2015). Spatiotopic, retinotopic, and object-centered reference frames of inhibition of return. **Journal of Psychological Science** (In Chinese), 38 (4): 813 - 821.

### Ongoing projects

1. He, T., Ekman M., Vandenbroucke A., & de Lange FP. No Remapping of Working Memory Across Eye Movements in Early Visual Cortex. *In prep.*
2. He, T., Wang Q., Zhu X., & Fang F. Replay of feature information in humans. *In prep.*

### Invited presentations

1. Replay of feature information in humans. **Annual Academic Conference of General and Experimental Psychology Committee of Chinese Psychological Society 2021**. Guiyang, China. October 2021.
2. Spatial properties of expectation suppression throughout the ventral visual stream. **Donders Discussions**. Donders Center for cognitive neuroimaging. Nijmegen, the Netherlands. September 2019.
3. No remapping of working memory across eye movements in early visual cortex. **Donders Discussions**. Donders Center for cognitive neuroimaging. Nijmegen, the Netherlands. October 2018.
4. Removing the scene eliminates the temporal but not the spatial effect of oculomotor inhibition of return. **The 17th Annual Conference of the Chinese Psychological Society**, Beijing, China. October 2014.

### Conference

1. He, T., Ekman M., Vandenbroucke A., & de Lange FP. (November 3 – 7, 2018). No Remapping of Working Memory Across Eye Movements in Early Visual Cortex. *Society for Neuroscience (SfN)*. San Diego, US.
2. He, T., Fritsche M., & de Lange FP. (December 14 – 16, 2017). Predictive remapping of visual features beyond saccadic targets. *The Dutch Society for Psychonomy (NVP)*. Egmond aan Zee, the Netherlands.
3. He, T., Fritsche M., & de Lange FP. (August 27 – 31, 2017). Predictive remapping of visual features beyond saccadic targets. *The 40th European Conference on Visual Perception (ECVP)*. Berlin, Germany.
4. He, T., & Wang, Z. (October 16 – 18, 2015). The global effect suggests biases in oculomotor selection. *The 18th Annual Conference of the Chinese Psychological Society*, Tianjin, China.
5. Yan, C., He, T., & Wang, Z. (October 16 – 18, 2015). Visual search eliminates retinotopic inhibition of return (IOR). *The 18th Annual Conference of the Chinese Psychological Society*, Tianjin, China.
6. He, T., & Wang, Z. (July 10-13, 2015). Spatiotopic and retinotopic IORs are both observed when potential methodological confounds are eliminated. *Asia-Pacific Conference on Vision*, Nanyang Technological University, Singapore. **[Student Travel Award]**
7. Ding, Y., He, T., Wang, Z., Tan, Y., Zheng, L., & Zhao, J. (July 10-13, 2015). Inhibition of return in normal developing and dyslexic children. *Asia-Pacific Conference on Vision*, Nanyang Technological University, Singapore.

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## **GRANTS, AWARDS AND HONORS**

China Postdoctoral Science Foundation Grant (¥80,000)	2021
International Postdoctoral Exchange Fellowship Program (Talent-Introduction Program, ¥600,000)	2020
Peking University Boya Postdoctoral Fellowship	2020
Radboud University International Travel Grant	2018
China Scholarship Council (€57,600)	2016
Distinguished Graduate of Zhejiang Province, China	2016
Distinguished Graduate Award of Hangzhou Normal University	2016
National Scholarship for Graduate Students	2015
Asia-Pacific conference on vision (APCV) Student Travel Award	2015
Fujian Medical University Outstanding diploma thesis Awards	2013
Fujian Medical University Outstanding Graduate Awards	2013

National College Students' Innovation Project

2011

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**TEACHING AND SUPERVISION EXPERIENCES**

UCL-PKU Summer School in Experimental design in Psychology

2021

Daily supervisor for **PhD students, Research Assistants** and **Undergraduates** from Peking university

2020-Present

Daily supervisor for **Master students** from Donders Cognitive Neuroscience Master Program

2016 - 2020

Multivariate Stats in R

2015

Programming Psychology Experiments in Python

2014