





# Likan ZHAN

-  No. 15, Xueyuan Road, Haidian District, Beijing 100083, China
-  + 86 10 8230 3468
-  [zhanlikan@hotmail.com](mailto:zhanlikan@hotmail.com)
-  <https://likan.info>
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## Academic Appointment

- 2018.12 ~ Now, Associate professor,  
School of Communication Science,  
Beijing Language and Culture University, Beijing, China
- 2016.06 ~ 2018.11, Assistant professor,  
School of Communication Science,  
Beijing Language and Culture University, Beijing, China
- 2014.09 ~ 2016.05, Assistant professor,  
Faculty of Linguistic Sciences,  
Beijing Language and Culture University, Beijing, China

## Education

- 2010.10 ~ 2014.09, Ph.D. Cognitive Science,  
Macquarie University, Sydney, Australia
- 2007.09 ~ 2010.07, M.E. Cognitive Psychology,  
Beijing Language and Culture University, Beijing, China
- 2000.09 ~ 2004.07, B.A. Teaching Chinese as a Second Language,  
Beijing Language and Culture University, Beijing, China

## Teaching Experience

- 2019 ~ Now. Experimental Psychology,  
Undergraduates, 4 hours per week, 68 hours in total

- 2019 ~ Now. Introduction to Neurolinguistics,  
Postgraduates, 2 hours per week, 34 hours in total
- 2017 ~ Now. Statistics for the Behavioral Sciences,  
Undergraduates and Postgraduates, 2 hours per week, 34 hours in total
- 2016 ~ Now. R for Modeling and Visualizing Data,  
Postgraduates and PhD candidates, 4 hours per week, 68 hours in total
- 2015 ~ Now. Introduction to Cognitive Neuroscience,  
Postgraduates and PhD candidates, 2 hours per week, 34 hours in total
- 2015 ~ Now. Foundations of Scientific Research,  
Undergraduates, 3 hours per week, 54 hours in total
- 2015 Fall. General Psychology,  
Undergraduates, 3 hours per week, 54 hours in total

## Professional Skills

1. Experiment techniques
  - Test stimuli: Package [PGF](#) in [LaTeX](#), [ImageMagick](#) and its implementation in R [magick](#), [OmniGraffle](#), as well as [Pixelmator](#) for image creating and editing; [praat](#), Packages [tuneR](#) and [seewave](#) in R, as well as [Adobe Audition](#) for audio editing and processing; [blender](#) and [Autodesk Maya](#) for video and 3d modeling; and [ffmpeg](#) for audio and video format converting;
  - Experiments building: Be familiar with package [Psychtoolbox](#) under [Matlab](#), [Presentation](#), package [Psychopy](#) under [Python](#), [E-prime](#), and [Experiment Builder](#) for script building;
  - Eye-tracker: Having advanced experience in using [Eyelink II/1000 plus](#) for experiment conducting, [Experiment Builder](#) for experiment building, and [Data Viewer](#) for data pre-processing;
  - E/MEG: In charge of establishing the first Child MEG lab in China; be familiar with Yokogawa MEG system for equipment maintenance and MEG data acquisition, packages [fieldtrip](#) and [SPM12](#) under Matlab, and [BESA](#) for data processing.

## 2. Data processing

- R: Besides base [R](#), be familiar with [data.table](#), [dplyr](#), and [tidyr](#) etc. for data pre-processing; [graphics](#), [lattice](#), and [ggplot2](#) etc. for data visualization; [car](#), [lme4](#), and [gam](#) for computational modeling. Create the R package [acqr](#) etc. for teaching statistics and illustrating data visualization;
- Julia: Recently start to use [julia](#), because of the [speed limitations](#) of R. Besides the base and standard libraries, be familiar with [CSV.jl](#), [DataFrames.jl](#) ([Database benchmark](#)), and [DataFramesMeta.jl](#) etc. for data preprocessing; [Plots.jl](#), [StatsPlots.jl](#), and [Gadfly.jl](#) for data visualization; as well as [Distributions.jl](#), [StatsBase.jl](#), [StatsModels.jl](#), [GLM.jl](#), and [MixedModels.jl](#) for computational modeling;

## 3. Other

- Markup languages: Be familiar with [LaTeX](#), [markdown](#), [R markdown](#) (R flavoured markdown), [Pluto.jl](#) (julia package), and [Jupyter](#) for document preparing; [knitr](#) (R package) [Documenter.jl](#) and [Weave.jl](#) (Julia package) for dynamically integrating R or Julia source code into a document; [Pandoc](#) for format conversion;
- Be familiar with the free source-code editor [visual studio code](#);
- Be familiar with the distributed version control system [git](#), package managers [conda](#), [homebrew](#), and [npm](#);
- Personal website: Use [hugo](#) under [go](#) language and the R package [blogdown](#) to build my personal website <https://likan.info>.

## Grants, Projects, and Awards

### 1. Grants

- **Zhan, L.**, Zhou, P., Zhang, L., & Crain, S. (2019 - 2023). The acquisition and online processing of irrealis in Mandarin Chinese. *The National Social Science Fund of China*. [Grant No. 19BYY087]. (¥200,000). Role: Principle Investigator.

- **Zhan, L.**, Qu, Y., Xu, J., Xiao, Y., & Li, N. (2019 - 2020). The eye movements pattern and neural oscitation markers of predictive processing in language comprehension. *The Fundamental Research Funds for the Central Universities*. [Grant No. 19YJ080002]. (¥70,000). Role: Principle Investigator.
- **Zhan, L.**, Shi, F., Gao, L., & Zhang, L. (2019 - 2020). The online processing and acquisition of lexical tone in Mandarin Chinese. *The Fundamental Research Funds for the Central Universities*. [Grant No. 18YBT15]. (¥70,000). Role: Principle Investigator.
- Shi, D., et al. (2018 - 2023). Studies of Chinese in Generative Grammar and Development of Chinese Grammar in the New Era. *The Major Project of the National Social Science Found of China*. [Grant No. 18ZDA291]. (¥800,000). Role: Co-Investigator.
- Si, F., et al. (2018 - 2023). Language acquisition and language cognition under the perspective of syntactic cartography. *The Fundamental Research Funds for the Central Universities*. [Grant No. 18ZDJ06]. (¥300,000). Role: Co-Investigator.
- **Zhan, L.** (2015 - 2016). Experimental explorations of possible world semantics. *The Fundamental Research Funds for the Central Universities*. [Grant No. 15YBB29]. (¥20,000). Role: Principle Investigator.
- **Zhan, L.** (2015 - 2016). Introduction to psychology and the scientific research. *The Funds Supporting the Growth of the New Teachers*. [Grant No. FD201530]. (¥7,000). Role: Principle Investigator.
- **Zhan, L.**, Shi, F., Gao, L., & Zhang, L. (2015 - 2016). The Processing and acquisition of tone in Mandarin Chinese. *The Fundamental Research Funds for the Central Universities*. [Grant No. 15YJ050003]. (¥70,000). Role: Principle Investigator.
- **Zhan, L.** (2010 - 2014). The interpretation of conditionals in natural language. *Cognitive Science Postgraduate Research Grant of Macquarie University*. (\$10,570). Role: Principle Investigator.

- **Zhan, L.** (20103). The hypothetical property of conditionals in natural language. *Macquarie University Postgraduate Research Fund*. (\$4,684). Role: Principle Investigator.

## 2. Projects

- Zhang, L., et al. (2018 - Now). The psychological and brain development of atypical developing adolescences. *The Program of WuTong Innovations Platforms*. Role: Co-Investigator.
- Chen, M., et al. (2019 - Now). The study of Chinese as a second language acquisition and second language teaching (The JunCai Group). *The Program of Establishing First-Class Disciplines in BLCU*. Role: Co-Investigator.

## 3. Awards

- 2013.11. The Paula Menyuk Travel Award for the 38th Boston University Conference on Language Development. (\$300).
- 2013.04. The Travel Award for the 26th Annual CUNY Sentence Processing Conference. (\$350).

## Professional Activities

1. Frontiers in Psychology, Review Editor in Language Sciences (2020 - )
2. Organization of international meetings
  - Academic Advisory Committee, The 24th annual conference of the International Association of Chinese Linguistics ([IACL-24](#)), Beijing Language and Culture University, Beijing, China.
3. Ad-hoc reviews
  - Frontiers in Psychology. (2020 - )
  - Scientific Reports. (2018 - 2019);
  - Journal of visualized experiments. (2018 - 2019);

- Language Teaching and Linguistic Studies. (In Chinese, 2016);
- SAGE Open. (2016).

#### 4. Clinical licenses





- Licensed Examiner of Wechsler Preschool and Primary Scale of Intelligence 4th Edition (WPPSI-VI) Chinese Version.
- Licensed Examiner of Adaptive Behavior Assessment System 2nd Edition (ABAS-II) Chinese Version.









## Publications



#### 1. Book

- **Zhan, L.** (2015). *The Interpretation of Conditionals in Natural Language*. Saarbrücken, Germany: Lap Lambert Academic Publishing.

#### 2. Periodicals

- Zhou, P., Shi, J., & **Zhan, L.** (in press). Real-time comprehension of garden-path constructions by preschoolers: A Mandarin perspective. *Applied Psycholinguistics*.
- Zhou, P., Ma, W., & **Zhan, L.** (2019). A deficit in using prosodic cues to understand communicative intentions by children with autism spectrum disorders: An eye-tracking study. *First Language*. doi: 10.1177/0142723719885270 
- Zhou, P., **Zhan, L.**, & Ma, H. (2019). Understanding others' minds: Social inference in preschool children with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 49(11), 4523-4534. doi: 10.1007/s10803-019-04167-x 
- Zhou, P., **Zhan, L.**, & Ma, H. (2019). Predictive language processing in preschool children with Autism Spectrum Disorder: An eye-tracking study. *Journal of Psycholinguistic Research*, 48(2), 431-452. doi: 10.1007/s10936-018-9612-5 
- **Zhan, L.** (2018). Using eye movements recorded in the visual world paradigm to explore the online processing of spoken language. *Journal of Visualized Experiments*, 140, e58086. doi: 10.3791/58086 




- Zhou, P., Ma, W., **Zhan, L.**, & Ma, H (2018). Using the visual world paradigm to study sentence comprehension in Mandarin-speaking children with autism. *Journal of Visualized Experiments*, 140, e58452. doi: 10.3791/58452 
  - **Zhan, L.**, Zhou, P., & Crain, S. (2018). Using the visual-world paradigm to explore the meaning of conditionals in natural language. *Language, Cognition and Neuroscience*, 33(8), 1049-1062. doi: 10.1080/23273798.2018.1448935 
  - **Zhan, L.** (2018). Scalar and ignorance inferences are both computed immediately upon encountering the sentential connective: The online processing of sentences with disjunction using the visual world paradigm. *Frontiers in Psychology*, 9. doi: 10.3389/fpsyg.2018.00061 
  - Moscati, V., **Zhan, L.**, & Zhou, P. (2017). Children's on-line processing of epistemic modals. *Journal of Child Language*, 44(5), 1025-1040. doi: 10.1017/S0305000916000313 
  - **Zhan, L.**, Crain, S., & Zhou, P. (2015). The online processing of only if- and even if- conditional statements: Implications for mental models. *Journal of Cognitive Psychology*, 26(7), 367-379. doi: 10.1080/20445911.2015.1016527 
  - Zhou, P., Crain, S., & **Zhan, L.** (2014). Grammatical aspect and event recognition in children's online sentence comprehension. *Cognition*, 133(1), 262-276. doi: 10.1016/j.cognition.2014.06.018 
  - Zhou, P., Crain, S., & **Zhan, L.** (2012). Sometimes children are as good as adults: The pragmatic use of prosody in children's on-line sentence processing. *Journal of Memory and Language*, 67(1), 149-164. doi: 10.1016/j.jml.2012.03.005 
  - Zhou, P., Su, Y., Crain, S., Gao, L., & **Zhan, L.** (2012). Children's use of phonological information in ambiguity resolution: A view from Mandarin Chinese. *Journal of Child Language*, 39(04), 687-730. doi: 10.1017/S0305000911000249 
3. Book chapters and conference proceedings
- **Zhan, L.** (2018). Magnetoencephalography (MEG) as a Technique for Imaging Brain Function and Dysfunction. In *Top 10 Contributions on Psychology* (Chapter 4, pp. 1-38). Telangana, India: Avid Science



- **Zhan, L.**, Crain, S., & Zhou, P. (2013). The anticipatory effects of focus operators: A visual-world paradigm eye-tracking study of “only if” and “even if” conditionals. In N. Goto, K. Otaki, A. Sato, & K. Takita (Eds.), *Proceedings of GLOW in Asia IX 2012*. Mie University, Japan.
4. Peer reviewed conference presentations
- **Zhan, L.**, & Zhou, P. (2019, June). *Children differ from adults in interpreting disjunctions: Evidence from an eye-tracking study*. Poster session presented at Psycholinguistics in Iceland - Parsing and Prediction, University of Iceland, Reykjavík, Iceland. 
  - **Zhan, L.** (2017, September). *Scalar implicature and ignorance inference are both locally computed: Evidence from the online processing of disjunctions using the visual world paradigm*. Oral session presented at the Second High-level Forum on Cognitive Linguistics, University of International Business and Economics, Beijing, China. 
  - **Zhan, L.**, Crain, S., & Zhou, P. (2013, November). *Going beyond the information that is perceived: The hypothetical property of if-conditionals in Mandarin Chinese*. Oral session presented at the Second International Conference on Psycholinguistics in China, Fuzhou, China.
  - Moscati, V., **Zhan, L.**, & Zhou, P. (2013, November). *Reasoning on possibilities: An eye tracking study on modal knowledge*. Poster session presented at the 38th Annual Boston University Conference on Language Development, Boston University, MA.
  - Zhou, P., Crain, S., & **Zhan, L.** (2013, November). *Anticipatory eye movements in children’s processing of grammatical aspect*. Poster session presented at the 38th Annual Boston University Conference on Language Development, Boston University, MA.
  - **Zhan, L.**, Crain, S., & Zhou, P. (2013, March). *The hypothetical property of “if”-statements: A visual-world paradigm eye-tracking study*. Poster session presented at CUNY2013: The 26th annual CUNY Sentence Processing Conference, Columbia, SC.



- **Zhan, L.**, Crain, S., & Zhou, P. (2012, July). *The interpretation of conditionals*. Oral session presented at the 7th International Conference on Thinking (ICT2012), Birkbeck/UCL, London, UK.
- Zhou, P., Crain, S., & **Zhan, L.** (2012, March). *Children's pragmatic use of prosody in sentence processing*. Poster session presented at the 35th Generative Linguistics in the Old World (GLOW) Workshop: Production and Perception of Prosodically-Encoded Information Structure, University of Potsdam, Potsdam, Germany.
- **Zhan, L.**, Crain, S., & Khlentzos, D. (2011, August). *The basic semantics of conditionals in natural language*. Oral session presented at the Harvard-Australia Workshop on Language, Learning and Logic, Macquarie University, Sydney, Australia.
- Zhou, P., Crain, S., Gao, L., & **Zhan, L.** (2010, September). *The role of prosody in children's focus identification*. Oral session presented at the Generative Approaches to Language Acquisition - North America 4 (GALANA-4), Toronto, Canada.
- Zhou, P., Su, Y., Crain, S., Gao, L., & **Zhan, L.** (2010, August). *Children's use of prosodic information in ambiguity resolution*. Oral session presented at the 8th Conference of Generative Linguistics in the Old World Asia (GLOW-in-Asia 8), Beijing, China.

## 5. Invited talks

- **Zhan, L.** (2020, October). *Language and Language Development*. Invited lecture given at the course of *Language +* organized by Prof. Si. 
- **Zhan, L.** (2019, August). *Gardener or Carpenter: Some thoughts on nurturing a child*. Invited presentation given at Smiland Daycare Center. 
- **Zhan, L.** (2018, December). *Sentential reasoning and sentential connectives: Conditional, disjunction, negation, and modality*. Invited presentation given at the Workshop of Theoretical and Experimental Linguistics, Tsinghua University, Beijing, China. 

- **Zhan, L.** (2018, November). *Methods of cognitive neuroscience: Focus on language*. Invited presentation given at the Child Cognition Laboratory, Department of Foreign Languages and Literatures, Tsinghua University, Beijing, China. 
- **Zhan, L.** (2018, November). *Visual world paradigm: An eye-tracking technique to study the real time processing of spoken Language*. Invited presentation given at the Center for Studies of Chinese as a Second Language, Beijing Language and Culture University, Beijing, China. 
- **Zhan, L.** (2018, October). *Experimental Builder: A what-you-see-is-what-you-get tool to build experiment scripts*. Invited presentation given at the Center for Studies of Chinese as a Second Language, Beijing Language and Culture University, Beijing, China. 