# Kayla Keyue Chen

Email: keyue.chen.19@ucl.ac.uk | Homepage: keyue-c.github.io

## Summary

Fourth-year PhD student with an interest in psycholinguistics and neurolinguistics, particularly in the predictive mechanisms in real-time language comprehension, and the interaction between language processing and (domain-general) cognitive processes (e.g., cognitive control, memory, attention).

#### EDUCATION

University College London

London, UK

PhD in Linguistics

2021 - present

Ongoing project: Prediction revision during language processing

Supervisor: Dr. Wing-Yee Chow, Dr. Andrea Santi

University College London

London, UK

Master of Research in Speech, Language and Cognition

2019 - 2020

Project: Cognitive control and garden-path sentence comprehension

Supervisor: Dr. Andrea Santi

Nankai University

Tianjin, China

Bachelor of Arts in Chinese Language and Culture (TCSOL) Project: Noun neighbor ratio and noun-verb distinction

Supervisor: Dr. Quansheng Xia

2015 - 2019

## Research experience

PhD Research 2021 - present

Division of Psychology and Language Sciences

University College London, London

This project investigated how comprehenders update predictions for upcoming input upon encountering informative cues during real-time language comprehension.

Reviewed and synthesised key findings from the literature.

Designed and conducted experiments using EEG, eye-tracking, mouse-tracking, and pupillometry.

Communicated research findings through publications and conference presentations.

#### Research Assistant (PI: Dr. Taomei Guo)

Feb-June, 2021

2018

State Key Laboratory of Cognitive Neuroscience and Learning

Beijing Normal University, China

I assisted with a project investigating the brain networks involved in processing positive and negative emotional words in the two language systems of bilinguals.

Performed a systematic review and meta-analysis of fMRI studies.

Collected fMRI data and analysed the data using extended unified Structural Equation Modeling.

## AWARDS, SCHOLARSHIPS & FUNDING

$Scholarships \ {\it egin{array}{c} Eunding \end{array}}$	
The AMLaP Conference Travel Grant (£120)	2024
Society for Human Sentence Processing Travel Grant (\$400)	2023
UCL Graduate & Overseas Research Scholarship (fees, maintenance, and research costs)	2021-2024
Oxford-Kaifeng Graduate Scholarship (fees and maintenance; declined)	2021-2024
Nomination of the 12th Zhou Enlai Scholarship, Nankai University (¥5,000)	2019
China National Scholarship, Nankai University ( $\$8,000\times3$ years)	2016-2019
Prizes & Awards	
Chinese Student Awards, Great Britain China Educational Trust	2024
Best Student Poster Prize at the 30th AMLaP Conference	2024
Yuen Ren Chao Language Experiment Star, Nankai University	2022
Dean's List of top performing students, Faculty of Brain Sciences, UCL	2020

#### PEER-REVIEWED JOURNAL PUBLICATIONS

First Prize, May Fourth Essay Competition, Nankai University

Chen, K. K., Johansen, I.M., & Chow, W.-Y. (2024). Revising noun predictions based on English measure phrases: Evidence from visual-world eye-tracking. Language, Cognition and Neuroscience, 40(1), 87–102.

Kuz, V., Cai, F., Chen, K., Chen, J., Veall, C., Zheng, Y., Xu, Z., Santi, A. (2024). Trial-Level and Contiguous Syntactic Adaptation: A Common Domain General Mechanism at Play?. Languages, 9(3), 73.

- Alrashdi, D. H., **Chen, K. K.**, Meyer, C., & Gould, R. L. (2023). A systematic review and meta-analysis of online mindfulness-based interventions for university students: An examination of psychological distress and well-being, and attrition rates. *Journal of Technology in Behavioral Science*, 9, 211–223.
- Dang, Q., Ma, F., Yuan, Q., Fu, Y., Chen, K., Zhang, Z., Lu, C., & Guo, T. (2023). Processing negative emotion in two languages of bilinguals: Accommodation and assimilation of the neural pathways based on a meta-analysis. *Cerebral Cortex*, 33(13), 8352-8367.
- Chen, K. & Xia, Q. (2020). Effects of noun neighbor ratio on grammatical class recognition of disyllabic compound nouns in Chinese. *Experimental Linguistics*, 9(2), 16-34.

## PEER-REVIEWED CONFERENCE PRESENTATIONS

#### Talks

- Chen, K. K., Xia, F., Wang, S., & Chow, W.-Y. (2024, September 5-7). Comprehenders use consecutive cues to update prediction incrementally: Evidence from eye-tracking and ERPs. Talk at the 30th Architectures and Mechanisms for Language Processing Conference, Edinburgh, Scotland.
- Chen, K. K., Xia, F., Wang, S., & Chow, W.-Y. (2024, June 19-20). Incremental prediction updating through consecutive cues: Evidence from ERPs. Talk at Oxford Postgraduate Conference in Linguistics, Oxford, UK.
- Chen, K. K., & Chow, W.-Y. (2023, December 1-3). Rapid semantic updating despite prediction errors: eye-tracking evidence from Mandarin Chinese. Talk at the 2nd Architectures and Mechanisms for Language Processing Asia Conference, Hong Kong, China.

#### Poster Presentations

- Chen, K. K., Hu, N., Liu, Z., & Chow, W.-Y. (2025, March 27-29). Dissociating top-down preactivation and bottom-up priming in prediction updating. Poster presented at the 38th Annual Conference on Human Sentence Processing, College Park, MD.
- Chen, K. K., Gao, J., & Chow, W.-Y. (2025, March 27-29). Updating predictions in the presence of a local competitor: A visual-world study. Poster presented at the 38th Annual Conference on Human Sentence Processing, College Park, MD.
- Chen, K. K., Lu, C., Wang, X., Wu, Y., & Chow, W.-Y. (2025, January 8-10). Resolving different types of prediction violations during sentence comprehension: Insights from pupillometry and individual differences. Poster presented at the Experimental Psychology Society Meeting, London, UK.
- Chen, K. K., Lu, C., Wang, X., Wu, Y., & Chow, W.-Y. (2024, September 5-7). Resolving different types of prediction violations during sentence comprehension: Insights from pupillometry and individual differences. Poster presented at the 30th Architectures and Mechanisms for Language Processing Conference, Edinburgh, Scotland.
- Chen, K. K.\*, Huo, Y.\*, Xu, J., Wang, Z., Xia, F., & Chow, W.-Y. (2024, September 5-7). Co-registration of mouse cursor and eye movements reveals comparable sensitivity of mouse and eye-tracking to prediction during language comprehension. Poster presented at the 30th Architectures and Mechanisms for Language Processing Conference, Edinburgh, Scotland. \*equal contribution
- Chen, K. K., Xia, F., Wang, S., & Chow, W.-Y. (2024, May 16-18). Incremental prediction updating through consecutive cues: Evidence from ERPs. Poster presented at the 37th Annual Conference on Human Sentence Processing, Ann Arbor, MI.
- Chen, K. K.\*, Huo, Y.\*, Xu, J., Wang, Z., Xia, F., & Chow, W.-Y. (2024, May 16-18). Co-registration of mouse cursor and eye movements reveals comparable sensitivity of mouse and eye-tracking to prediction during language comprehension. Poster presented at the 37th Annual Conference on Human Sentence Processing, Ann Arbor, MI. \*equal contribution
- Zhang, Y., Wang, Y., Frassinelli, D., Antúnez, M., Lim, D, Aneez, M, Chen, K., & Vigliocco, G. (2023, September 6-9). Multimodal information contribution to language comprehension in naturalistic settings: EEG evidence. Poster presented at the 23rd meeting of the European Society for Cognitive Psychology, Porto, Portugal.
- Chen, K. K., & Chow, W.-Y. (2023, March 9-11). Updating predictions incrementally: Listeners are able to process new information following prediction errors. Poster presented at the 36th Annual Conference on Human Sentence Processing, Pittsburgh, PA.
- Chen, K. K., Johansen, I.M., & Chow, W.-Y. (2022, September 7-9). Unexpected information triggers rapid prediction updating: Evidence from eye movements. Poster presented at the 28th Architectures and Mechanisms for Language Processing Conference, York, UK.
- Chen, K. K., Johansen, I.M., & Chow, W.-Y. (2022, March 24-26). Listeners rapidly update their predictions in response to unexpected information. Poster presented at the 35th Annual Conference on Human Sentence Processing, Santa Cruz, CA.
- Kuz, V., Chen, K., Veall, C., & Santi, A. (2021, March 4-6). Cognitive control and ambiguity resolution: Beyond conflict resolution. Poster presented at the 34th Annual CUNY Conference on Human Sentence Processing, Philadelphia, PA.

## INVITED TALKS

- Chen, K. (2025, February 26). Prediction updating during language processing. Language and Learning Seminar Series, Department of Psychology, University of Warwick, UK.
- Chen, K. (2021, March 7). Predictive mechanisms in language comprehension. Psycholinguistics Salon, College of Chinese Language and Culture, Nankai University, China.

#### Internal presentations

- Chen, K. K., & Chow, W.-Y. (2024, April 23). The interplay of predictability, plausibility, and cognitive functions in sentence comprehension: A pupillometry study. Talk at the 2nd Chandler House Symposium, Division of Psychology and Language Sciences, University College London, UK.
- Chen, K. K., & Chow, W.-Y. (2023, June 14). Rapid semantic updating despite prediction errors: Evidence from Mandarin Chinese. Talk at PhD Day, Department of Linguistics, University College London, UK.
- Chen, K. K., & Chow, W.-Y. (2023, April 17). Overcoming prediction errors: Rapid updating in language comprehension. Talk at the 1st Chandler House Symposium, Division of Psychology and Language Sciences, University College London, UK.
- Chen, K. K., Johansen, I.M., & Chow, W.-Y. (2022, May 27). Unexpected information triggers rapid prediction updating: Evidence from eye movements. Talk at Faculty of Brain Sciences Postgraduate Conference 2022, University College London, UK.

## TEACHING EXPERIENCE

Credit-bearing Courses

#### Bi/Multilingualism: Development and Cognition (BA, MA)

Term 2, 2024-25

| Teaching assistant, University College London

Designed and delivered one lecture, and collaborated on preparing and delivering tutorials.

Marked and provided feedback on final assessments.

Experimental Linguistics Laboratory (BSc) | Teaching assistant, University College London Term 1, 2024-25

Collaborated on preparing an online experimental program for course activities.

Created materials to demonstrate data analysis using R.

**Language and Communication (BSc)** | *Teaching assistant, University College London* Term 2, 2023-24, 2024-25 Delivered one lecture.

Marked and provided feedback on final assessments (academic posters).

Intermediate Statistical Methods (BSc) | Demonstrator, University College London Term 1-2, 2021-22, 2022-23 Delivered weekly practical sessions and drop-in consultations.

Marked and provided feedback on students' homework, coursework, and final exam.

 $\textbf{Neurolinguistics} \ (\textbf{BA}, \ \textbf{MA}) \ | \ \textit{Teaching assistant, University College London}$ 

Term 2, 2021-22

Delivered weekly tutorial sessions.

Marked and provided feedback on midterm assessments (short questions).

#### Research Methods: Principles, Skills and Applications (MSc)

Term 1-2, 2019-20

| Peer tutor, University College London

Conceptualised and organised weekly group meetings for review and discussion.

#### Chinese Traditional Idiom (MA) | Lecturer, Nankai University

Fall, 2018-19

Designed and delivered weekly lectures.

Marked and provided feedback on final assessments (presentations).

Short Courses, Workshops & Guest Lecturer

#### Introduction to Statistics for Linguists Using R | University College London

May-June, 2022-2024

Collaborated with a fellow PhD student in leading the summer short course.

Designed and delivered two lectures and tutorials, and provided drop-in consultations.

Pupillometry in Linguistic Research in Psycholinguistics: The Eye-tracking Method and its Applications in

Language Research, UCL Linguistics Autumn School | *University College London* Designed and delivered one lecture.

Nov, 2023

Supervision & Advising

#### Masters Dissertation Project

Jingyi Gao (2024), Cassie Liu (2024), Ningxin Hu (2024), Jiajian Xu (2023), Zunni Wang (2023), Fan Xia (2023)

#### Undergraduate Dissertation Project

Anne Wang (2025), Yuhan Shen (2025), Yijia Luo (2025), Qizhang Shi (2024), Yuxuan Wu (2024), Xinyi Wang (2024), Chen Lu (2024)

Undergraduate Psychology Scholarships Placements

Aisha Shabir (2024), Cheri Au (2022)

#### Undergraduate Psychology Year-2 Lab Project

Ian Feng (2022), Leonie Hellwich (2022), Yue Zheng (2022), Cheri Au (2022), Muge Karan (2022)

## Professional services

Organising

Online Psycholinguistics Reading Group | Organisor

Oct, 2023 - Dec, 2024

Psycholinguistics Lab Meeting | Organisor

Term 1, 2024

Research Students Psycholinguistics Talks and Reading Group | Co-organisor

Term 1, 2023

Reviewing

Ad-hoc Reviewing

Journal of Cultural Cognitive Science

Quarterly Journal of Experimental Psychology

Ad-hoc Collaborative Reviewing (under the guidance of Dr. Wing-Yee Chow)

Journal of Experimental Psychology: Learning, Memory, and Cognition

Language and Cognition

PeerJ

## Professional memberships

#### Society for Human Sentence Processing

2023 - present

## SKILLS

Analytical tools: R, MatLab (EEGLAB, ERPLAB, SPM)

Research tools: Python (Psychopy), Experiment Builder, E-prime, Ibex Farm, PCIbex, Gorilla, Praat

Language skills: Mandarin Chinese (native), English (fluent)

Training:

- Learning Pupillometry From Theory to Analyses Workshop, University of Konstanz, March 2024.
- Thirty-third EEGLAB Workshop, Aspet, France, July 2023.
- Generalised Additive Mixed Models (GAMMs) Workshop, University of Reading, December 2022.
- Sixth Summer School on Statistical Methods for Linguistics and Psychology (SMLP), Introduction to Bayesian Data Analysis, University of Potsdam, September 2022.
- Advanced Core Training in Linguistics (ACTL), University of York, June 2022.

#### Certificates:

- Probability Theory: Foundation for Data Science, University of Colorado, through Coursera, January 2022.
- Introduction to Calculus, The University of Sydney, through Coursera, November 2021.