Chengli Xiao

Contact Information

Department of Psychology School of Social and Behavioral Sciences Nanjing University, 163 Xianlin Road Nanjing 210023, P. R. China Tel: +86-25-89680958-419 Fax: +86-25-89680950 Email: xiaocl@nju.edu.cn

Research Interest

- \checkmark The social interactions between human and artificial intelligence.
- Spatial cognition and spatial thinking, spatial communication and perspective-taking in human-human and human-robot interactions; spatial construal of abstract concepts (e.g., time, number).

Education

Ph.D.	Psychology, Chinese Academy of Sciences	2003-2008
BA	Psychology, East China Normal University	1999-2003

University Experience

Professor, Department of Psychology, School of Social and Behavioral Sciences,
Nanjing University, January 2022 – present
Associate Dean, School of Social and Behavioral Sciences, Nanjing University,
February 2024 - present
Associate Professor, Department of Psychology, School of Social and Behavioral
Sciences, Nanjing University, January 2012 – December 2021
Vice-Chair, Department of Psychology, School of Social and Behavioral Sciences,
Nanjing University, July 2010 – August 2013; September 2015 - January 2024
Visiting Scholar, Department of Psychological & Brain Sciences, University of
California, Santa Barbara, September 2013 – August 2014
Assistant Professor, Department of Psychology, School of Social and Behavioral
Sciences, Nanjing University, July 2008 – December 2011

Director Assistant, Department of Psychology, School of Social and Behavioral Sciences, Nanjing University, February 2009 –June 2010

Teaching Experience

Cognitive Psychology, Nanjing University Introduction to Cognitive Sciences, Nanjing University Spatial Cognition and Spatial Thinking, Nanjing University Theoretical and Applied Cognitive Sciences, Nanjing University Advanced Experimental Technologies, Nanjing University A History of Psychology, Nanjing University

Grants

The Study of Social Acceptance and Social Impact of Anthropomorphic Artificial Intelligence
the National Social Science Fund of China (21BSH045), 1/1/2022-12/31/2024
Human-Robot Spatial Language Interaction in Chinese Language and Culture
the Major Projects of Philosophy and Social Science Research in Jiangsu
Universities (2018SJZDA020), 1/1/2019-12/31/2021
Mandarin Speakers' Time Cognition and Behaviors
Liberal Arts Innovation Team Project of Nanjing University (010914370105), 1/1/2018-12/31/2019
Robots' Spatial Cognition and Optimization of Human-Robot Interaction Strategies
Original and Cross-Research Cultivation Fund Project of Nanjing University (011814380035), 1/1/2018-12/31/2019
Spatial Representation in Real and Imagined Movement

National Natural Science Foundation of China (31000457), 1/1/2011-12/31/2013

Professional Activities

- Member of the Engineering Psychology Committee of the Chinese Psychological Society
- ✓ Council member of the Jiangsu Psychological Society
- ✓ Member of the Psychonomic Society
- ✓ Member of the spatial network of the Spatial Intelligence and Learning Center

Ad hoc reviewer:

Journal of Field Robotics

Journal of Environmental Psychology **Cognitive Science** Food Quality & Preference International Journal of Social Robotics Spatial Cognition and Computation: An Interdisciplinary Journal International Journal of Contemporary Hospitality Management Computer Speech & Language **Cognitive Development** American Journal of Psychology Frontiers in Psychology **Clinical Linguistics & Phonetics** Acta Psychologica Sinica (in Chinese) Advances in Psychological Science (in Chinese) Progress in Biochemistry and Biophysics (in Chinese) Studies of Psychology and Behavior (in Chinese) Chinese Journal of Applied Psychology (in Chinese)

Publications

(* denotes corresponding author; # denotes student co-author)

- Zhao, Y. #, & <u>Xiao, C.*</u> (2024). Overcome medical algorithm aversion: Conditional joint effect of direct and indirect information. International Journal of Human-Computer Interaction, online. https://doi.org/10.1080/10447318.2024.2344146
- Hua, S.#, & <u>Xiao, C.*</u> (2023). What shapes a parasocial relationship in RVGs? The effects of avatar images, avatar identification, and romantic jealousy among potential, casual, and core players. *Computers in Human Behavior*, 139, 107504. https://doi.org/10.1016/j.chb.2022.107504
- Xiao, C.*, Wu, W.#, Zhang, J.#, & Xu, L.# (2023). Treat robots as humans? Perspective choice in human-human and human-robot spatial language interaction. *Spatial Cognition and Computation: An Interdisciplinary Journal*, 23, 309-329. https://doi.org/10.1080/13875868.2023.2227995
- Xiao, C.*, & Zhao, L. # (2022). Robotic chef versus human chef: The effects of anthropomorphism, novel cues, and cooking difficulty level on food quality prediction. *International Journal of Social Robotics*, 14, 1697-1710. https://doi.org/10.1007/s12369-022-00896-9
- 5. Liu, M. #, <u>Xiao, C.</u>, & Chen, C.* (2022). Perspective-corrected spatial referring expression generation for human-robot interaction. *IEEE Transactions on*

Systems Man Cybernetics-Systems, *52*, 7654-7666. https://doi.org/10.1109/TSMC.2022.3161588

- <u>Xiao, C.*</u>, Fan, Y. #, Zhang, J. #, & Zhou, R. (2022). People do not automatically take the level-1 visual perspective of humanoid robot avatars. *International Journal of Social Robotics*, 14, 165–176. https://doi.org/10.1007/s12369-021-00773-x
- Xiao, C.*, Xu, L. #, Sui, Y. #, & Zhou, R. (2021). Do people regard robots as human-like social partners? Evidence from perspective-taking in spatial descriptions. *Frontiers in Psychology*, 11, 578244. https://doi.org/10.3389/fpsyg.2020.578244
- Xiao, C.*, Sui, Y. #, Xiao, S. #, & Zhou, R. (2021). A new perspective on spatial interaction research: The effects of multiple social factors. *Advances in Psychological Science*, 29, 796 805. (in Chinese)
- Sui, Y. #, Wu, Y. #, <u>Xiao, C.*</u>, & Zhou, R. (2021). Study on spatial language interaction in simulated human-robot cooperative exploration task. *Manned Spaceflight*, 27, 549-558. (in Chinese)
- Fan, Y. #, Xiao, C.*, & Zhou, R. (2021). Regulating role of attention in spontaneous visual perspective-taking. *Space Medicine & Medical Engineering*, 34, 31-38. (in Chinese)
- Xiao, C.*, Fan, Y. #, Xu, L. #, & Zhou, R.* (2019). Human-centered human-robot natural spatial language interaction. *Chinese Journal of Applied Psychology, 25,* 319-331. (in Chinese)
- Fan, Y. #, & <u>Xiao, C.*</u> (2019). The challenges and optimizations of psychological environment of underground space. *Chinese Journal of Underground Space and Engineering*, 15, 499-507. (in Chinese)
- Zhao, M. #, & <u>Xiao, C.*</u> (2019). Gender differences in multiple spatial tasks in large scale real environments: Taking shopping mall and office building for example. *Psychological Research*, *12*, 262-271. (in Chinese)
- Xiao, C.*, Zhao, M. #, & Chen, L. # (2018). Both earlier times and the future are "front": The distinction between Time- and Ego-reference-points in Mandarin speakers' temporal representation. *Cognitive Science*, 42, 1026-1040. doi: 10.1111/cogs.12552
- Liu, C. #, & Xiao, C.* (2018). Dual systems for spatial updating in immediate and retrieved environments: Evidence from bias analysis. *Frontiers in Psychology*, 9, 85. doi: 10.3389/fpsyg.2018.00085
- 16. <u>Xiao, C.*</u>, Lian, Y. #, & Hegarty, M. (2015). Spatial updating of map-acquired representation. *Memory & Cognition*, 43, 1032-1042. doi: 10.3758/s13421-015-0520-8
- 17. Xiao, C.*, & Liu, C. # (2014). Spatial updating of imagined environment. Acta

Psychologica Sinica, 46, 1289-1300. doi: 10.3724/SP.J.1041.2014.01289 (in Chinese)

- Xiao, C.* (2013). Stable egocentric representation acquired from sequential proprioceptive learning. *Acta Psychologica Sinica*. 45, 752-761. doi: 10.3724/SP.J.1041.2013.00752 (in Chinese)
- <u>Xiao, C.*</u>, & Zhang, L. # (2013). Egocentric representation acquired from offline map learning. *PLoS ONE*, 8, e60194. doi: 10.1371/journal.pone.0060194
- 20. <u>Xiao, C.*</u>, McNamara, T. P., Qin, S., & Mou, W. (2010). Neural mechanisms of recognizing scene configurations from multiple viewpoints. *Brain Research*, 1363, 107-116. doi: 10.1016/j.brainres.2010.09.068
- Xiao, C., Mou, W.*, & McNamara, T. P. (2009). Use of self-to-object and object-to-object spatial relations in locomotion. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 35*, 1137-1147. doi: 10.1037/a0016273
- Mou, W.*, <u>Xiao, C.</u>, & McNamara, T. P. (2008). Reference directions and reference objects in spatial memory of a briefly viewed layout. *Cognition*, 108, 136-154. doi: 10.1016/j.cognition.2008.02.004
- Mou, W.*, McNamara, T. P., Rump, B., & <u>Xiao, C.</u> (2006). Roles of egocentric and allocentric spatial representations in locomotion and reorientation. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 32*, 1274-1290. doi: 10.1037/0278-7393.32.6.1274