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Agenda

December 11, 2025		
All Day	**Registration**	
15:00–17:30 Room 2	**Workshop** **Qing Cai**, East China Normal University Building a Psycholinguistic Database with Human Behavioral Big Data and Cross-Domain Representation Alignment	

December 12, 2025			
08:30–09:00		**Opening Ceremony**	
09:00–09:50 Room 1		**Keynote 1** **Kate Watkins**, University of Oxford Stimulating Speech: Auditory-Motor Interactions during Production and Perception	
09:50–10:10		**Coffee Break**	
10:10–11:40 Room 1		**Invited Talks** **Xingshan Li**, Chinese Academy of Sciences The Chinese Reading Model (CRM): Recent Advances and Future Directions **Yiu-Kei Tsang**, Hong Kong Baptist University Research collaboration in the Greater Bay Area: A psycholinguistic comparison of simplified and traditional Chinese **Ming Xiang**, The University of Chicago The Effect of Question under Discussion on Pragmatic Inferences	
12:00–13:00		**Lunch**	
13:00–14:30		**Poster Session A**	
14:30 – 15:00	Room 1	**Flash Session 1-1**	
	Room 2	**Flash Session 1-2**	
15:00 – 16:15	Room 1	**Oral Session 1-1** Sentence and Discourse Processing	
	Room 2	**Oral Session 1-2** Character and Word Processing	
16:15–16:40		**Coffee Break**	
16:40–17:30 Room 1		**Keynote 2** **Robert J. Hartsuiker**, Ghent University The Developmental Account of Shared Syntax in Bilinguals: Where are We Now?	
18:00–20:00		**Welcome Banquet**	

December 13, 2025	
08:30–09:20 Room 1	**Keynote 3** **Ping Li**, The Hong Kong Polytechnic University Leveraging AI and Emerging Technologies for the Study of Neurocognition of Chinese and Other Languages
09:20–09:40	**Coffee Break**

09:40–11:40 Room 1		**Invited Talks** **Ding Nai**, Zhejiang University Encoding of Linguistic Structure in Human Brain and LLMs **Chunming Lu**, Beijing Normal University Resolving Uncertainty through Computational Inference during Natural Communications **Shaonan Wang**, The Hong Kong Polytechnic University Decoding the Multimodal Mind: Generalizable Brain-to-Text Translation via Multimodal Alignment and Adaptive Routing **Gangyi Feng**, The Chinese University of Hong Kong Neural Representations Connecting Language Learning and Processing	
12:00–13:00		**Lunch**	
13:00–14:30		**Poster Session B**	
14:30 – 15:00	Room 1	**Flash Session 2-1**	
	Room 2	**Flash Session 2-2**	
15:00 – 16:15	Room 1	**Oral Session 2-1** Language Computational Modeling	
	Room 2	**Oral Session 2-2** Language Production, and Language Development	
16:15–16:40		**Coffee Break**	
16:40 – 17:30 Room 1		**Keynote 4** **Asli Özyürek**, Max Planck Institute for Psycholinguistics A Multimodal Approach to Neural and Cognitive Processing of Language: Insights from Humans and Machines	
18:00–19:30		**Dinner**	

December 14, 2025			
08:30–10:30 Room 1		**Invited Talks** **Yang Zhang**, University of Minnesota From Brain to Behavior: Lexical Tone Processing Across the Lifespan and in Atypical Development **Shelley Xiuli Tong**, The university of Hong Kong Statistical Learning Optimizes Working Memory Representations **Andus Wing Kuen Wong**，City University of Hong Kong Phonological planning in Cantonese-English bilingual speech production **Him Cheung**, University of Canterbury The Role of Cognitive Reserve in Chinese Older Adults' Reading Comprehension	
10:30–10:50		**Coffee Break**	
10:50-11:40 Room 1		**Keynote 5** **Jesse Snedeker**，Harvard University Studying the Development of Predictive Language Comprehension Using a Naturalistic EEG Paradigm	
11:40–12:00		**Closing Ceremony**	
12:30–13:30		**Lunch**	

Oral Sessions

Oral 1-1

Dec 12, 2025
15:00–16:15
Room 1

[O1] Why Is Understanding Counterfactual Meaning So Difficult? Insights from fNIRS Evidence
Xiaodong Xu, Cheng Jia
Nanjing Normal University

[O2] Probing the Syntax-Semantics Interface of the Language Network in Sentence Processing
Peisong Yan[1,2,3]，Luyao Chen[4*], Junfeng Lu[1,2,3]
[1] Department of Neurosurgery, Huashan Hospital, Shanghai Medical College, Fudan University, Shanghai, China; [2] Shanghai Key Laboratory of Brain Function Restoration and Neural Regeneration, China; [3] National Center for Neurological Disorders, Huashan Hospital, Shanghai Medical College, Fudan University, Shanghai 200040, China; [4] Max Partner Group at School of International Chinese Language Education, Beijing Normal University, Beijing 100875, China

[O3] Neural Basis of Eye Movement Metrics in Natural Reading: A Fixation-Related fMRI Study
Jiayu Han[1,2] Ruoling Hang[1,2] Pingping Xin[1,2] Yijia Xu[1,2] Xiyu Zhou[1,2] Junjie Wu[1,2,3]
[1] Key Research Base of Humanities and Social Sciences of the Ministry of Education, Academy of Psychology and Behavior, Tianjin Normal University, Tianjin 300387; [2] Faculty of Psychology, Tianjin Normal University, Tianjin 300387; [3] Department of Linguistics, Faculty of Medicine, Health and Human Sciences, Macquarie University, Sydney, Australia

[O4] The role of working memory in structural priming during language production and comprehension
Xuemei Chen[1,2*], Suiping Wang[1*]
[1] Philosophy and Social Science Laboratory of Reading and Development in Children and Adolescents (South China Normal University), Ministry of Education, 510631 Guangzhou, China; [2] School of Psychology, South China Normal University

[O5] The good-enough listener: A visual world paradigm reveals the interaction between prediction and bottom-up input
Jiaxuan Li[* 1], Kayla Keyue Chen[* 2], Anne Wang [2], Yuhan Shen [2], Yijia Luo [2], Richard Futrell [1], Wing-Yee Chow [2]
[1] Department of Language Science, University of California Irvine; [2] Division of Psychology and Language Sciences, University College London

Oral 1-2

Dec 12, 2025
15:00–16:15
Room 2

[O6] Variations of Grammatical Gender in Different Variants of German: Evidence From the Processing of Bidialectal Speakers
Niels O. Schiller [1]
[1] Department of Linguistics and Translation, City University of Hong Kong, Hong Kong SAR

[O7] Spatiotemporal Dynamics of Language Information Representation within the Left Inferior Parietal Lobule Network: An Intracranial SEEG Study
Jiahong Zeng[1, †], Yuxin Liu[1, †], Chunyu Zhao[1], Zhenjiang Cui[1], Saiyi Jiao[1,2], Yi Liu[3], Di Liu[1], Xuliang Zhang[1], Yudan Luo[1,4], Yidong Jiang[1], Gaofeng Shi[5], Yuguang Guan[6], Zaizhu Han[1, *]
[1] National Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing 100875, China; [2] Department of Otorhinolaryngology, Peking Union Medical College Hospital, Beijing 100730, China; [3] Beijing Institute of Otolaryngology, Otolaryngology-Head and Neck Surgery, Beijing Tongren Hospital, Capital Medical University, Beijing 100005, China; [4] Department of Psychology and Art Education, Chengdu Education Research Institute, Chengdu 610036, China; [5] College of International Education and Exchange, Tianjin Normal University, Tianjin 300387, China; [6] Department of Neurosurgery, Sanbo Brain Hospital, Capital Medical University, Beijing 100093, China
† These authors contributed equally to this work.

[O8] Brain Activity Composing the Structure of Words: An MEG Study
Haruki Noda [1], Emi Yamada [2], Nanami Yoshii [1], Hiroshi Shigeto [3,4], Shinri Ohta [2]
[1] Department of Linguistics, Graduate School of Humanities, Kyushu University, Fukuoka, Japan; [2] Department of Linguistics, Faculty of Humanities, Kyushu University, Fukuoka, Japan; [3] Department of Health Sciences, Faculty of Medical Sciences, Kyushu University, Fukuoka, Japan; [4] Department of Neurology, Kyushu University Hospital, Fukuoka, Japan

[O9] Taxonomic or Thematic Organization: Semantic Network Mechanisms Underlying Creative Thinking
Chen Jie [1], Bofan Jiang[1], Yutian Han[1], Yan Wu[1]
[1] School of Psychology, Northeast Normal University, Changchun, China

[O10] The Neural Dynamics of Sub-lexical Prediction during L2 Spoken Sentence Processing: Evidence from ERPs
Nan Li [1], Wenkang Luo [1], Anthony Yacovone [2], Jesse Snedeker [3]
[1] School of Foreign Studies, South China Normal University, Guangzhou, China; [2] Department of Linguistics, Boston University, Boston, USA; [3] Department of Psychology, Harvard University, Cambridge, USA

Oral 2-1 Dec 13, 2025 15:00 – 16:15 Room 1	**[O11] Encoding without borders: alignment between brain and LLM-linguistic features across languages** Ni Yang[1], Rui He[1], Wolfram Hinzen[1,2] [1] Department of Translation & Language Sciences, Universitat Pompeu Fabra, Barcelona, 08018, Spain; [2] Intitut Català de Recerca i Estudis Avançats (ICREA); Barcelona, 08010, Spain **[O12] Dynamic Modulation of Surprisal Effects in Reading Authentic L2 Texts: Evidence from Self-Paced Reading and Probabilistic Language Models** Yuefan Hao [1], Jie Zhang [1], Jiaxin Yuan [2], Terry Qiu [3], Lin Chen [4 5 6], Liner Yang [2], Xiaoping Fang [1] [1] School of Psychological and Cognitive Sciences, Beijing Language and Culture University; [2] School of Information Science, Beijing Language and Culture University; [3] Department of Mathematics, University of Illinois Urbana-Champaign; [4] Department of Educational Psychology, University of Illinois Urbana-Champaign; [5] Beckman Institute for Advanced Science and Technology, University of Illinois Urbana-Champaign; [6] Department of Linguistics, University of Illinois Urbana-Champaign **[O13] The prosocial effects of linguistic alignment differ between human and AI interlocutors** Max S. Dunn [1], Zhenguang G. Cai [2,3], & Stefano Occhipinti [1] [1] International Research Centre for the Advancement of Health Communication, Department of English and Communication, The Hong Kong Polytechnic University, Hong Kong, SAR, China; [2] Department of Linguistics and Modern Languages, The Chinese University of Hong Kong, Hong Kong, SAR, China; [3] Brain and Mind Institute, The Chinese University of Hong Kong, Hong Kong, SAR, China **[O14] Neural dynamics and computational mechanisms of multidimensional cue integration in communicative intention comprehension** Panke Gao [1,2], Jiayu Wang [1,2], Yufang Yang [1,2], Xiaoqing Li [1,2*] [1] State Key Laboratory of Cognitive Science and Mental Health, Institute of Psychology, Chinese Academy of Sciences, Beijing, China; [2] Department of Psychology, University of Chinese Academy of Sciences, Beijing, China **[O15] Detecting Cognitive Impairment in Mandarin-speaking Older Adults across Multiple Speech Tasks: A Machine Learning Approach** Tsy Yih [1], Lihe Huang [1] [1] Research Center for Aging, Language and Care, School of Foreign Studies, Tongji University, Shanghai, China
Oral 2-2 Dec 13, 2025 15:00 – 16:15 Room 2	**[O16] Divergent Neural Trajectories in Tone vs. Consonant Processing: EEG Evidence from Preterm Language Development** Yun Pan, Kunyu Xu* Institute of Modern Languages and Linguistics, Fudan University, Shanghai **[O17] Investigating Microstructural Contributions to Language Production Lateralization in Left-Handers** Xiaoyin Wu [1, #], Miaomiao Zhu [2, #], Chu-Chung Huang [1], and Qing Cai [1] [1] Department of Lifespan Development and Learning Sciences, School of Psychology and Cognitive Science, East China Normal University, shanghai, 200333, China; [2] Institute of Brain Science and Education Innovation, East China Normal University, shanghai, 200333, China # These authors contributed equally to this work **[O18] Developmental Patterns in Children's Statistical Learning of Orthographic Distributional Regularities** Xiuhong Tong [1], Rujun Duan [1], Qi Sun [2] [1] Department of Psychology, The Education University of Hong Kong, Hong Kong, China; [2] Department of Psychology, Zhejiang Normal University, Jinhua, China **[O19] Music-to-language Transfer: Cue-weighting and Thai Tone Word Learning** Runqing Cheng [1], William Choi [1] [1] Academic Unit of Human Communication, Learning, and Development, The University of Hong Kong, Hong Kong Special Administrative Region (SAR) of China. **[O20] How "dyslexia genes" influence brain connectivity?** Jingjing Zhao [1, *], Yueye Zhao [2], Hayley S Mountford [3], Colin Buchanan [3], Joanna Moodie [3], 23andMe, Heather Whalley [4], Simon Cox [3], Michelle Luciano [3] [1] Department of Psychology, The Chinese University of Hong Kong; [2] School of Psychology, Shaanxi Normal University; [3] Department of Psychology, University of Edinburgh; [4] Department of Psychiatry, University of Edinburgh

Flash Sessions

Flash 1-1

Dec 12, 2025
14:30 – 15:00
Room 1

[F1] ERP Evidence for Referential Updating in the Face of Structural Ambiguity in Mandarin Chinese Ellipsis
Ashley Glen Lewis [1], Hao Huang [1], Jackie Yan-Ki Lai [1], Jochen Zeller [2]
[1] Department of Linguistics and Translation, City University of Hong Kong, Hong Kong SAR, China; [2] School of Arts, Linguistics Discipline, University of KwaZulu-Natal, Durban, South Africa

[F2] The roles of visuospatial attention in reading: a meta-analytic fMRI approach
Yaqin Gao [1], Wei Zhou [1]
[1] Department of Psychology, Capital Normal University, Beijing, China

[F3] Reverse Wrap-up Effects in Natural Chinese Reading: Evidence from Eye Movements
Yushu Wu [1], Chunyu Kit [1]
[1] Department of Linguistics and Translation, City University of Hong Kong, Hong Kong, China

[F4] Functional subdivision of the left middle frontal gyrus in Chinese sentence reading
Fakun Chen [1], Wenqi Cai [2], Jianfeng Yang [2]
[1] Department of Psychology, Jiangxi Normal University, Nanchang, China; [2] Department of Psychology, Shaanxi Normal University, Xian, China

[F5] How does relationship closeness influence the online processing of Chinese sarcasm in social situation? An fNIRS study
Ling Zhang, Kexin Yang, Lijuan Liang*
Bilingual Cognition and Development Lab, Center for Linguistics and Applied Linguistics, Guangdong University of Foreign Studies, Guangzhou, China

[F6] How Narrative Perspective Modulates Reading Immersion: Converging Behavioral and fNIRS Findings
Letian Li [1], Meijia Wang [2], Siyun Liu [3*]
[1] School of Psychology, Central China Normal University, Wuhan, China; [2] [a]School of Psychology, Central China Normal University, Wuhan, China; [b]School of Marxism, Zhumadian Agricultural Engineering Vocational College, Zhumadian, China; [3] School of Psychology, Central China Normal University, Wuhan, China

[F7] Cognitive processes and influencing factors of garden-path jokes pointing to different individuals
Xinru Fan, Tingting Jin, Qian Wang, Weijun Li*
Institute of Psychological and Brain Sciences, Liaoning Normal University, Dalian, China

[F8] Processing Negative Polar Questions in Chinese? No Problem!
Jiaying Zou [1], Darcy Sperlich [2]
[1] Department of Chinese and Bilingual Studies, The Hong Kong Polytechnic University, HKSAR, China; [2] Department of Applied Linguistics, Xi'an Jiaotong – Liverpool University, Suzhou, China

[F9] The Interaction between Conceptual and Syntactic Structures in Syntactic Structure Selection during Chinese Speakers' Sentence Production: A Syntactic Priming Study
Xiao Ke [1], Silke Brandt [2], Katherine Messenger *[1]
[1] Department of Psychology, Lancaster University, Lancaster, UK; [2] Department of Linguistics and English Language, Lancaster University, Lancaster, UK

Flash 1-2

Dec 12, 2025
14:30 – 15:00
Room 2

[F10] Neural Predictors of Reading Skills: Comparing Verbal and Non-Verbal Stimuli Across Script Systems
Xiaoli Ma [1], Xinran Li [2], Xiaohua Cao [3], Werner Sommer [2,4,5]
[1] Ningbo University, Ningbo, Zhejiang, China; [2] Department of Psychology, Humboldt-Universität zu Berlin, Berlin, Germany; [3] Department of Psychology, Zhejiang Normal University, Jinhua, Zhejiang, China; [4] Department of Physics and Life Science Imaging Center, Hong Kong Baptist University, Hong Kong, China; [5] Faculty of Education, National University of Malaysia, Kuala Lumpur, Malaysia

[F11] Adaptive compensatory mechanism in the regulation of language switching performance under negative emotional states- An ERP study
Siyi Jiang [1], Xue Zhang [2], Baoguo Chen [2*]
[1] School of Foreign Studies, Shanghai University of Finance and Economics, Shanghai, China; [2] Faculty of Psychology, Beijing Normal University, Beijing, China

Flash 1-2 Dec 12, 2025 14:30 – 15:00 Room 2	**[F12] Division of Labor Between Phonology and Semantics in Reading and Its Relation to Chinese L2 Literacy Skills** Jiali Ban [1], Tian Hong [1]* [1] School of Humanities, Shanghai Jiao Tong University, Shanghai, China **[F13] Cross-Language Semantic Activation during Reading: Evidence from Chinese-English Bilingual Readers** Jinger Pan Department of Psychology, The Education University of Hong Kong **[F14] The Neural Structures Underlying Hierarchical Language Representations in Chinese-English Bilinguals during Language Production** Junjie Wu [1, 3], Xinping Pu [1], Chengyao Qian [1], Pingping Xin [1], Qiping Wang [2, 3], Xin Wang [3] [1] Key Research Base of Humanities and Social Sciences of the Ministry of Education, Academy of Psychology and Behavior, Tianjin Normal University, Tianjin, China; [2] School of International Chinese Language Education, Beijing Normal University, Beijing, China; [3] Department of Linguistics, Faculty of Medicine, Health and Human Sciences, Macquarie University, Sydney, NSW, Australia **[F15] Adapting under pressure: Cognitive load enhances proactive but not reactive language control in bilinguals** Hong Liu [1], Adel Chaouch-Orozco [2], Darcy Sperlich [1] [1] Department of Applied Linguistics, Xi'an Jiaotong-Liverpool University, Suzhou, China; [2] Department of Linguistics and Translation, City University of Hong Kong, Hong Kong, China **[F16] Language and Script Effects on Information Credibility in a Triliteral Context** Zhimin Hu [1], Eduardo Navarrete [1], Yao Yao [2] [1] Department of Developmental Psychology and Socialisation, University of Padua; [2] Department of Chinese and Bilingual Studies, The Hong Kong Polytechnic University **[F17] Effects of Phoneme Training on Neural Speech Perception for Preschool Children** Jinghan Liang [1], Xiuhong Tong [1] [1] Department of Psychology, Education University of Hong Kong, Hong Kong, China
Flash 2-1 Dec 13, 2025 14:30 – 15:00 Room 1	**[F18] Development of narrative comprehension abilities: Results from left-behind Mandarin-speaking monolinguals** Jingru Zeng, Wenchun Yang School of Foreign Studies, Xi'an Jiaotong University, Xi'an, China **[F19] The Influence of Semantic Knowledge on the Syntactic Acquisition of Mandarin-Speaking Deaf Children Aged 3 to 6** Tianqi Yue [1], Yan Wu [1] [1] School of Psychology, Northeast Normal University, Changchun, China **[F20] Polarity-specific brain network bases of formal thought disorder in schizophrenia: A meta-networking state-based prediction study** Zhe Hu [1], Jianshan Chen [2], Binke Yuan [1], Liping Cao [2] [1] Institute for Brain Research and Rehabilitation, South China Normal University, Guangzhou, Guangdong 510631, China; [2] Affiliated Brain Hospital of Guangzhou Medical University, Guangzhou, Guangdong 510370, China; Corresponding author: Binke Yuan, Liping Cao **[F21] Neural Mechanisms of Reading in Children with Comorbid ADHD and Dyslexia: An fNIRS Study with Rapid Automatized Naming Task** Wenjuan Liu [1], Yufeng Wang [2,3], Hua Shu [4], Yueqin Hu [1], Jiuju Wang [2,3] [1] Faculty of Psychology, Beijing Normal University, Beijing, China; [2] Peking University Sixth Hospital/Institute of Mental Health, Beijing, China; [3] NHC Key Laboratory of Mental Health (Peking University), National Clinical Research Center for Mental Disorders (Peking University Sixth Hospital), Beijing, China; [4] State Key Laboratory of Cognitive Neuroscience and Learning & IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China **[F22] Visual-articulatory Cues Benefit Mandarin Tonal Perception for Children with Cochlear Implants** Ping Tang [1], Shenpeng Li [1], Yanan Shen [1], Qianxi Yu [1], Yan Feng [1] [1] School of Foreign Studies, Nanjing University of Science and Technology, Jiangsu, China **[F23] Behavioral and Neural Impacts of Variability, Intensity, and Engagement in Speech and Auditory Category Learning** Nan Wang [1], Gangyi Feng [1,2]

Flash 2-1 Dec 13, 2025 14:30 – 15:00 Room 1	[1] Department of Linguistics and Modern Languages, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong SAR, China; [2] Brain and Mind Institute, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong SAR, China **[F24] Expressiveness of the Instructor's Voice Affects Learning Outcome, Engagement, and Dynamic Inter-Brain Coordination in Multimedia Poetry Learning** Menghan Yao [a, 1], Xinyue Wang [a, 1], Dan Lin [b], Fangzheng Zhao [a], Qingrong Chen [a, c, *] [a] School of Psychology, Nanjing Normal University, Nanjing, China; [b] Department of Psychology, The Education University of Hong Kong, Hong Kong, China; [c] Collaborative Innovation Center for Language Ability, Xuzhou, China; [1] Menghan Yao and Xinyue Wang contributed equally to this paper and should both be considered as first authors. **[F25] Embodied Semantics Meets Prior Knowledge: A Visual-World Approach to Concept Learning** Weiyi Li [1], Jiayu Wang [2], Xiaoqing Li [2], Gangyi Feng [1,3] [1] Department of Linguistics and Modern Languages, The Chinese University of Hong Kong, Hong Kong SAR, China; [2] Institute of Psychology, Chinese Academy of Sciences, Beijing, China; [3] Brain and Mind Institute, The Chinese University of Hong Kong, Hong Kong SAR, China **[F26] Core Concept Learning from Scientific Texts: Evidence from Fixation-Related fMRI** Yu Qi [1], Jing Yang [1] [1] School of International Studies, Zhejiang University, Hangzhou, China
Flash 2-2 Dec 13, 2025 14:30 – 15:00 Room 2	**[F27] Surprisal reduces when grammar enters: the linguistic and neural accounts** Rui He [1], Ni Yang [1], Wolfram Hinzen [1,2] [1] Department of Translation & Language Sciences, Universitat Pompeu Fabra; Barcelona, 08018, Spain; [2] Intitut Català de Recerca i Estudis Avançats (ICREA); Barcelona, 08010, Spain **[F28] The Neural Basis of Hierarchical Structure Building during Phrase Processing** Feizhen Cao [1,2], Ming Xiang [3], Shuguang Yang [1,2], Junyi Li [1,2], Ziyi Wang [1,2], Yujing Nie [1,2], Peng Peng [1,2], Suiping Wang [1,2*] [1] Philosophy and Social Science Laboratory of Reading and Development in Children and Adolescents (South China Normal University) Ministry of Education China; [2] Guangdong Key Laboratory of Mental Health and Cognitive Science, South China Normal University, 510631 Guangzhou, China; [3] Department of Linguistics, University of Chicago, Chicago, Illinois, USA **[F29] Synergistic Predictive and Reinforcement Mechanisms Drive Language Learning Success** Shuguang Yang [1], Suiping Wang [1], Gangyi Feng [2,3] [1] Philosophy and Social Science Laboratory of Reading and Development in Children and Adolescents, South China Normal University, Guangzhou 510631, China; [2] Department of Linguistics and Modern Languages, The Chinese University of Hong Kong; [3] Brain and Mind Institute, The Chinese University of Hong Kong **[F30] Adaptive semantic prediction in dynamic linguistic environments: Hierarchical Bayesian inference reveals computational neural mechanism** Meihua Zhao [1,2], Yifan Li [2], Xuemei Chen [1,2], Wenjia Zhang [3], Carol A. Seger [2,4], Qi Chen [5], Suiping Wang [1,2] [1] Philosophy and Social Science Laboratory of Reading and Development in Children and Adolescents (South China Normal University), Ministry of Education, 510631 Guangzhou, China; [2] School of Psychology, South China Normal University, Guangzhou, 510631, China; [3] Key Laboratory for Artificial Intelligence and Cognitive Neuroscience of Language, Xi'an International Studies University, Xi'an, 710128, China; [4] Department of Psychology and Program in Molecular, Cellular, and Integrative Neurosciences, Colorado State University, Fort Collins, CO 80523, United States; [5] School of Psychology, Shenzhen University, Shenzhen, 518060, China **[F31] Neural Mechanisms of Morphological Structure and Semantic Processing in Chinese Compound Words** Wenqi Cai [1], Yun Qi [1], Zhaoyuan Cai [1], Jiaxuan Huang [1], Jianfeng Yang [1] [1] School of Psychology, Shaanxi Normal University, Xi'an City, China, 710062 **[F32] The Impact of Semantic Network Structure on Scientific and Artistic Creativity: Similarities and Differences in Neural Mechanisms** Yangping Li [1]*, Renkaiwen Chen [1] [1] School of Foreign Studies, Xi'an Jiaotong University, Xi'an, China **[F33] Investigating Internal Monitoring Mechanisms in Chinese Word Production** Ziyi Wang [1], Chen Zhao [1] [1] Center for Linguistics and Applied Linguistics, Guangdong University of Foreign Studies, Guangzhou, China **[F34] The Applicability of the Children's Communication Checklist for Mandarin - speaking School - aged Children: An Empirical Analysis** Jin Xue Beijing Institute of Technology, School of Foreign Languages, Beijing, China

Poster Sessions

Poster sessions are one and a half hours, and presenting authors are expected to be present the entire time. You may post your materials on the board assigned to you.

Date & Time	Posters	Topics
Poster Session A Dec 12, 2025 13:00–14:30	A1-A4	Character and word processing
	A5-A8	Sentence and discourse processing
	A9-A12	Concept / knowledge representation and storage
	A13-A16	Speech perception, prosody and auditory processing, Language production
	A17-A21	Language acquisition, development, and learning
	A22-A29	Bilingualism
	A30-A35	Language-related cognitive and emotional processing
	A36-A46	Developmental and acquired language disorders
Poster Session B Dec 13, 2025 13:00–14:30	B1-B4	Character and word processing
	B5-B10	Sentence and discourse processing
	B11-B13	Concept / knowledge representation and storage
	B14-B17	Speech perception, prosody and auditory processing
	B18-B22	Language acquisition, development, and learning
	B23-B31	Bilingualism
	B32-B36	Language-related cognitive and emotional processing
	B37-B46	Developmental and acquired language disorders

[A1] Multi-source vocabulary feature imputation

Yimin Cai [1], Haoyun Zhang [1,2]

[1] Centre for Cognitive and Brain Sciences; [2] Department of Psychology, University of Macau, Taipa, Macau SAR, China

[A2] The Effect of Arousal Information on Chinese Word Segmentation

Chenxi Li [1, 2], Linjieqiong Huang [1] and Xingshan Li [1, 2]

[1] Institute of Psychology, Chinese Academy of Sciences, Beijing, China; [2] Department of Psychology, University of Chinese Academy of Sciences, Beijing, China

[A3] Phonological acquisition of novel stimuli selectively activates the cerebellum

Jiahao Wu, Mingyang Li, Xiangqi Luo, Jiahong Zeng, Zaizhu Han*

State Key Laboratory of Cognitive Neuroscience and Learning & IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing 100875, China

Email addresses: *Correspondence: Zaizhu Han (zzhhan@bnu.edu.cn)

[A4] Morpheme Category Effects Revisited: How Combinatorial Probability and Affix-like Morphemes Shape the Processing of Compound Noun in Mandarin

Quansheng Xia *, Xuan Kang

Nankai University

[A5] Eye Movements during Reading of Horizontal and Vertical Traditional Chinese Text

Ming Yan [1, 2] & Dixiao Tan [1]

[1] Department of Psychology, University of Macau, Macau SAR, China; [2] Center for Cognitive and Brain Sciences, University of Macau, Macau SAR, China

[A6] Common and Distinct ERP Responses to Violations of Two Different Types of Politeness Maxims during Sentence Comprehension

Meng Han, Yaxu Zhang

School of Psychological and Cognitive Sciences, Peking University, Beijing 100871, China

[A7] Effects of Social and Referential Factors on Referential Overspecification in Interpersonal Interaction

Sibei Ye, Lu Xiaoxiao, Siyun Liu*

School of Psychology, Central China Normal University, Wuhan, China

[A8] Pre-activation of Hierarchical Information: Evidence from EEG-RSA

Weiqiong Jin [1,2], and Suiping Wang [2]*

[1] School of Psychology, South China Normal University, Guangzhou, China; [2] Philosophy and Social Science Laboratory of Reading and Development in Children and Adolescents (South China Normal University), Ministry of Education, China

[A9] Investigation of Semantic Representation of Emotion-laden Words Using Lexico-Semantic Priming Methods

Dayoung Hong, Donghoon Lee

Department of Psychology, Pusan National University, The Republic of Korea

[A10] Differences in Multi-text Information Integration Performance Across Input Modalities

Runze Chi , Yutong Wu , Yili Xie , Xuqian Chen*

[1] Philosophy and Social Science Laboratory of Reading and Development in Children and Adolescents, Ministry of Education, South China Normal University, Guangzhou, China; [2] Center for Studies of Psychological Application, Guangdong Key Laboratory of Mental Health and Cognitive Science, School of Psychology, South China Normal University, Guangzhou, China

[A11] From Recent to Remote: Temporal Dynamics of New-Meaning Learning for Familiar Words

Jinqi Wang [1], Yufan Zhang [1], Youyi Liu [2], Qiuhai Yue [3], Xiaoping Fang [1]

[1] School of Psychological and Cognitive Science, Beijing Language and Culture University, Beijing, China; [2] State Key Laboratory of Cognitive Neuroscience and Learning & IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, China; [3] School of Psychology, Shenzhen University, Shenzhen, China

[A12] Default Mode Network Distinguishes Person Perspectives in Counterfactual Meaning

Cheng Jia; Xiaodong Xu

School of Foreign Languages and Cultures, Nanjing Normal University, Nanjing, China.

[A13] Praditor: A DBSCAN-Based Automation for Speech Onset Detection

Zhengyuan Liu [1], Xinqi Yu [3,4], Yunxiao Ma [3], Ruiming Wang [3], Haoyun Zhang [1,2]*

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[A14] Adaptive Phonetic Cue-weighting in Non-native Perception: An Eye-tracking Study

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[1] College of Foreign Languages and Literature, Fudan University, Shanghai, China; [2] Department of Linguistics, University of Kansas, Kansas, USA; [3] Institute of Modern Languages and Linguistics, Fudan University, Shanghai, China

[A15] Predicting Speaker Information and Phonological Representations in Spoken Language Comprehension

Xing Zhou [1], Keke Yu [1], Shuqi Yin [1], Qingqing Qu [2] & Ruiming Wang [1]

[1] Philosophy and Social Science Laboratory of Reading and Development in Children and Adolescents, Ministry of Education, & Center for Studies of Psychological Application, School of Psychology, South China Normal University, Guangzhou 510631, China; [2] State Key Laboratory of Cognitive Science and Mental Health, Institute of Psychology, Chinese Academy of Sciences, Beijing 100101, China

[A16] Testing Adaptive Mechanisms in Blocked-Cyclic and Continuous Naming in Cantonese Language

J. Maria Koschnitzke [1], Andus Wing-Kuen Wong [1]

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[A17] Gene-Environment and Environment-Environment Interactions on Children's Reading Ability: The Mediating Role of Vocabulary Knowledge

Yingying Li [1, 2], Jingjing Zhao [1], Youyi Liu [2]

[1] Department of Psychology, Chinese University of Hong Kong, Hong Kong, China; [2] State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

[A18] Neural Representations of Social and Temporal concepts in Children and Adolescents: A Multidimensional Semantic Framework

ZhaoLu Zou, JiaXuan Liu, JingWen Chen, BinKe Yuan*

Department of Brain Research and Rehabilitation, South China Normal University, Guangzhou, China

[A19] Intergenerational Transmission Effects on Children's Reading Abilities: Differential Influences from Mothers and Fathers

Ning Ding [1], Sen Li [2], Yuxiao He [3], Franck Ramus [4], Jingjing Zhao [5]*

[1] School of Psychology, Shaanxi Normal University, Xi'an, China; [2] Department of Special Education, College of Education, The University of Texas at Austin, USA

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[A20] Comparing the Neural Basis of Meaningful and Rote Learning: Evidence from Chinese Character Learning

Liuyi Guo [1,2], Chuyao Cai [1,2], Luyao Chen [3], Jinshan Wu [4,6]*, Junjie Wu [1,2,5,6]*

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[A21] Can Doubao Agents do better than English teachers：from a perspective of phonetic convergence

Lan Fang, Yao Liang

Department of Linguistics, Guangzhou University, Guangzhou, China

[A22] Influence of Sino-Cognates on Semantic Processing of Korean and Chinese words of Equivalent Korean-Chinese bilinguals and Chinese learners of Korean as a foreign language

Xueying Bi [1], Zhezhu Jin [2], Donghoon Lee [1]

[1] Department of Psychology, Pusan National University, Pusan, The Republic of Korea; [2] Department of Psychology, Yanbian University, Yanbian, China

[A23] Bilingual Influences and Sources of Variability in Acceptability Judgments: A Case Study of Chinese

Hai Hu [1], Aini Li [2], Yina Patterson [3], Jiahui Huang [4], Chien-Jer Charles Lin [5]

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East Asian Languages and Cultures, Indiana University Bloomington, USA

[A24] How Prosodic Prominence and Gestures are Coordinated in Chinese College Students' Academic English Speeches

Yating Cao

School of Foreign languages, Central South University, Changsha, China

[A25] Emotion effects in metaphor processing: Evidence from Chinese-English bilinguals

Guorong Yuan [1], Yi Sun [2]

[1] Foreign languages college, Jiangxi Normal University, Nanchang, China; [2] Center for linguistics and applied linguistics, Guangdong University of Foreign Studies, Guangzhou, China

[A26] The Processing of Emotion Words in the First and Second Language of Chinese–English Bilinguals and Its Cognitive Mechanisms

Jue Wang *, Keting Wang, Xin Jiang

School of Psychology and Cognitive Science, Beijing Language and Culture University, Beijing, China

[A27] Generative AI-Driven Exploration of the Orthographic Niche: A Neurocognitive Study of Chinese Character Acquisition in Donggan Multilinguals

Yurou Chang

College of International Cultural Exchanges, Northwest Normal University, Gansu, China

[A28] Integrating Eye-Tracking and Machine Learning: A Cognitively Grounded Framework for L2 Chinese Vocabulary Grading

Keren Zheng [1,2], Shiyi Lu [1,2], Lihong Li [1,2]

[1] School of Liberal Arts, Guangxi University, Nanning, China; [2] Language Cognition Laboratory, Guangxi University, Nanning, China

[A29] Multi-Level Integration for Reading Proficiency Prediction: Bayesian Models Combining Eye-Tracking and Linguistic Features for L2 Chinese Learners

Jiaxi Han [1,2], Shiyi Lu [1,2]

[1] School of Liberal Arts, Guangxi University, Nanning, China; [2] Language Cognition Laboratory, Guangxi University, Nanning, China

[A30] The relationship between reading ability and sub-word processing in Japanese kanji among Japanese primary school children

Jade Christopher [1], Ami Sambai [2]

[1] Graduate School of Comprehensive Human Sciences, University of Tsukuba, Tsukuba, Japan; [2] Institute of Human Sciences, University of Tsukuba, Tsukuba, Japan

[A31] Cross-Cultural Differences in the Influence of Background Colors on the Judgment of Emotional Valence of Facial Expressions

ENHUI LI, Donghoon Lee

Department of Psychology, Pusan National University, Busan, The Republic of Korea

[A32] Development and Validation of a Simplified Chinese Version of the Motivation for Reading Questionnaire (CMRQ-S) for Primary School Students

Hui Wang [1], Ning Ding [1], Xiaoyi Pan [1], Jingjing Zhao [1]

[1] Department of Psychology, Chinese University of Hong Kong, Hong Kong, China

[A33] Can Implicit Reward Modulate Language Switching Behavior?

Congyi Peng [1], Robert J. Hartsuiker [2], Nazbanou Nozari [3]

[1] Department of Linguistics and Translation, City University of Hong Kong, Hong Kong; [2] Department of Experimental Psychology, Ghent University, Ghent; [3] Department of Psychological and Brain Sciences, Indiana University, Bloomington

[A34] Neural Mechanisms of Within- and Cross-language Control in Bilingual Sentence Comprehension: An fMRI Study

Fengge Gao [1,2], Le Li [1,2]

[1] Key Laboratory of Language and Cognitive Science (Ministry of Education); [2] Cognitive Science and Allied Health School, Beijing Language and Culture University, Beijing, China

[A35] Regionally distributed storage of visually presented lexical information in working memory

Yunsong Li [1], Ming Xiang [2], Suiping Wang [1]

[1] Philosophy and Social Science Laboratory of Reading and Development in Children and Adolescents (South China Normal University), Ministry of Education, China;

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[A36] Altered Functional Connectivity in Children with Dyslexia during Reading: An fMRI Study

Zian Huang [1], Daniel C. Gallagher [2], Shinri Ohta [2]

[1] Department of Linguistics, Graduate School of Humanities, Kyushu University, Fukuoka, Japan; [2] Department of Linguistics, Faculty of Humanities, Kyushu University, Fukuoka, Japan

[A37] Development of a simplified version of character corpus for Chinese dyslexia diagnosis using item response theory

Xiangming Wang [1], Ning Ding [2], Zebo Xu [3], Zhenguang Cai [3], Jingjing Zhao [1],*

[1] Department of Psychology, The Chinese University of Hong Kong, Hong Kong, China; [2] School of Psychology, Shaanxi Normal University, Xi'an, China; [3] Department of Linguistics and Modern Languages, The Chinese University of Hong Kong, Hong Kong, China

[A38] The influence of oral vocabulary comprehension on early Chinese reading development in elementary school children

Li-Ying Fan [1], Wun-Lin Chang [2], Shiou-Yuan Chen [3], Hsin-Chin Chen [4], Tai-Li Chou [5]

[1] Department of Education, National Taipei University of Education, Taipei, Taiwan; [2] Taipei Municipal Nanmen Elementary School, Taipei, Taiwan; [3] Department of Early Childhood Education, University of Taipei, Taipei, Taiwan; [4] Department of Psychology, National Chung Cheng University, Chiayi, Taiwan; [5] Department of Psychology, National Taiwan University, Taipei, Taiwan

[A39] Impairments in semantics, memory, and emotion observed in patients with semantic dementia are associated with atrophy in the left temporal pole

Runxiang Yao [1], Junjing Li [1], Zhe Hu [1], Lin Huang [2], Qihao Guo [2], Binke Yuan [1]

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[A40] Beyond Words: Face-Selective Resting Networks Identify Childhood Dyslexia

Yuche Li [1], Xiaoxia Feng [1], Guosheng Ding [1]

[1] State Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University, Beijing, China

[A41] Intervention of the "Hidden Picture" Task Targeting Noise Exclusion Improves Reading Skills in Chinese Children with Dyslexia

Mengke Yang [1], Jiaxin Zhao [1], Yuzhu Ji [1]*

[1] College of Education, Zhejiang University of Technology, Hangzhou, 310023

[A42] The Feature Underspecification in Relative clauses: a comparative study on Mandarin-speaking Children with Developmental Language Disorder and Children with Autism Plus Language Impairment

Jiao DU [1], Lishan HUANG [2], Haopeng YU [2]

[1] School of Foreign Studies, South China Agricultural University, Guangzhou, China; [2] Faculty of English Language and Culture, Guangdong University of Foreign Studies, Guangzhou, China;

[A43] Cognitive Mediation of Autonomic Effects on Language Function in Post-Stroke Aphasia

Meng Huan Wang [1], Yun Jie Gui [2], Dan Dan Liang [1]

[1] School of Chinese Language and Culture, Nanjing Normal University, Nanjing, Jiangsu, China; [2] The Affiliated Mental Health Center of Jiangnan University, Wuxi Central Rehabilitation Hospital, Wuxi, Jiangsu, China

[A44] Production of Mandarin Tone Sandhi in Prelingually Deaf Children with Cochlear Implants: An Acoustic and Behavioral Analysis

Ziyi Huang [1,2], Jiawei Huang [3], Qun Li [2]

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[45] The Mediating Role of Working Memory in the Development of Perception and Reading Ability: Chain Effects and Intervention Studies

Liying Hao [1], Wenjuan Liu [2], Yufeng Wang [3,4], Junqing Zhu [5], Liyun liu [6], Changming Wang [1], Jiuju Wang [3,4]

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[A46] The Performance of Adults with Dyslexia in Verbal Reasoning

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[B1] Neural Dynamics Underlying Statistical Learning of Orthographic-Semantic Relationships in the Presence of Long-Term Knowledge

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[B2] The Role of Imagability on the Recognition and Processing of Chinese Personality Words

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[B3] The Ageing Effect of Orthographic, Phonetic and Semantic in Chinese Word Processing

Wenguang He, Tianyu Zhang

Department of Psychology, Qufu Normal University, Qufu, China

[B4] The Effect of Rotational Angle on the Recognition of Chinese Single-Character Words: Evidence from Behavioral Measures and Event-Related Potentials

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[B5] The Role of Talker and Participant Gender in Mandarin Sentence Processing: Effects of Modality and Experimental Design

Yun Feng [1], Yao Yao [1], Ming Xiang [2]

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[B6] The Perceptual Span and Oculomotor Activity during the Reading of Japanese Sentences

Ming Yan [1], Yuqi Hao [1]

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[B7] The effect of information structure enhancing displays on improving Chinese reading efficiency

Nankai Wu [1], Kun Jia [2]

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[B8] Neural Mechanisms of Humor Processing in Homograph Puns and Homophonic Puns

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[B9] ERP Study on English Subject-Verb Agreement Processing in Chinese-Speaking Children

Guoyu Wen

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[B10] The cognitive and neural mechanisms of hierarchical linguistic prediction during the appreciation of classical Chinese poetry

Zhou Wu [1], Tingxin Wei [2], Yixiao Zhou [1], Qingrong Chen [1]

[1] School of Psychology, Nanjing Normal University, Nanjing, China; [2] International College for Chinese Studies, Nanjing Normal University, Nanjing, China

[B11] The alignment of human-rating semantic and word embedding: a machine learning prediction study based on multidimensional semantic representation theory

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[B12] Association Between Semanticization and Contextual Memory Loss During Concept Learning

Jiameng Li, Jing Wang

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[B13] The Specificity of Verbal Violence Words in Emotional Lexicon Processing

Yunhan Wang [1], Shujing Huang [1], Ruiming Wang [1]

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[B14] Neural Mechanisms Underlying Native Listeners' Comprehension of Non-Native Speech: A Preliminary EEG Study Using Naturalistic Stimuli

Yaxin Cui [1], Saku Yamamoto [2], Emi Yamada [3], Shinri Ohta [3]

[1] Department of Linguistics, Graduate School of Humanities, Kyushu University, Fukuoka, Japan; [2] Department of Linguistics, School of Letters, Kyushu University, Fukuoka, Japan; [3] Department of Linguistics, Faculty of Humanities, Kyushu University, Fukuoka, Japan

[B15] Naturalistic Stimulus Annotation Toolbox

Jianlong Wen, Junjie Yang, Jingwen Chen, Binke Yuan*(yuanbinke@m.scnu.edu.cn)

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[B16] Cue-weighting Strategy in Mandarin-speaking Preschoolers' Emotional Perception

Ruowei Wu [1], Zheyu Song [1], Yi Li [1], Ping Tang [1]

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[B17] What Can Voices Convey: Vocal Social Traits Perception in Mandarin

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[B18] The Role of Ruby among Second-Language Learners of Japanese: Evidence from Eye Movements

Yuqi Hao [1], Yingyi Luo [2], Lychee Muroga [3], Ming Yan [1]

[1] Department of Psychology, University of Macau, Macau, China; [2] Institute of Linguistics, Chinese Academy of Social Sciences, Beijing, China; [3] School of International Liberal Studies, Waseda University, Tokyo, Japan

[B19] Mediating Effects of Phonological and Morphological Skills underlying Genetic and Environmental Influences on Chinese Children's Reading ability

Yizhen Guo [1], Ning Ding [2], Jingjing Zhao [1]

[1] Department of Psychology, Chinese University of Hong Kong, Hong Kong, China; [2] School of Psychology, Shaanxi Normal University, Xi'an, China

[B20] The roles of maturation and experience in linguistic integration during Chinese reading comprehension

Danni He [1], Qing Cai [1]*

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[B21] The phonological mechanism of attentional control on character and word reading ability in Chinese elementary children

Shuo Lei [1, 2], Yajie Hu [3], Jianyi Liu [4], Xue'er Ma [2], Jingjing Zhao [3]

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[B22] The Neural Correlates of Auditory and Visual Statistical Learning and the Underlying Modality Specificity

Bao Bo [1], You Li [1], Guiping Xu [1]

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[B23] The Role of Phonological Processing in Sentence Acceptability Judgements: Behavioral Evidence from Native Japanese Speakers

Jananeh Shalpoush [1], Daniel C. Gallagher [2], Emi Yamada [2], Shinri Ohta [2]

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[B24] Stimulus-specific effects in bilingual language switching: Evidence from digit and picture naming

Adel Chaouch-Orozco [1], Hong Liu [2]

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[B25] Picture naming in Cantonese–Mandarin–English trilingual speakers

Jie Wang [1], Leqi Cheng [1], Ziyi Wang [1], Pingxin Ao [1], Ya-Ning Chang [2], Yen Na Yum [1], Suiping Wang [3] and Hsuan-Chih Chen [4]

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[B26] Figurative or Literal? Effects of Context and Working Memory on Idiom Processing in Chinese EFL Learners

Ziman Liu [1], Shifa Chen [2]

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[B27] Less Conflict with More Similarity: Evidence from Bidialectal Speakers

Qianming Liu [1] Xuefang Li [1] Lici Pan [1] Yuxin Yang [1] Xin Wang [2] Qiping Wang [3] Junjie Wu [1,2]

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[B28] Differences in Predictive Processing between Native and Second Language Comprehension

Xinuo Jiang [1], Le Li [1,2]

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[B29] Cognitive Mechanism of Chinese "Pseudo-Semantic Violation" Verb-Object Collocations in L2 Learners

Muhan Liang [1], Jianqin Wang [2]

[1] School of Literature Arts, Guangxi University, Guangxi, China; [2] Beijing Language and Culture University, Beijing, China

[B30] Beyond Genealogy: Regional Typology and Contact Effects in CSL Reading Processing

Yan Li [1,2], Cheng Yang [3], Rui Sun [1,2], Shiyi Lu [1,2]

[1] School of Liberal Arts, Guangxi University, Nanning, China; [2] Language Cognition Laboratory, Guangxi University, Nanning, China; [3] School of Electrical Engineering, Guangxi University, Nanning, China

[B31] Cognitive Adaptation in Predictive Processing: How L1-L2 Typological Distance Modulates LLM-Based Surprisal Optimization During Second Language Reading

Zhizhuo He [1,2], Shiyi Lu [1,2]

[1] School of Liberal Arts, Guangxi University, Nanning, China; [2] Language Cognition Laboratory, Guangxi University, Nanning, China

[B32] Can Emotion-laden words activate a specific emotion concept? Investigation of priming effects of Emotion-laden words on Emotion-label words.

Soyoung Kwon, Donghoon Lee

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[B33] Smartphone Effects on Mind Wandering and Reading Comprehension

Xiangfei Li [1], Dandan Wu [2], Kin Chung Yeung [3], Yen Na Yum [1]

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[B34] Cross-Linguistic Social Perception of Creaky Voice by Mandarin-English Bilinguals

Meixian Li [1], Yao Yao [1], Charles B. Chang [2]

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[B35] The involvement of domain-general resources is systematically differentiated between phonemic and semantic verbal fluency tasks

Feipeng Chen [1], Shikai Meng [1] and Zude Zhu [1, 2, 3]*

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[B36] Neural processing differences between Chinese emotion-label and emotion-laden words revealed by visual event-related potentials

Kai Zhang [1]

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[B37] A multimodal Mandarin-Cantonese dataset for language impairment with its neural and biological correlates in Alzheimer's Disease

Rui He [1], Yonghua Huang [1], Hong Jiang [2], Simon Wing-Fai Mok [3,4], Yu Tu [5], Libin Liu [5], Wolfram Hinzen [1,6]

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[B38] Old readers in Chinese: An eye-tracking study

Yiu-Kei TSANG

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[B39] Phonological Deficits in Cantonese Adult Dyslexia

Yajie Hu [1], Pui Sin Keung [1], Ning Ding [2], Jingjing Zhao [1]

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[B40] Macrostructures and microstructures in storytelling of Mandarin-speaking children with(out) autism spectrum disorder

Ruijie Zhao, Wenchun Yang

School of Foreign Studies, Xi'an Jiaotong University, Xi'an, China, 710049.

[B41] The structure of meaning in schizophrenia: a study of spontaneous speech in Chinese

Han Zhang [a]*, Rui He [b], Claudio Palominos [b], Ning Hsu [c], Hintat Cheung [d], Wolfram Hinzen [b,e]

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[B42] Domain-General Visual Statistical Learning Impairments in Developmental Dyslexia and the Compensatory Role of Auditory Cues

Wenchun Li [1], Yuzhu Ji [1]*

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[B43] Tracking Conceptual Refinement in Development: The Role of Embodied and Linguistic Systems

Luan Li [1,2], Jun Zhang [3]

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[B44] Nonlinear Developmental Trajectories in the Language-Related Networks

Wenjing Yu [1], Xiaohong Yang [1,2]

[1] Department of Psychology, Renmin University of China, Beijing, China; [2] Jiangsu Collaborative Innovation Center for Language Ability, Jiangsu Normal University, Xuzhou, China

[B45] Does a Caused-Motion Construction Facilitate a Resultative? Evidence from a Structural Priming Study within the Mandarin ba-Construction

Zheng Cheng [1], Yu Deng [1]

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[B46] Differential Cross-Modal Functional Plasticity in Deaf Individuals: A Meta-Analysis of Neuroimaging Studies

Xiaoyi Zuo [1,2], Gantang Li [1,2], Zhengye Wang [1,2], Peng Peng [1,2], Chenjie Dong [1,2]*, Suiping Wang[1,2]*

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KeyNotes

Prof. Kate Watkins
Department of Experimental Psychology, University of Oxford

Stimulating speech: auditory-motor interactions during production and perception

This talk will present a series of studies investigating the role of the speech motor cortex in perception and production. I will begin by outlining our detailed mapping of articulatory representations using quantitative brain imaging and then demonstrate how non-invasive brain stimulation can be used to selectively perturb these regions. By measuring the effects of such perturbations, we provide converging evidence that motor representations of specific articulators contribute directly to speech sound discrimination. I will further show how motor and auditory systems interact to support speech perception—even for unattended sounds—and how these interactions are lateralized according to the linguistic function of the auditory signal, reflecting top-down processing. Together, these findings highlight the value of combining transcranial magnetic stimulation (TMS) with complementary neuroimaging and behavioural methods to probe auditory–motor integration during speech perception and production.

Biography

Professor of the Department of Experimental Psychology, University of Oxford. Prof. Watkins's research interests are in the area of cognitive neuroscience. Specifically, she interested in the brain processes underlying speech and language and brain development. This is studied by working with populations of children and adults with developmental disorders of speech and language (e.g. stuttering, developmental language disorder, and DLD). In her research, she uses a number of different methods in the laboratory including neuropsychological testing, brain imaging and brain stimulation.

Prof. Robert J. Hartsuiker
Department of Experimental psychology, Ghent University

The developmental account of shared syntax in bilinguals: where are we now?

Learning a second language (L2) is challenging. One reason is that some sentence structures differ between languages, but others are similar, so their representations could potentially be shared across languages. A decade ago, Sarah Bernolet and I proposed a "developmental account" of shared syntax, which assumes that L2 learners start out with language- and verb-specific representations of L2 structures, but that in the course of language learning their representations become more and become abstract. The endpoint of this trajectory would be a system, in which similar structures are fully shared and different structures are kept separately. In my keynote I will first present this account and the empirical data that motivated it. I will then discuss two series of studies using structural priming that tested the accounts' predictions. In the first set of studies, we taught participants artificial languages to study development of syntactic representations under controlled lab conditions. The second set of studies tested language learners, including immigrants with no prior knowledge of the community language, in ecologically valid (classroom) settings. Both strands of research offer partial support for the model. I will discuss the current strengths and weaknesses of the model and possible routes towards revising and extending it.

Biography

Professor of the Department of Experimental Psychology, Ghent University. Prof. Hartsuiker's lab focuses on language production, bilingualism, and the self-monitoring of speech. His research interests also include the cognitive aspects of the use of English as a medium of instruction in higher education. To address the research questions in these domains, his lab employs a wide range of methodologies including behavioral experiments, eye-tracking, EEG, fMRI, the study of language processing in individuals with brain damage, and computational models.

Prof. Ping Li
The Hong Kong Polytechnic University

Leveraging AI and Emerging Technologies for the Study of Neurocognition of Chinese and Other Languages

In an era of rapid developments in generative AI (genAI) and digital technology, many fields are facing significant challenges. In psycholinguistics and the neuroscience of language studies, we must combine the latest techniques and emerging technologies to examine the computational and neurocognitive mechanisms underlying language learning and processing. For example, we can use neurocomputational methods to study individual differences in language processing; we can build VR/xR platforms that simulate the acquisition process and motivate learning in a real world-like natural but controlled environment; and we can study how human learners, compared with AI models, more efficiently integrate multimodal information in social contexts, and how such social interactive processes enable some to learn more effectively than others. To achieve these goals, we need to collect and use high-quality domain-specific data (unlike what genAI models do), linguistic and non-linguistic processing data, and real-time multi-sensory learning data. We can also leverage genAI to develop evidence-based, personalized, pedagogical designs for foreign language learning and representation. Theoretical and educational implications of our findings on language, reading, and the brain will be discussed in light of current technological and scientific developments.

Biography

Ping Li (李平) is Sin Wai Kin Foundation Professor in Humanities and Technology, Chair Professor of Neurolinguistics and Bilingual Studies, and Dean of the Faculty of Humanities at the Hong Kong Polytechnic University. He was previously Professor of Psychology, Linguistics, and Information Sciences at the Pennsylvania State University, and served as Program Director of Cognitive Neuroscience and Perception, Action, and Cognition programs at the U.S. National Science Foundation. Li's research is focused on investigating the neurocognitive and computational bases of language acquisition, bilingualism, and reading comprehension. He uses cognitive neuroscience approaches and emerging technologies to study the neuroplasticity and individual differences in both children and adults for learning and representing Chinese and other languages, aiming at understanding the relationships among language, culture, technology, and the brain. Li is currently Editor-in-Chief of Brain and Language and Senior Editor of Cognitive Science. He was President of the Society for Computation in Psychology, and is a Fellow of the American Association for the Advancement of Science, the Psychonomic Society, and the Cognitive Science Society.

Prof. Asli Özyürek
Planck Institute for Psycholinguistics

A multimodal approach to neural and cognitive processing of language: Insights from humans and machines

Many theoretical and processing of models of language in cognition and brain have focused on speech and text. However a mostly ignored but universal aspect of language is that all languages of the world embody “visible” components; spoken languages are accompanied by manual and facial gestures and language can be expressed by signed languages as well as spoken languages. I will argue that taking into account such universally shared visible components questions some of our assumptions about language structure, its use in context and interaction, and (neural) processing, To do so I will present evidence from interdisciplinary multimodal research (e.g., from language production, eye tracking, imaging, computational) conducted in diverse spoken and signed languages and with individuals who lack accessibility to different sensory experiences (e.g, deaf, blind). I will also show such a multimodal approach to language is also needed to enhance machines capacity to use generative language in more human like ways and in an adaptive and flexible manner.

Biography

Asli Özyürek, received a joint PhD in Linguistics and Psychology from the University of Chicago. She is currently the Director of Multimodal Language Department at the Max Planck Institute for Psycholinguistics and is a Professor at Radboud University. She is also a PI at Donders Institute for Brain Cognition and Behavior and an elected member of Academia Europea and Fellow of the Cognitive Science Society. She has received many prestigious grants from NSF, NIH, Dutch Science Foundation, ERC, EU Horizon programmes and Turkish Science Foundation. Özyürek investigates the inherently and universal multimodal nature of human language capacity as one of its adaptive design features. To do so she studies how brain supports multimodal language, how typologically different spoken and signed languages pattern their structures given their multimodal diversity, and how the learning constraints and communicative pressures of interaction shape multimodal language, its acquisition and evolution as an adaptive system. She uses a variety of methodologies such as behavioral and kinematic analyses of multimodal linguistic structures, eye tracking, machine learning and brain imaging to understand the complex multimodal nature of human language capacity and how it can be extended to machines.

Prof. Jesse Snedeker
Harvard University

Studying the development of predictive language comprehension using a naturalistic EEG paradigm.

Comprehension in adults is incremental, interactive and predictive. Not only do we interpret speech and text in light of top-down constraints, we also make predictions about upcoming lexical items before a word begins. For about 25 years, my lab has been exploring spoken language comprehension in 4- to 6-year-old children, who have considerable language experience but limited literacy. In our early work, we found that children's syntactic processing was both incremental and interactive, but curiously impervious to top-down information. Recent work in my lab uses EEG to study lexical processing using a naturalistic listening task (the Storytime Paradigm). Our findings demonstrate that young children use top-down constraints to make form-based lexical predictions. Predictive skill improves with age and with linguistic knowledge (as measured by vocabulary). This raises several questions. Why do syntactic and lexical processes show such different trajectories? How does prediction shape language learning and early literacy? When does lexical prediction first emerge?

Biography

Professor of the Department of Psychology, Harvard University. Prof. Snedeker's laboratory explores language development, comprehension, production, and representation in populations including typically developing children, adults, and a variety of special populations. Her laboratory employs a variety of methodologies, including eye-tracking, corpus analysis, and training studies. They use these methodologies to explore the process learning words and grammars, and probe the linguistic intuitions of naïve speakers.

Invited Talks

Xingshan Li
Institute of Psychology, Chinese Academy of Sciences

The Chinese Reading Model (CRM): Recent Advances and Future Directions

As a logographic writing system, Chinese differs in many ways from alphabetic systems such as English. A particularly important distinction is the absence of interword spaces, which raises fundamental questions about how Chinese readers segment words and select saccade targets. To address these questions, we developed a computational model of word processing and eye-movement control during Chinese reading—the Chinese Reading Model (CRM; Li & Pollatsek, 2020). In this talk, I will illustrate how CRM has been used both to revisit longstanding issues and to inspire new research on the mechanisms of Chinese reading. In one line of work, CRM has been applied to classic problems such as compound word processing, providing fresh perspectives on traditional questions. In another, CRM has motivated studies that extend the model. For instance, using rapid invisible frequency tagging (RIFT), we investigated whether covert attention supports word segmentation. The findings suggest that attentional dynamics are tightly coupled with segmentation processes and play a crucial role in resolving word boundaries. I will conclude by discussing how CRM can continue to motivate future studies and advance our understanding of Chinese reading.

Biography

Xingshan Li is a Professor of Psychology at the Institute of Psychology, Chinese Academy of Sciences. He earned his Ph.D. degree in Psychology from the University of Massachusetts Amherst (2007). His research focuses on Chinese reading and language processing. In recent years, he has delved into understanding how Chinese readers deal with the unique features of Chinese text during reading, employing techniques such as eye tracking and computational modeling. Notably, he has proposed innovative perspectives on word segmentation and saccade target selection by Chinese readers, even in the absence of inter-word spaces. His work culminated in the development of a computational model that simulates eye-movement control and word processing during Chinese reading.

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Yiu-Kei TSANG
Department of Education and Psychology
Academy of Wellness and Human Development
Hong Kong Baptist University

Research collaboration in the Greater Bay Area: A psycholinguistic comparison of simplified and traditional Chinese

This talk introduces the Greater Bay Platform for Experimental Research in Language/Linguistics (GB PERL), a new initiative designed to foster collaboration and intellectual exchange among language researchers in the Greater Bay Area and beyond. To illustrate the power of this collaborative model, I will present findings from two studies comparing the cognitive processing of simplified and traditional Chinese scripts. The first study, a lexical decision task involving over 800 native readers and 12,000 words per script, reveals an interesting processing difference in the two scripts. While simplified Chinese readers demonstrated higher accuracy, they were slower than traditional Chinese readers. Crucially, simplified script readers were more sensitive to word-level properties (e.g., word frequency, length), whereas traditional script readers were more attuned to character-level properties (e.g., a character's productivity and number of meanings). The second study examined the effect of explicit word boundary cues on Chinese reading. These cues robustly facilitated reading in simplified Chinese, but the benefit was restricted to low-proficiency readers of traditional Chinese. Together, these findings highlight subtle yet important differences in processing the two scripts, which underscores the need for more systematic comparative research. Collaborative platforms like GB PERL can help tackle these fundamental questions.

Biography

Prof. Yiu-Kei Tsang
Associate Professor of the Department of Education and Psychology, Hong Kong Baptist University. He received training in experimental psychology, with a focus on Chinese language processing. His research topic included word recognition, lexical tone and sentence reading. He used different methods, including traditional behavioral experiments, megastudies, eye-tracking, and event-related potential (ERP) recording. Recently, he was working on a project that examined reading in old Chinese readers.
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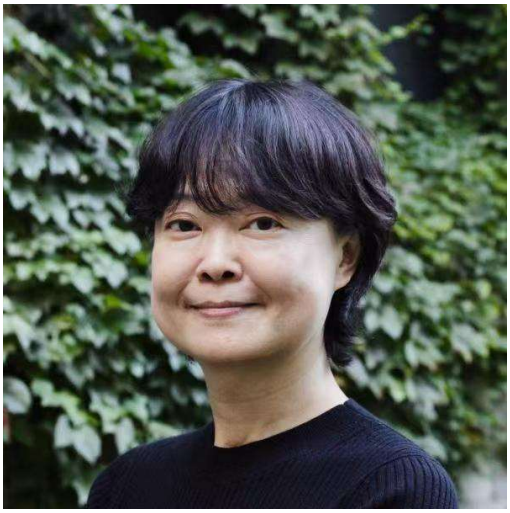

Ming Xiang
Department of Linguistics, The University of Chicago, USA

The effect of question under discussion on pragmatic inferences

Question under Discussion (QUD) is a key linguistic concept for modeling the structure of discourse context. Through the lens of QUDs, discourse unfolds as a goal-driven process in which interlocutors cooperate to resolve relevant issues—essentially responding to the current QUDs. Most previous research on QUDs has focused on highly controlled contexts with carefully curated examples. However, a major challenge remains: identifying QUDs in naturalistic settings, especially given that different comprehenders may have divergent intuitions about which QUD is most relevant in any given situation. In this talk, we use scalar implicature as a case study to examine how QUDs influence pragmatic inference. Specifically, we investigate both experimental and computational approaches for tracking and quantifying QUD variability in natural discourse, demonstrating that variability in QUDs is closely linked to variability in pragmatic inferences.

Biography

Prof. Ming Xiang
Professor of the Department of Linguistics, The University of Chicago. Her research is geared towards better understanding the processing and neural mechanisms that support the rapid, real-time construction of sophisticated linguistic representations. She primarily works on sentence processing, including syntax, semantics and discourse comprehension. Her recent collaborative projects also started looking at how language processing plays a role in shaping language change.
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Nai Ding
Zhejiang University, China

Encoding of Linguistic Structure in Human Brain and LLMs

How does the brain encode sentences? Classic linguistic theories propose that parsing a sentence into constituents is a necessary step for sentence comprehension. Language users, however, are generally unaware about the constituent parsing processing and similarly current large language models (LLMs) do not explicitly encode linguistic constituents but still reach human-level performance in many language tasks. This talk will discuss whether humans and LLMs implicitly perform constituency analysis and can rely on the latent constituency structure for rule inference tasks. In the first part of the talk, I will present a series of experiments that test behavioral sensitivity to linguistic constituents for both human participants and LLMs using a novel one-shot learning task. In the second part of the talk, I will present evidence that information integration in LLMs is gated by punctuations and show effects similar to the sentence wrap up effects in humans. These studies demonstrate that the constituency structure strongly influences language representation in both the human brain and LLMs.

Biography

Nai Ding is a Principal Investigator at the College of Biomedical Engineering and Instrument Science. He studies the neural and cognitive mechanisms underlying auditory perception and language comprehension. He has published over 50 papers in journals such as Trends in Cognitive Sciences, Nature Neuroscience, and Nature Human Behaviour. He serves on the board of directors for the Society for the Neurobiology of Language, and is a handling editor for eLife and Imaging Neuroscience.
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Chunming Lu
State Key Laboratory of Cognitive Neuroscience and Learning & IDG/McGovern Institute for Brain Research, Beijing Normal University, Beijing, 100875, China

Resolving Uncertainty through Computational Inference during Natural Communications

Linguistic ambiguity and the dynamic nature of everyday communication introduce inherent uncertainty into how we interpret a partner's speech and select our own responses. The mechanisms for resolving this uncertainty in open-ended communications remain poorly understood. To address this, we conducted a series of studies that combined natural communication paradigms with hyperscanning and computational modeling. Our results revealed that during narrative comprehension, individuals employ a computational inference strategy, integrating both prior and upcoming context to fill in missing words and resolve linguistic uncertainty. Furthermore, in two-way communication, we found that individuals first generate a cohort of candidate words and then select the optimal one by integrating pragmatic predictions with prediction errors, thereby increasing the activation strength of the target word. Neuroimaging data supported this model, revealing a hierarchical architecture in the brain: higher-level regions (the left temporoparietal junction and inferior frontal cortex) processed the predictions about partners and updated one's own predictions, while a lower-level region (the anterior temporal cortex) responded to prediction errors. Finally, we demonstrated that this computational inference mechanism supports observational learning in children and has diagnostic value for children with hearing loss.

Biography

Chunming Lu received his Ph.D. in Psychology in 2008. He is currently a Professor and Principal Investigator at the IDG/McGovern Institute for Brain Research, Beijing Normal University. His research focuses on the neurocognitive mechanisms of social interaction and language communication in naturalistic contexts, such as the classroom. He and his research group have developed state-of-the-art approaches to study real-time social interaction in naturalistic settings, proposed original theoretical and computational models to understand these interactions, and conducted pioneering work in the field of educational neuroscience. He has published over 70 papers in journals such as Nature Communications, PNAS, Advanced Science, and Psychological Science.

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Shaonan Wang
The Hong Kong Polytechnic University

Decoding the Multimodal Mind: Generalizable Brain-to-Text Translation via Multimodal Alignment and Adaptive Routing

Decoding language from the human brain remains a grand challenge for Brain-Computer Interfaces (BCIs). Current approaches typically rely on unimodal brain representations, neglecting the brain's inherently multimodal processing. Inspired by the brain's associative mechanisms, where viewing an image can evoke related sounds and linguistic representations, we propose a unified framework that leverages Multimodal Large Language Models (MLLMs) to align brain signals with a shared semantic space encompassing text, images, and audio. A router module dynamically selects and fuses modality-specific brain features according to the characteristics of each stimulus. Experiments on various fMRI datasets with textual, visual, and auditory stimuli demonstrate state-of-the-art performance, achieving an 8.48% improvement on the most commonly used benchmark. We further extend our framework to EEG and MEG data, demonstrating flexibility and robustness across varying temporal and spatial resolutions. To our knowledge, this is the first unified BCI architecture capable of robustly decoding multimodal brain activity across diverse brain signals and stimulus types, offering a flexible solution for real-world applications.

Biography

I am an Assistant Professor in the Department of Language Technology and Science at The Hong Kong Polytechnic University. Previously, I conducted research at the Institute of Automation, Chinese Academy of Sciences, and at the University of New York.

My research lies at the intersection of Natural Language Processing (NLP) and cognitive neuroscience, with a dual focus: using NLP to understand how the brain processes language, and using those insights to build more intelligent machines. My work specifically investigates how the brain represents word meaning and integrates multimodal information. I am passionate about exploring how this semantic integration develops from childhood and how we can leverage these findings to build communication aids and learning tools that improve lives.

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FENG Gangyi
Department of Linguistics and Modern Languages
Brain and Mind Institute
The Chinese University of Hong Kong

Neural representations connecting language learning and processing

Language learning and processing are interconnected, with neural representations formed during learning shaping how we perceive, produce, and communicate. This talk introduces a unified framework that examines how the brain encodes and utilizes linguistic information, driven by multiple learning mechanisms that collectively determine learning outcomes and generalization processes. By combining neuroimaging techniques (fMRI, MEG) with encoding modeling and task-trained language models, we identify dynamic neural codes at both the group and individual levels, explaining variations in learning success and processing efficiency. We find that language input shapes brain representations, with tonal languages using lexical tones that lead to unique neural encoding formats beyond language-general segmental features. These tone-based representations are predictive of comprehension and are observed in both native speakers and learners, indicating language-specific neural representations. These input-driven encodings are likely the result of multiple learning systems recruited during learning, influenced by corticostriatal networks, as the brain adapts its neural codes to input distribution for neuroplasticity. Comparing predictive coding and reinforcement learning in a transformer-based language model reveals that two learning mechanisms jointly shape the neural encodings of an artificial language. Overall, these findings show that (1) language input and learning strategies influence neural representations; (2) distinct corticostriatal networks support multiple learning mechanisms that build and refine these representations; and (3) individual differences in neural representation can predict learning and communication success. These findings have the potential to enhance our understanding of the neurobiology of language and support personalized education and early intervention for diverse populations.

Biography

Prof. Feng Gangyi is an Associate Professor in the Department of Linguistics and Modern Languages and serves as the Principal Investigator at the Brain and Mind Institute, as well as the director of the Neurobiology of Language Learning (NLL) Lab at The Chinese University of Hong Kong (CUHK). He holds undergraduate and doctoral degrees in Psychology and completed his postdoctoral training in the Cognitive Neuroscience of Language at CUHK and the University of Texas at Austin. His research explores how language is learned and represented in the human brain and mind, a field known as Neurolinguistics and Psycholinguistics. Prof. Feng's work has been recognized and supported by numerous prestigious awards and funding, including China’s National Excellent Young Scientist Fund (Hong Kong & Macao) and the Hong Kong RGC Collaborative Research Fund (CRF). His research has been published in top-tier academic journals, such as PNAS and the Journal of Neuroscience. His team’s studies have produced influential findings, including identifying brain networks for language learning and representation, uncovering neural bases of individual differences in language learning success, and developing neural predictive models for speech development in clinical populations.

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Yang Zhang
University of Minnesota

From Brain to Behavior: Lexical Tone Processing Across the Lifespan and in Atypical Development

Lexical tone is a defining feature of many East Asian languages. Because tone is related to pitch processing and operates at the intersection of phonetics, phonology, prosody, and cognition, it provides a powerful window into how the brain processes speech, adapts to linguistic experience, and copes with sensory or neurodevelopmental challenges. Over the past decade, our research team has pursued a coordinated research program investigating tone perception and production across diverse populations: typically developing children, adults learning Mandarin as a second language, children with cochlear implants, and individuals with autism spectrum disorder (ASD). In this talk, I will present converging evidence from behavioral, electrophysiological (ERP/MMN), and intervention-based studies that reveal: (1) Tone is fragile: even in native listeners, tone perception is highly sensitive to acoustic degradation (e.g., background noise) and developmental timing; (2) Tone is multimodal: visual pitch gestures and high-variability training significantly boost tone learning, especially in pediatric cochlear implant users; (3) Tone is selectively impaired: Mandarin-speaking children with ASD show disproportionate deficits in tone discrimination compared to segmental features, suggesting a suprasegmental processing bottleneck; and (4) Tone is trainable: AI-enhanced, robot-assisted, and multimodal training programs yield robust gains in non-native tone learning, with transfer to production. Our findings illustrate that lexical tone is not merely a phonological curiosity but a critical test case for theories of speech perception, neural plasticity, and cross-modal integration that can lead to important insights on typical and atypical speech and language development.

Biography

Yang Zhang is a professor in the Department of Speech-Language-Hearing Sciences and Masonic Institute for the Developing Brain at the University of Minnesota, Twin Cities. He serves as the Special Issue Editor for Developmental Science and Associate Editor for the Journal of Speech Language and Hearing Research (2026-2028). He specializes in speech perception and production, developmental psychology, and the social, emotional and cognitive foundations that support neural commitment and plasticity in auditory and visual domains.

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Shelley Xiuli Tong
Human Communication, Development, and Learning, Faculty of Education
The University of Hong Kong

Statistical Learning Optimizes Working Memory Representations

Statistical learning enhances the efficiency of limited working memory resources by abstracting relations among specific items. However, the cognitive and neural mechanisms underlying how abstract and item-specific information are represented remain unclear. This talk will address three key questions. 1) How does probability influence the internal representations of abstract and item-specific information during statistical learning? 2) To what extent does encoding strategy affect these internal representations across probability levels? 3) How does language experience shape the memory representation of various types of probabilistic information? Our results suggest that statistical learning plays a central role in the process of abstraction. Specifically, cognitive encoding strategies and input probabilities influence the formation of abstract and item-specific representations through a flexible working memory prioritization system, particularly when processing uncertain inputs.

Biography

Shelley Xiuli Tong, Ph.D., is a Full Professor at the University of Hong Kong's Faculty of Education where she directs the Speech, Language, and Reading Lab. Recognized as an RGC Research Fellow and Fulbright Senior Scholar, her research, which has been funded by the U.S. National Academy of Education, the UK ESRC- HK RGC joint grant scheme and the Hong Kong Research Grants Council, focuses on utilizing cognitive-behavioural, neurophysiological, and machine learning approaches to investigate the roles of prosodic reading in bilingual reading comprehension difficulties; the cognitive and neural mechanisms underlying statistical learning in children with dyslexia; and optimal solutions for classifying dyslexia, autism, and hearing-impairment. She has invented an intelligent dyslexic interface design (I-DID) that capitalizes on individual strengths of children with dyslexia and reflects her life-long commitment to transform scientific evidence into public policy and practice. Her work has resulted in over 90 publications in journals such as *Child Development, Cognition, Neuroimage, Autism Research, Journal of Educational Psychology, Learning and Instruction,* and *Educational Psychology Review*. She was an Associate Editor of Applied Psycholinguistic and currently serves as an Associate Editor for *Scientific Studies of Reading*.
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Wing Kuen WONG
Department of Social and Behavioural Sciences, City University of Hong Kong

Phonological planning in Cantonese-English bilingual speech production

In language production, the general consensus in the field is that there is a stage of processing where the phonological form of the target utterance is retrieved and processed prior to articulation. This cognitive process has been referred to as phonological planning. Past research has provided considerable evidence showing that the basic processing unit (proximate unit) for phonological planning varies across languages, with Indo-European languages such as Dutch and English using the phoneme as the proximate unit, whereas the proximate unit in Japanese is the mora, and in Cantonese and Mandarin it is the syllable. Given the striking contrast across languages, an interesting and important issue is how multilingual speakers cope with these differences when the different languages they possess adopt dissimilar phonological planning strategies (e.g., syllable-based Cantonese and phoneme-based English). Findings speaking to this issue coming from behavioural and event-related brain potential (ERP) studies will be presented and discussed in this talk, together with the influences of language experience and proficiency on multilingual phonological planning.

Biography

Dr. Andus Wing-Kuen Wong

Associate Professor of the Department of Social and Behavioural Sciences, City University of Hong Kong. His research interest revolves around language production in Chinese, with a specific focus on the phonological planning processes. His recent projects are about phonological planning in multi-lingual speech production, using both behavioural and ERP (event-related brain potential) approaches.

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Him Cheung
University of Canterbury

The Role of Cognitive Reserve in Chinese Older Adults' Reading Comprehension

Background: The Simple View of Reading provides a powerful account for reading comprehension in child and younger adult populations. Yet it has not been applied to aging readers with different levels of cognitive reserve. The present study examines reading comprehension performance and its predictors in older Chinese readers with higher versus lower levels of cognitive reserve, using the Simple View as theoretical framework. **Methods:** Cognitive reserve was measured in 232 older Chinese readers aged 55 years and above via the Cognitive Reserve Index questionnaire. Profiling analysis was performed. Reading comprehension accuracies and the relative predictive roles of character decoding, working memory, cognitive flexibility, vocabulary, and listening comprehension in the cognitive reserve subgroups were compared. Reading motivation, satisfaction, and interest were also measured. **Results:** The high-reserve readers outperformed their low-reserve counterparts in reading comprehension, listening comprehension, character decoding, and vocabulary, and also reported higher motivation for and a stronger interest in reading. Character decoding and listening comprehension emerged as predictors of reading comprehension in the high-reserve readers, as predicted by the Simple View. In contrast, vocabulary and reading motivation, in addition to listening comprehension, were significant predictors of reading comprehension in the low-reserve readers. **Conclusions:** Maintenance of active living as captured by higher levels of cognitive reserve is important in older adults' preservation of reading efficiency. While older adults high in cognitive reserve tend to approach the task of Chinese reading in a straightforward manner via character decoding and listening comprehension as stipulated by the Simple View, their low-reserve counterparts appear to capitalise more on accumulated language experience and the motivational aspect of reading.

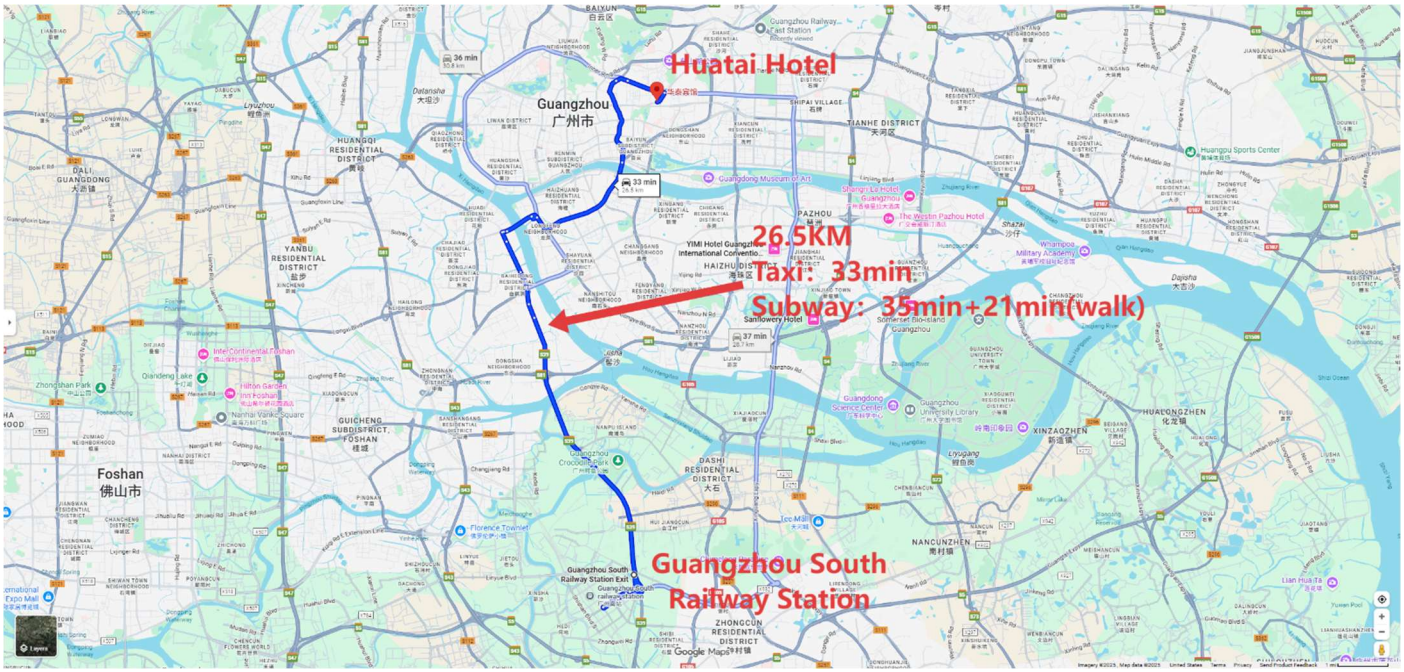
Biography

Him graduated with a PhD majoring and minoring in experimental psychology and speech science, respectively, at the University of Kansas. He is interested in theory of mind and reading development in relation to phonological and working memory processes. He taught at the Otago University, The Chinese University of Hong Kong and The Education University of Hong Kong. Him is now adjunct professor at the University of Canterbury.

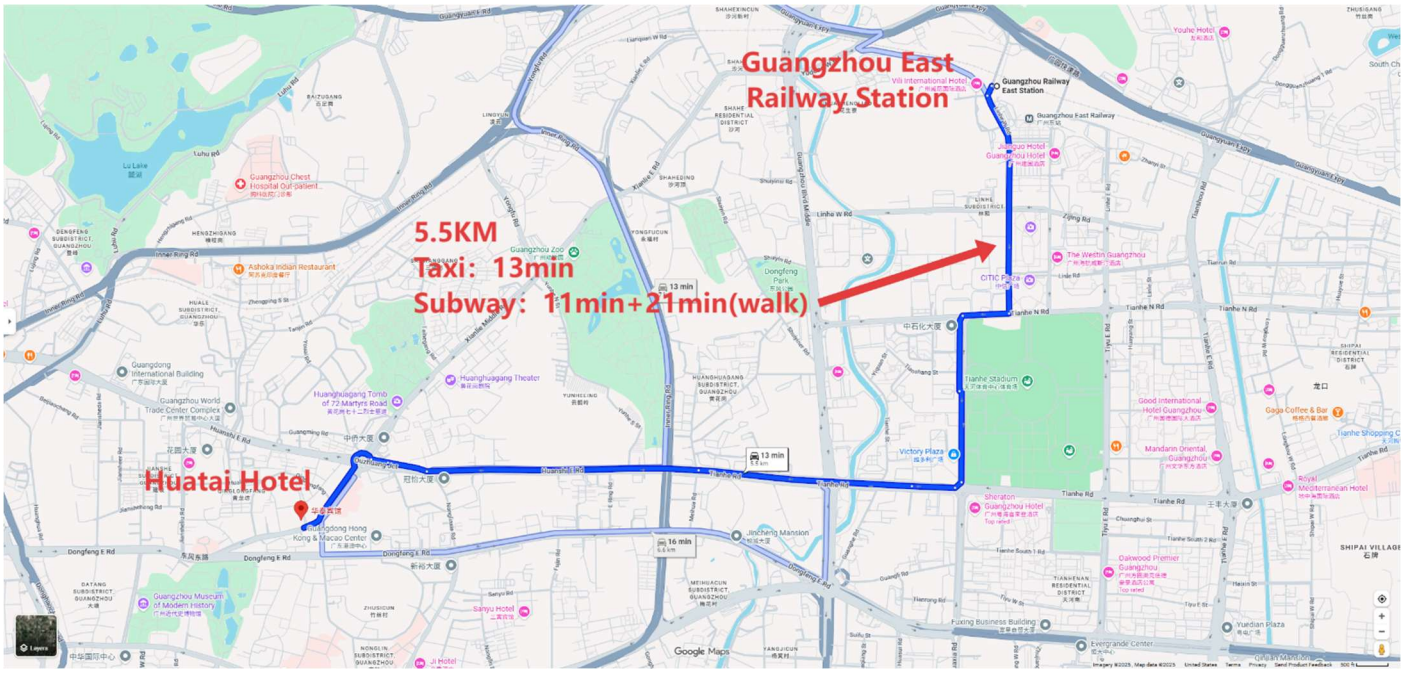
Map and Directions

Conference Location Map

Guangzhou **South** Railway Station



Guangzhou **East** Railway Station



Guangzhou **Baiyun** International Airport