2nd
Hong Kong Baptist University
International Conference on Interpreting

Theme COGNITIVE APPROACHES

8-9 April 2021
Hong Kong Baptist University
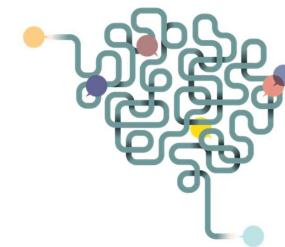
Programme Handbook

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ABOUT THE CONFERENCE

Cognitive approaches to studying interpreting have been one of the main streams of research in Interpreting Studies since the 1970s. Recently, as new perspectives continue to form and new methodologies continue to be adopted and as a result of increasing inter-disciplinary cross-pollination, the field of Interpreting Studies has seen a resurgence of cognition-related research, not only in spoken language interpreting, but also in signed language interpreting. Riding on this exciting new wave and continuing our tradition of having a targeted theme, we aspire to use this platform to bring together top and promising scholars in both spoken language interpreting and signed language interpreting to Hong Kong with the following aims:

1. to provide a platform for sharing new knowledge in cognition and interpreting;

2. to foster a dialogue among scholars who engage in cognition-related research in spoken languages and signed languages; and

3. to enhance the international presence of interpreting research in Hong Kong and to further highlight Interpreting Studies at HKBU to the international research world.

A workshop on "Journal Publication: A Dialogue between Authors and Editors" has also been arranged to meet the needs of postgraduate students and young scholars attending the conference.

This conference is the second "Hong Kong Baptist University International Conference on Interpreting". The first conference was held in 2017 with the theme of "History of Interpreting".

ORGANIZING COMMITTEE

Min-hua LIU (Conference Chair)
Professor, Department of Translation, Interpreting and Intercultural Studies
Director, Centre for Translation
Hong Kong Baptist University, Hong Kong

Robert NEATHER
Head and Associate Professor, Department of Translation, Interpreting and Intercultural Studies
Research Fellow, Centre for Translation
Hong Kong Baptist University, Hong Kong

Dr. Nan ZHAO
Assistant Professor, Department of Translation, Interpreting and Intercultural Studies
Hong Kong Baptist University, Hong Kong
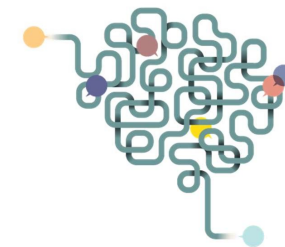
PROGRAMME COMMITTEE

Michaela ALBL-MIKASA
Zurich University of Applied Sciences, Switzerland

Agnieszka CHMIEL
Adam Mickiewicz University, Poland

Yanping DONG
Zhejiang University, China

Damien FAN
National Taiwan University, Taiwan

Adolfo GARCÍA
Cognitive Neuroscience Center, UdeSA, Argentina

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University of Vienna, Austria

Elisabet TISELIUS
Stockholm University, Sweden

PROGRAMME SCHEDULE
8 April 2021 (Thursday)

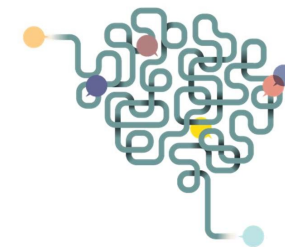|	
08.30-08.45	**Welcome** Opening speech by Mette HJORT (Dean of the Faculty of Arts, Hong Kong Baptist University)
09.00-10.30	**SESSION 1: Cognitive Abilities as Interpreting Aptitude** **Chair**: Christopher D. MELLINGER
	09.00 (21.00, New York) **Interpreting Experience Enhances Predictive Processing in the Second Language** Cristina LOZANO-ARGÜELLES (John Jay College of Criminal Justice, USA) Nuria SAGARRA (Rutgers University, USA) Joseph V. CASILLAS (Rutgers University, USA)
	09.30 (9.30, Hangzhou) **Attentional Control and the Unique Bilingual Profile of Interpreters** Yanping DONG (Zhejiang University, China)
	10.00 (10.00, Shanghai) **Uncertainty Management with Professional and Novice Interpreters: An Eye-Tracking Study** Yan HE (Fudan University, China)
11.00-12.30	**SESSION 2: Cognitive Processes and Constructs in Interpreting 1** **Chair**: Christopher D. MELLINGER
	11.00 (11.00, Taipei) **Tail-To-Tail Span and Quality in English to Chinese Simultaneous Interpreting** Chiaming Damien FAN (National Taiwan University, Taiwan) Ping-Hsiu Kimberly CHEN (National Taiwan University, Taiwan)
	11.30 (11.30, Hong Kong) **Planning Ahead: Interpreters Predict Source Language in Consecutive Interpreting** Nan ZHAO (Hong Kong Baptist University, Hong Kong) Xiaocong CHEN (The Hong Kong Polytechnic University, Hong Kong) Zhenguang CAI (The Chinese University of Hong Kong, Hong Kong)
	12.00 (12.00, Hong Kong) **Is There a Core Word List of Political Interpreting?** Haoran Harry WANG (The Hong Kong Polytechnic University, Hong Kong)
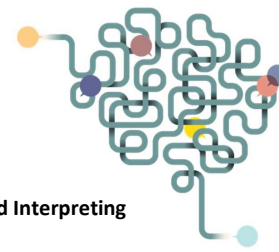
15.30-17.00 **SESSION 3: Cognitive Processes and Constructs in Interpreting 2**
Chair: Chiaming Damien FAN

15.30 (10.30, Istanbul)
**Morphosyntactic Prediction in Student Vs. Professional Turkish (A) -
English (B) Simultaneous Interpreters: Between-group and Individual
Differences**
Deniz ÖZKAN (Koç University, Turkey)
Ena HODZIK (Boğaziçi University, Turkey)
Ebru DIRIKER (Boğaziçi University, Turkey)

16.00 (10.00, Brussels)
**Are Complex Sentences Harder to Translate and Interpret between
Languages from Different Families?**
Selim EARLS (University of Louvain, Belgium)

16.30 (16.30, Nanchang)
**Primary Information Processing in English-Chinese Simultaneous
Interpreting. A Corpus-Based Description Triangulated with an
Eye-Tracking Experiment**
Lu YUAN (East China Jiaotong University, China)

20.00-21.30 **KEYNOTE SPEECH 1**
(09.00, Buenos Aires)
What's Special about the Interpreter's Brain?
A Neurocognitive Tale of Expert Bilingual Processing
Adolfo GARCÍA (Cognitive Neuroscience Center, UdeSA, Argentina;
Global Brain Health Institute, UCSF, USA)
Moderator: Min-hua LIU

9 April 2021 (Friday)

09.00-10.30 **SESSION 4: Interpreting Skill Acquisition**
Chair: Chiaming Damien FAN

09.00 (21.00, Charlotte)
**Developing Meta-Cognitive Behavior in Community Interpreting Students:
Sight Translation as a Case Study**
Christopher D. MELLINGER (University of North Carolina at Charlotte, USA)

09.30 (09.30, Guangzhou)
**Effects of Note-taking on Interpreters' Memory of Source Text: A
Developmental Perspective**
Jinhua ZHOU (Guangdong University of Foreign Studies, China)

10.00 (10.00, Wenzhou/Hangzhou)
**The Emergence of a Complex Language Skill: Evidence from the
Self-organization of Interpreting Competence in Interpreter Trainees**
Zhibin YU (Wenzhou Medical University, China)
Yanping DONG (Zhejiang University, China)

13.30-14.30 **SESSION 5: Cognitive Considerations in Machine-Aided Interpreting**
Chair: Nan ZHAO

13.30 (13.30, Chongqing)
**Computer-Aided Interpreting in The Consecutive Mode: A Practical
Training Proposal**
Sijia CHEN (Southwest University, China)

14.00 (08.00, Mainz)
Cognitive Load in ASR-Aided Interpreting: A Look at Pauses and EVS
Bianca PRANDI (Johannes-Gutenberg Universität Mainz, Germany)

15.00-16.30 **SESSION 6: Cognitive Workload in Interpreting**
Chair: Nan ZHAO

15.00 (17.00, Sydney)
**An Eye-Movement Analysis of Visual Attention, Cognitive Load, and
Interpreting Performance during Consecutive and Simultaneous
Interpreting Modes in a Remotely Interpreted Investigative Interview**
Stephen DOHERTY (The University of New South Wales, Australia)
Sandra HALE (The University of New South Wales, Australia)
Natalie MARTSCHUK (Charles Sturt University, Australia)
Jane GOODMAN-DELAHUNTY (Charles Sturt University, Australia)

15.30 (09.30, Zurich)
**English as a Lingua Franca-Induced Effects on Cognitive Load and
Interpreting Quality**
Michaela ALBL-MIKASA (Zurich University of Applied Sciences, Switzerland)
Anne Catherine GIESHOFF (Zurich University of Applied Sciences,
Switzerland)

16.00 (09.00, Newcastle)
**Let the Eyes Do the Talking – A Study on Trainee Interpreters' Cognitive
Load during Notetaking in Consecutive Interpreting Using Gaze Aversion
(GA) Paradigm**
Wenbo GUO (Newcastle University, United Kingdom)

20.00-21.30 **KEYNOTE SPEECH 2**
(08.00, Cleveland)
**Interpreting as Complex Human Performance: The Role of Cognitive
Abilities, Experience, and Task Demands**
Brooke MACNAMARA (Case Western Reserve University, USA)
Moderator: Min-hua LIU

21.30-21.45 **Closing**

KEYNOTE ABSTRACTS

Keynote Speech 1

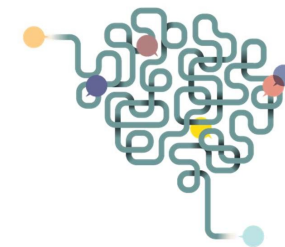### What's Special about the Interpreter's Brain?
A Neurocognitive Tale of Expert Bilingual Processing

Adolfo GARCÍA   Cognitive Neuroscience Center, UdeSA, Argentina;
Global Brain Health Institute, UCSF, USA

Within the vast bilingual population, simultaneous interpreters (SIs) stand out by the elevated processing demands they face in professional settings. The need to comprehend oral discourse in one language and render it in another as it unfolds, under strict time constraints, pushes verbal and non-verbal mechanisms to their limits. Therefore, SIs offer a unique model to assess how capable the bilingual brain is for experience-driven changes under stringent circumstances. In this conference, I will review multiple studies to answer three relevant, overarching questions: (a) how do the neurobiological systems mediating bilingual cognition adapt to the extreme demands faced by SIs?; (b) which of the associated verbal and non-verbal functions evince behavioral enhancements in this population?; and (c) what are the immediate challenges in this flourishing research field? In brief, this is an invitation to understand how extreme bilingual experiences influence cognition at large and, more generally, how the human mind adapts to the particular demands we may place on it.

About the Speaker :

Adolfo García, Ph.D., is an expert in the neuroscience of language and social interaction. He serves as Associate Professor and Co-Director of the Cognitive Neuroscience Center (Universidad de San Andrés, Argentina), Atlantic Fellow and Associate Specialist at the Global Brain Health Institute (University of California, San Francisco), Adjunct Researcher at the National Scientific and Technical Research Council (Argentina), Adjunct Professor of Neurolinguistics at the Faculty Education of the National University of Cuyo (Argentina), member of the Management Committee of the "Translation, Research, Empiricism, Cognition" (TREC) Network, honorary member of the Center of Cognitive Neuroscience at La Laguna University (Spain), and High-Level Talent appointed by the Ministry of Science and Technology of China. He has received training in cognitive neuroscience, translation, and foreign-language teaching, alongside postdoctoral studies at the Institute of Cognitive Neurology (Argentina) and research stays at New York University and Rice University (United States). He now leads research projects in over ten countries across the globe. Moreover, he serves as Director of the Master's in Language and Cognition, a postgraduate program he created at the National University of Cuyo. His teaching career includes graduate and postgraduate courses in Argentina, Chile, Colombia, the United States, Germany, the United Kingdom and China. He has more than 170 publications, including books, chapters, and papers in leading journals, mainly focused on neurolinguistics and bilingualism. He has offered more than 150 presentations and speeches at international academic meetings and science dissemination events. Moreover, he is the host of the TV show "Of brains and words" and of a radio column titled "Mind and communication". His scientific contributions have been recognized by awards and distinctions from the Linguistic Association of Canada and the United States, the Ibero-American Neuroeducation Society, the Argentine Association of Behavioral Science, and the Legislature of the City of Buenos Aires.
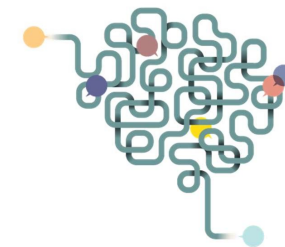
Keynote Speech

Keynote Speech 2

Interpreting as Complex Human Performance:
The Role of Cognitive Abilities, Experience, and Task Demands

Brooke MACNAMARA   Case Western Reserve University, USA

Interpreting involves multiple cognitive processes and recruitment of linguistic, social, and content knowledge. Moreover, interpreting is considered a skill practiced in "wicked" (rather than "kind") environments. That is, we have limited control over the content we interpret or the pace of the speakers, we cannot predict exactly what will be said in the next few minutes, and we will likely never interpret the same content in the same context ever again. Despite this, some interpreter trainees develop robust interpreting skills and some professional interpreters excel in a variety of interpreting settings. In this address, I will discuss interpreting through the lens of complex human performance. This lens takes into account cognitive factors, experiential factors, and the role of task demands. I will give background on existing theories of skill acquisition and expertise, then will explain newer research that better accounts for the complexity of interpreting. With this research, we can move toward a better understanding of interpreter expertise.

About the Speaker :

Dr. Brooke N. Macnamara has degrees in American Sign Language-English Interpreting (B.A.), Interdisciplinary Studies (M.A.), and Psychology (M.A. and Ph.D.). After graduating from an interpreter training program and receiving her national certification in interpreting, she worked full time as an American Sign Language-English interpreter in Chicago, IL for seven years. During this time she became interested in cognitive aptitude for interpreting and completed an M.A. in Interdisciplinary Studies, focusing on cognitive psychology and interpreting theory. In 2008, she turned her attention full-time to research, pursuing a M.A. and a Ph.D. in cognitive psychology at Princeton University. There, she began investigating individual differences in cognitive abilities and experience as predictors of interpreting skill. After receiving her Ph.D. in 2014, Dr. Macnamara joined the faculty in the Department of Psychological Sciences at Case Western Reserve University where she directs the Skill, Learning, and Performance Laboratory and the Bilingualism and Communication Performance Laboratory. She currently researches predictors of skill acquisition and expertise across a range of performance domains.

SESSION PRESENTATION ABSTRACTS *(In the order of presentation)*

Interpreting Experience Enhances
Predictive Processing in the Second Language

Cristina LOZANO-ARGÜELLES	John Jay College of Criminal Justice, USA
Nuria SAGARRA	Rutgers University, USA
Joseph V. CASILLAS	Rutgers University, USA

Prediction facilitates human cognition (Bar, 2007). Language research suggests that native speakers predict different types of information (semantic, syntactic, etc.), but L2 learners have difficulties (Kaan, 2014). L2 studies show mixed findings even at advanced proficiency levels, indicating that factors other than proficiency impact linguistic prediction. Interpreters use prediction to ease the cognitive load of simultaneous interpreting (Seeber & Kerzel, 2011). Hence, this population could elucidate whether prediction experience, rather than language proficiency, is a key during L2 prediction.

We investigate whether experience with prediction (implicitly acquired through simultaneous interpreting) extrapolates to non-interpreting linguistic situations, by comparing Spanish monolinguals to interpreter and non-interpreter advanced learners of Spanish. Furthermore, we explore how experiential conditions (i.e., interpreting experience) impact associative learning in the L2.

We investigate whether Spanish monolinguals (32), advanced L2 learners of Spanish with (24), and without interpreting experience (28) predict the final syllable of the target word (Experiment 1: verb ending, *LLEna-lleNÓ*; Experiment 2: word ending, *PApa-paPÁ*) based on lexical stress cues (oxytone, paroxytone) and syllabic structure cues (CVC, CV). The initial syllable of both words presented to the participants was identical and could only be distinguished by lexical stress. The L2 groups were matched in L2 proficiency and working memory. During the visual-world eye-tracking tasks, participants listened to a sentence (e.g., *La mujer llenó la jarra*) while seeing two words on the screen (*llena-llenó*) and pressed a left or right bottom to select the word they heard in the sentence. Looks towards the target after hearing the first syllable of the word were taken as an indicator of prediction.

Results from Experiment 1 reveal that interpreters are more efficient than non-interpreters when predicting morphology, but not as efficient as monolinguals. However, results from Experiment 2 show that monolinguals and interpreters display comparable prediction rates.

Taken together, our findings support that L2 difficulties using stress and syllabic structure for prediction can be overcome with interpreting experience. Interpreters in Experiment 2 stopped over-relying on distributional regularities of stress-suffix associations in Spanish, suggesting that interpreting experience enhances associative learning. In line with Kuperberg and Jaeger (2016), interpreters' superior performance shows that language processing demands reshape predictive processing strategies to adapt to task demands by changing the allocation of cognitive resources.

About the Presenter :

Cristina Lozano Argüelles is Assistant Professor of translation and interpreting at the Department of Modern Languages and Literatures at John Jay College of Criminal Justice in New York City. She investigates monolingual and bilingual language processing and, in particular, the effects of interpreting experience on second language processing. She is currently working with undergraduate students and setting up her new eye-tracking lab on bilingualism and interpreting.

Email: clozanoarguelles@jjay.cuny.edu
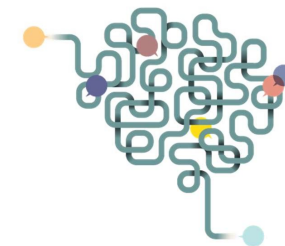
Session 1:
Cognitive Abilities as Interpreting Aptitude

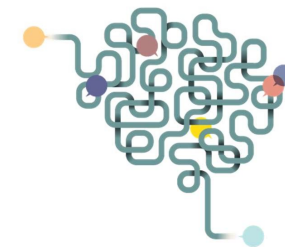Attentional Control and the Unique Bilingual Profile of Interpreters

Yanping DONG   Zhejiang University, China

Interpreting is a challenging bilingual task, placing high demands on language control (i.e., source language not interfering in target language production) and processing control (i.e., multi-tasking carried out in concert under time pressure). Dong and Li (2020) proposed the attentional control model that took both language control and processing control into consideration. Based on their proposal, the present paper tries to further illustrate the unique bilingual profiles of interpreters, with evidence from empirical studies that have been published and that are in review. Briefly speaking, interpreters are assumed and expected to be highly fluent in both languages, but at the same time, they are unique bilinguals in a few aspects. First, the two languages must be more closely associated for interpreters than for general bilingual speakers, and interpreters must be more aware of the similarities and differences between the two languages. Second, interpreters switch more frequently and regularly between the two languages than general bilingual speakers, and are thus probably more capable of switching between two languages or between two tasks. Third, interpreting requires more multi-tasking under time pressure than a communication task in a general monolingual or bilingual situation, and are thus probably more capable of multi-tasking and distributed attention. Fourth, interpreters have to acquire and adopt strategies or coping tactics to cope with the challenging demands in interpreting, and are thus probably more aware of potential problems and problem-solving techniques. These features are consistent with the attentional control model and underline major topics of the cognitive approach to interpreting, including topics such as interpreting processes, cognitive load in interpreting, interpreter advantages, etc.

About the Presenter :

Dr. Yanping Dong is Professor of psycholinguistics in Zhejiang University, China. She serves as chair of the Chinese Association of Psycholinguistics, on the editorial board of *Bilingualism: Language and Cognition*, and on the Advisory Board of the book series of *Bilingual Processing and Acquisition* by John Benjamins. Most of her research is on the psycholinguistic approach to bilingualism (e.g., "Shared and separate meanings in the bilingual lexical memory") and interpreting (e.g., "Attentional control in interpreting").

Email: ypdong@zju.edu.cn

Uncertainty Management with Professional and Novice Interpreters:
An Eye-Tracking Study

Yan HE   Fudan University, China

The interlingual brokering process is essentially a chain of decision making based on interpreters' holistic competence of problem solving. This is especially true when interpreters run into uncertainty during interpreting tasks. Uncertainty management has been documented as a topic in translation process research. However, little has been done to address this issue neither in theoretical reflection nor in empirical research. The present study investigated the interplay between interpreting competence and uncertainty management, with a hope to be a stepping stone for modelling the interaction among problem solving, competence, strategy and efforts. By triangulating eye-tracking data, interpreting output and retrospective interview, the study was conducted to answer the following questions: 1) What are the strategies employed by interpreters to manage the uncertainties? How would interpreting competence impact strategy use in dealing with uncertainties? 2) Are interpreters of higher competence more risk-taking (willingness to live with temporary uncertainty) than those of lower competence? 3) In the triangular relationship among interpreting strategy, interpreting effort, and degrees of risk, how are the three balanced by interpreters of different competence level? Will interpreters of higher competence level handle the problem more economized compared to interpreters of lower competence level?
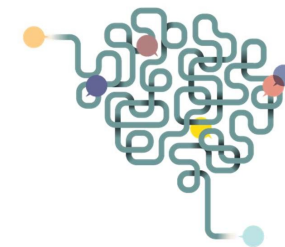
To address the questions, 16 interpreters were invited to participate in the experiment, who were divided into two groups according to their interpreting experience. They were asked to sight translate two English passages selected from newspapers, which were on the same topic and of similar length. Five words/phrases in each passage were replaced with low-frequency items. The passages were presented on the screen of a computer in a counterbalanced order. When the interpreters performed the sight translation task, their eye movements were recorded by an eye-tracker; their interpreting production was recorded by a digital voice recorder. Post-hoc interviews were done to investigate whether the low-frequency items posed any uncertainty to them and the reason the interpreters chose a specific strategy to tackle the problem. Our findings revealed: 1) the professionals were more efficient and more resourceful in handling uncertain items. They had a larger strategy package and were more proficient in adopting global strategies which anchor single word or phrase to larger context;

2) the professionals were more risk-taking than novices; 3) the professionals were more economized in uncertainty management in high-risk context.

About the Presenter :

Yan He, Ph.D., is Lecturer at College of Foreign Languages and Literatures, Fudan University, Shanghai, China. She takes a keen interest in investigating the cognition in translation and interpreting by using eye-tracking and fNIRS techniques. She has published in *Babel*, *Biomedical Optics Express*, *Behavioural Brain Research*, etc.

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Tail-To-Tail Span and Quality in English to Chinese
Simultaneous Interpreting

Chiaming Damien FAN   National Taiwan University, Taiwan
Ping-hsiu Kimberly CHEN   National Taiwan University, Taiwan

Synchronicity is a key feature of simultaneous interpreting (SI). It reflects aspects such as cognitive load and information processing, which would in turn affect output quality. Studies that examine the effect of synchronicity on SI quality often measure the "ear-voice span (EVS)", the time that elapses between the onset of the source speech and the onset of the corresponding interpretation. Usually, a longer EVS gives interpreters more time to comprehend the source speech but increases working memory burden, while a shorter EVS has the opposite effect. Given that EVS is modulated by factors such as syntactic differences between language pairs, source speech input rate, and interpreters' personal preferences, there are no categorical rules about the ideal length of EVS. However, interpreters are consistently advised to shorten another measure of synchronicity, the "tail-to-tail span (TTS)", which is the time that elapses between the end of a source speech sentence and the end of the corresponding interpretation. A shorter TTS would reduce the amount of time that the interpreter's output is overlapping with the speaker's speech, helping interpreters preserve more cognitive capacity to process incoming sentences and maintain synchronicity. Anecdotally, shorter TTS produces higher interpretation quality and demonstrates that the interpreter has better language flexibility and text processing skills such as selective omission, compression, or anticipation. This study aims to test the hypothesis that a longer TTS would result in lower interpreting quality by examining the SI performance of 14 post-graduate level student interpreters. They interpreted an 11-minute speech from English into Mandarin Chinese in which 19 critical sentences were designed to appear in regular intervals. These sentences were constructed in a way that critical meaning units appeared in the beginning part of these sentences. Failing to hear or interpret the critical meaning units would likely result in erroneous or vague renditions of the critical sentences. In addition to identifying whether the critical meaning units were correctly interpreted, two raters evaluated the accuracy and fluency of the interpretation of two time frames: 0-7 seconds and 8-14 seconds after onset of the critical sentence. The purpose is to observe the spill-over effects of TTS lengths and how they affect output quality. Regression analyses show that the longer the length of TTS, the lower the quality scores and the percentage of critical units correctly interpreted. The negative correlation was also evident in inter-participant and certain intra-participant comparisons.

About the Presenters :

Dr. Chiaming Damien Fan is Assistant Professor at the Graduate Program in Translation and Interpretation, National Taiwan University. He received his doctoral degree from National Taiwan Normal University, and has been teaching full-time since 2009. Dr. Fan was a visiting professor at the Middlebury Institute of International Studies at Monterey during 2019-2020. He is a member of the International Association of Conference Interpreters (AIIC).

Ping-hsiu Kimberly Chen received her M.A. in conference interpreting from the Graduate Program in Translation and Interpretation, National Taiwan University. She is currently working as an in-house interpreter and translator for a global consulting firm.

Email: damienfan@ntu.edu.tw
       jess60120jess@gmail.com
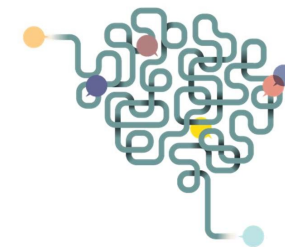
Planning Ahead:

Interpreters Predict Source Language in Consecutive Interpreting

Nan ZHAO   Hong Kong Baptist University, Hong Kong,
Xiaocong CHEN   The Hong Kong Polytechnic University, Hong Kong
Zhenguang. G. CAI The Chinese University of Hong Kong, Hong Kong

People predict upcoming linguistic content in reading and listening (Pickering & Gambi, 2018). In particular, it has been hypothesized that interpreters anticipate upcoming words and syntax in both source language (SL) and target language (TL) to facilitate timely interpreting delivery (Amos & Pickering, 2020; Chernov, 1994). In this paper, we asked whether interpreters predict lexico-semantic content in SL comprehension in interpreting to a greater extent than in regular language comprehension and whether such enhanced prediction (if any) is constrained by cognitive resources.

Expt 1a and 1b examined whether interpreters make more lexico-semantic predictions when they read a sentence to later interpret than to later repeat (Macizo & Bajo, 2006). Expt 1a had a design of 2 (predictability: predictable vs. unpredictable) x 2 (task: repetition vs. interpreting; blocked). We manipulated a critical word to be predictable or unpredictable in a sentence; the predictability of the critical word was normed in a pretest. Participants read a sentence to either later repeat (as a form of regular language comprehension) or to later interpret (as a form of SL comprehension). Participants were Chinese-English bilinguals with interpreting training/experience. They self-paced read an English sentence word by word in an online experiment on Gorilla and later either repeated the sentence or interpret it into Mandarin. Expt 1b had the same design and was intended to replicate Expt 1a using more and refined items.

As shown in Fig. 1, participants read the critical word and the following regions more quickly in the predictable than unpredictable condition. More importantly, there was an interaction between predictability and task such that the prediction effect was stronger when participants read a sentence to later interpret than to repeat.

Experiment 2 further examined whether the enhanced prediction in interpreting is constrained by cognitive resources. It had a design of 2 (predictability: predictable vs. unpredictable) x 2 (task: repetition vs. interpreting; blocked) x 2 (load: low vs. high). In the low-load condition, participants read one sentence and then repeated/interpreted it (as in

Expt 1a and 1b). In the high-load condition, we added a 5-word sentence before the original sentence. Participants read the first sentence, kept it in memory, read the second (target) sentence, before they repeated/interpreted both sentences. As shown in Fig. 2, we replicated the finding in Expt 1a and 1b: The prediction effect was stronger in reading to interpret than in reading to repeat. More importantly, there was also a three-way interaction, suggesting that reading to interpret enjoyed enhanced prediction in the low- but not high-load condition.

In all, the results suggest that interpreters are more predictive of lexico-semantic content in SL comprehension in interpreting than in regular language comprehension, giving support to the hypothesis that interpreters use an anticipatory strategy to maximize interpreting timeliness. Also, prediction in interpreting seems to require cognitive resources.

About the Presenters :

Nan Zhao,
nanzhao@hkbu.edu.hk, Hong Kong Baptist University, Hong Kong;

Xiaocong Chen,
xiaocong.chen@polyu.edu.hk, The Hong Kong Polytechnic University, Hong Kong;

Zhenguang. G. Cai,
zhenguangcai@cuhk.edu.hk, The Chinese University of Hong Kong, Hong Kong.
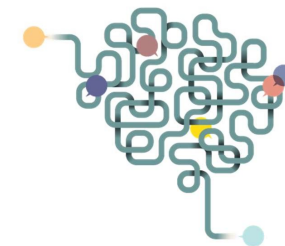
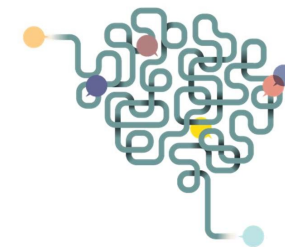## Is There a Core Word List of Political Interpreting?

Haoran Harry WANG   The Hong Kong Polytechnic University, Hong Kong

This study presents a core word list of political interpreting, which is derived from the Chinese/English Political Interpreting Corpus (CEPIC; J. Pan 2019) that is compiled with about 6.5 million word tokens and aligned at the paragraph level. This corpus is a balanced and representative reservoir of contemporary political speeches and its renditions from China, UK and US in English or in Chinese. The study first explores reasons why a core word list of political interpreting (as a text genre) is warranted and why this list is needed in interpreting practice and training. The cognitive account on some sub-skills of interpreting, e.g. lexical retrieval and mental representation, and its implications on computer-aided interpretation are also covered in this part. Secondly, this study, in particular, searches the core words of both languages based on the frequencies, part-of-speech (POS), and keyness. The parallel corpus searching methodology and rationale are justified. The entire word list will be presented in both a lemma version and a word-family version as part of the findings. Beside this, the result intends to show that there is a stable core word list of Chinese-English political interpreting, that is more independent from the content of the speech but linguistically common in the political speeches, i.e. covering a considerable percent of the text in the corpus. This study concludes with a discussion of how the core word list can be used in the interpreting practice and training. In the discussion, the follow-up survey on feedbacks from interpreting trainers, trainees, and practitioners on this core word list will be included and the further application of this core word list will also be tapped, for example, the possible construction of an internet-based dynamic speech repository that is informed by this core word list.

About the Presenters :

Harry is a Hong Kong-based conference interpreter and a doctoral student at the Hong Kong Polytechnic University. The active young interpreter is becoming quite the academic researcher. He mainly studies what he is practicing, i.e. simultaneous interpreting and consecutive interpreting. His research is practice-oriented and theory-informed, focusing on psycholinguistics and interpreting studies.

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Morphosyntactic Prediction in Student Vs. Professional Turkish (A) - English (B) Simultaneous Interpreters: Between-group and Individual Differences

Deniz ÖZKAN   Koç University, Turkey
Ena HODZIK   Boğaziçi University, Turkey
Ebru DIRIKER   Boğaziçi University, Turkey

Language users can predict upcoming linguistic content based on semantic and/or morphosyntactic cues (e.g. Altmann & Kamide, 1999; Huettig & Altmann, 2005). Recent psycholinguistic research investigating individual differences in prediction skill showed that it was positively associated with individuals' working memory capacity (WMC; Huettig & Janse, 2016). Prediction was also found during simultaneous interpreting (SI), where professionals showed more instances of prediction than students (Jörg 1997; Riccardi 1996). Expertise-related advantages were also observed in tasks measuring WMC in interpreters (Padilla et al., 1995; Yudes et al., 2013). However, while individual variations in WMC were related to SI performance in student interpreters (Zhang and Yu, 2019, Lin et al., 2018), studies with professional interpreters found either non-significant or weaker associations (Timarová et al., 2015).

We aimed to identify whether professional interpreters' morphosyntactic prediction skills differ from that of students, and whether WMC is associated with prediction skills in those groups. Twenty-one student interpreters and 17 professional interpreters with Turkish as their A and English as their B language completed a morphosyntactic prediction task using the visual world paradigm (VWP; Cooper, 1974; Tanenhaus et al., 1995) and an operation span task in Turkish (Mizrak & Oztekin, 2016; Unsworth et al., 2005).

We found a prediction effect (i.e., significantly higher increase in fixations to potential agent in an accusative condition than in a nominative condition) for professionals, but not for students. A closer look at the professional's data revealed a significant increase in anticipatory target fixations (potential agent in accusative, potential patient in nominative conditions) for both conditions. Despite the absence of significant group differences in WMC, professionals who had higher WMC showed higher fixations to the target in the nominative, but not in the accusative condition.

That only professionals showed the prediction effect indicated a significant contribution of SI experience/expertise to the prediction of upcoming arguments cued by Turkish case markers.

Unlike other studies, we did not find a prediction effect for students, which might be because of the conservative model with maximal random effects structure we deployed to minimize Type 1 error rates (Barr et al., 2013). Our finding that professionals benefitted from WMC in the nominative (hence more difficult-to-predict) condition, where students did not show any prediction effect at all, suggests that professionals may be better at strategically allocating their available cognitive resources.
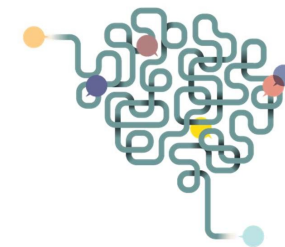
About the Presenters :

Deniz Ozkan is a Ph.D. candidate at Koç University and a part-time lecturer at Bahcesehir University. Her research interests are language processing in various populations including children, adults, and bilinguals and individual differences in language and cognitive skills.

Ena Hodzik is Assistant Professor of Translation and Interpreting Studies at Boğaziçi University. For her Ph.D. at the University of Cambridge she employed latency measures to investigate predictive processes during simultaneous interpreting from German into English. She is currently applying the same method to an investigation of prediction during SI from Turkish into English. She is also interested in how syntactic re-structuring contributes towards predictive processes during SI between languages with inverse structures.

Ebru Diriker is Professor of Translation and Interpreting Studies at Boğaziçi University, Honorary Research Fellow at the University of Manchester and Course Director at York University and the University of Ottawa. She is an experienced conference interpreter and has published extensively, mainly on the sociological aspects of interpreting.

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Are Complex Sentences Harder to Translate and Interpret between Languages from Different Families?

Selim EARLS   University of Louvain, Belgium

Is translation or interpretation of complex sentences between languages from different families associated with greater production or processing difficulties than transfer between related languages? And are those difficulties proportional to the structural difference of the language pair?

This study examines the link between structural difference and the difficulty of complex sentence transfer between English and five languages from different families (Hungarian, Turkish, Arabic, Mandarin and Japanese). Specifically, it examines the link between *differences in branching directionality* and three features of production or processing difficulty: *nesting*, *reordering* and *relations between propositions*.

Nesting and the associated enlarging of phrasal combination domains have been shown to be a factor of processing difficulty. Reordering of items in recall has been shown to be a factor of production difficulty. And reproduction of relations between propositions has been identified as central to the successful transfer of meaning, so distortion of those relations is another indicator of production difficulty for the translator or interpreter.

This study analyzes a sample corpus of 20 complex sentences in two modes of language transfer: translation (the 10 most complex sentences from the European Convention on Human Rights) and simultaneous interpretation (the 10 most complex sentences each from an interpreted speech on the European Parliament website for Hungarian, a professional interpreter's Youtube channel for Turkish and the UN website for Arabic, Mandarin and Japanese).

Each language version of each sentence is parsed semantically (on a parse tree in the tradition of transformational grammar, but with each branch showing a semantic proposition). Those trees are used to illustrate and measure branching directionality and the above three features of difficulty for each sentence. The resulting values are averaged and correlated for each language pair in each mode.
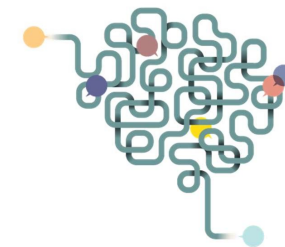
The resulting strong correlations ($r = \pm 0.9$) provide initial confirmation that translation and interpretation between languages from different families are associated with specific production and processing difficulties, and that those difficulties are proportional to the structural difference of the language pair.

This proposed contribution is part of an ongoing Ph.D. thesis, which details a method of semantic parsing as a basis for examining the above correlations with a larger corpus, in four modes of language transfer: standard translation, subtitle translation, simultaneous interpretation and Google Translate.

About the Presenters :

Selim Earls holds a B.A. in Oriental Studies from the University of Pennsylvania, an M.A. in Conference Interpretation from the University of La Laguna (Spain) and an M.A. in Interpreter Training from the University of Geneva, and is a translator and interpreter at the European Union. He is a trainer in interpretation as well as a Ph.D. student at the University of Louvain (Belgium), researching complex sentence transfer between languages from different families. He is also a member of the International Association of Conference Interpreters (AIIC).

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Primary Information Processing in English-Chinese Simultaneous Interpreting. A Corpus-Based Description Triangulated with an Eye-Tracking Experiment

Lu YUAN   East China Jiaotong University, China
Binhua WANG   University of Leeds, United Kingdom

The study intends to investigate the primary information processing in English-Chinese simultaneous interpreting. Due to time constraints, synchronicity and cognitive load in simultaneous interpreting, compression and/or omission are typical, which means the interpreter needs to focus on conveyance of primary information. As Gile (2009) found in small-scale experiments, fidelity in interpreting is achieved through retention and rendition of primary information (PI), framing information (FI) and linguistically/culturally induced information (LCII).

In the current study a pilot descriptive analysis is done based on a self-built corpus of live simultaneous interpreting of the 2020 US Presidential Debate, which indicates that the interpreters tend to follow a pattern in conveying primary information. Then an eye-tracking experiment is conducted to probe the cognitive process of primary information processing, which is also designed to triangulate with the descriptive findings.

In the experiment several professional interpreters are recruited as participants to do sight simultaneous interpreting when listening to the audio file and viewing the source text displayed on screen sentence by sentence, which is the transcription of the same speech. Gaze, fixation time and saccade data of the interest areas, which were identified as the primary information of each sentence by the researchers beforehand, will be collected and analyzed to see if participants consciously follow a pattern to extract primary information.

Previous eye-tracking studies have focused on the cognitive process of sight translation but no study has yet utilized eye-tracking to examine information processing in simultaneous interpreting. The results of the experiment in the current study are also triangulated by a descriptive study based on a corpus of live simultaneous interpreting in authentic environment, which combines the strengths of both naturalistic observational studies and experimental studies.

About the Presenters :

Lu Yuan is Lecturer in the School of Foreign Languages of East China Jiaotong University. She has got an M.A. in interpreting and translation from Queensland University in Australia.

Binhua Wang is Chair/Professor of interpreting and translation studies and Director of the Centre for Translation Studies in University of Leeds. He is also Fellow of the "Chartered Institute of Linguists" (CIOL) and an editorial board member of *Babel*, *Forum: International Journal of Interpretation and Translation* and *Chinese Translators Journal*. His research has focused on various aspects of interpreting and translation studies, in which he has published over 40 articles in refereed CSSCI/Core and SSCI/A&HCI journals such as *Meta*, *Perspectives*, *Babel*, *Interpreting and Translation Review* as well as over a dozen peer-reviewed book chapters. He has authored the monographs *Theorising Interpreting Studies* (2019) and *A Descriptive Study of Norms in Interpreting* (2013) and edited with Jeremy Munday the themed volume *Advances in Discourse Analysis of Translation and Interpreting* (Routledge, 2020).

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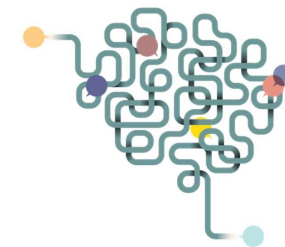
Developing Meta-Cognitive Behavior in Community Interpreting Students: Sight Translation as a Case Study

Christopher D. MELLINGER   University of North Carolina at Charlotte, USA

Translation and interpreting programs have adopted a range of pedagogical approaches in an effort to prepare students to work as professional translators and interpreters (Venuti 2017). Recent research on the employability of TI graduates illustrates the potential for tension between academic curricula and industry/professional standards and practices (e.g., Rodríguez, Sakamoto, and Berthaud 2017), yet the same work also demonstrates how closer alignment of professional requirements with coursework can be mutually beneficial. The same holds in community interpreting – interpreting curricula differ considerably in the approach and alignment with professional practices (Matthews and Ardemagni 2013; Tipton and Furmanek 2017).

In order to improve interpreter performance and develop interpreting competence, process-oriented researchers have investigated the cognitive processes, behaviors, and attitudes held by practicing translators and interpreters (e.g., Tiselius and Hild 2017) that can be applied to a process-oriented pedagogy (e.g., Massey 2017). By moving away from a focus solely on the final interpreted rendition, instructors can contextualize the act of interpreting with related skills, knowledge, and behavior, which, in turn, can help develop task awareness and problem-solving strategies that are indicative of professional behavior. This approach to pedagogy has been shown to be effective in a number of translation contexts (e.g., Angelone 2013, 2016; Mellinger 2019), and its application to community interpreting may yield considerable benefits.
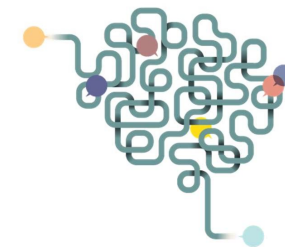
By means of a cohort study, this paper investigates the effectiveness of a process-oriented pedagogy for community interpreting to develop meta-cognitive behavior in interpreting students during the sight translation task. Whereas previous research on sight translation has examined potential visual interference (e.g., Lambert 2004; Shreve, Lacruz, and Angelone 2010) in relation to interpreter performance as well as instructor feedback (e.g., Lee 2012; Li 2018), the present study investigates whether a process-oriented pedagogy – informed by previous scholarship on expertise studies and reflective practice – can enhance student performance and change meta-cognitive behavior over time. The study draws on written retrospective protocols of interpreting students enrolled in a semester-long course to identify potential indicators of task awareness and meta-cognitive behavior and then examines their development over time. Angelone's (2010) tripartite model of problem-solving behavior is used as a framework to examine how novices approach the sight translation task, and the findings provide insight on how training can be informed by cognitively oriented research to help develop expertise.

About the Presenter :

Christopher D. Mellinger is Assistant Professor in the Department of Languages and Culture Studies at The University of North Carolina at Charlotte. Dr. Mellinger holds a Ph.D. in Translation Studies from Kent State University. He is the managing editor of the journal *Translation and Interpreting Studies*, co-author of *Quantitative Research Methods in Translation and Interpreting Studies* (Routledge), and co-editor of *Translating Texts: An Introductory Coursebook on Translation and Text Formation*. He has co-edited special issues on community interpreting and technology (*Translation and Interpreting Studies*, 2018) and on translation process research (*Translation & Interpreting*, 2015).

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Session 4:
Interpreting Skill Acquisition

Effects of Note-taking on Interpreters' Memory of Source Text:
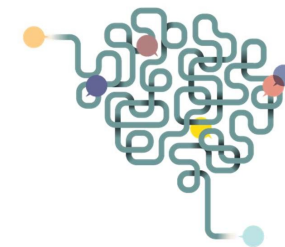A Developmental Perspective

Jinhua ZHOU   Guangdong University of Foreign Studies, China

There has been much discussion on the question of how note-taking (NT) may affect consecutive interpreters' memory of the source text, but there is little empirical data to substantiate these discussions. To fill the gap, an empirical study was conducted, addressing two research questions: (1) How does note-taking affect student interpreters' memory of the source text? (2) How does the note-taking effect (if any) develop in the course of interpreting training? To answer these two questions, an oral free recall experiment was designed to measure effects of note-taking on recall of the source text for student interpreters at three different training stages: at the beginning of interpreting training, after six-month interpreting training, after two-year interpreting training. 53 undergraduate student interpreters and 35 postgraduate student interpreters participated in the study. The recall experiment consisted of a recall task with note-taking and one without. All conditions were matched between the two recall tasks so that difference between recall performance with note-taking and that without note-taking was attributed to note-taking. The materials used in the recall tasks were developed to meet features of typical materials in a NT-needed conference interpreting task. Results showed that note-taking significantly enhanced overall recall performance and specific aspects of recall: accuracy and fluency, for students at all the three stages. However, the magnitude of note-taking effect differed among the three stages. Specifically, after one-semester training, the note-taking effect on recall fluency was significantly improved, but the note-taking effect on recall accuracy was not; after two-year training, the note-taking effect on recall accuracy improved significantly, but the effect on recall fluency did not. The findings suggest that note-taking enhanced consecutive interpreters' memory of source text and that the note-taking effect developed along interpreting training. This indicates that despite challenges posed by note-taking, note-taking exerted an overall positive effect and this positive effect was resistant to the length of interpreting training experience. Underlying mechanisms of the note-taking effect and implications on note-taking practice and training are discussed.

About the Presenters :

Jinhua Zhou is a Ph.D. in psycholinguistics and Assistant Professor at Guangdong University of Foreign Studies. She also holds a Master's degree in conference interpreting. She is interested in interpreting research using cognitive and psycholinguistic approaches. Her doctoral dissertation is about note-taking in consecutive interpreting.

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The Emergence of a Complex Language Skill:
Evidence from the Self-organization of Interpreting Competence in Interpreter Trainees

Zhibin YU   Wenzhou Medical University, China
Yanping DONG   Zhejiang University, China

Research on the development of interpreting competence could be a window to the issue of how L2 learners develop complex language skills. To date, it remains unclear how relevant cognitive abilities are mobilized and organized in interpreting training to produce the intended progress. To clarify this issue, the present study conducted a longitudinal experiment with beginning interpreting students, exploring the change of relationship between consecutive interpreting (CI) competence and two related capacities (i.e., language competence and memory capacity). Thirteen tasks were adopted at the 2nd and 10th month of CI training (Stage 1 and 2) measuring participants' L2-L1 and L1-L2 CI performances, language skills and working memory (WM) spans. There were two major results, one from correlation analysis and the other from structural equation modeling. First, Pearson correlation analyses revealed the general pattern that at the second stage of interpreting training, more cognitive abilities (language skills and WM spans) got correlated with CI performance, and that in general, cognitive abilities that were correlated with interpreting performance at a previous stage of less training were also correlated with interpreting performance at a later stage of more training (in spite of two exceptions). Second, structural equation modeling showed that a fit model of CI competence could only be established in the post-test, with WM working on CI performance via language competence (which works directly on CI performance). We may therefore conclude that the development of interpreting competence is at least partly a result of the self-organization of the interpreting competence system, in which relevant components get mobilized, and a better coordinated structure emerges. Implications for the development of complex language skills and for the concept of self-organization are discussed, and directions for future research are pointed out.

About the Presenters :

Dr. Yanping Dong got her Ph.D. degree in psycholinguistics, and is Professor of psycholinguistics in Zhejiang University. Her research concerns areas of psycholinguistics, neurolinguistics, second language acquisition and interpreting studies, with most research focusing on the psycholinguistics of bilingualism. Dr. Dong serves as president of the Chinese Association of Psycholinguistics (2011-), vice president of the Chinese Association for Comparative Studies of English and Chinese (2014-). She also serves on the board of *Bilingualism: Language and Cognition* (2011-), on the advisory board of the series of books *Bilingual Processing and Acquisition* (2014-), and a number of other journals and book series.

Dr. Zhibin Yu got his Ph.D. degree in psycholinguistics, and is Lecturer in the Foreign Language Faculty, Wenzhou Medical University. His research concerns areas of interpreting studies, especially the emergence of interpreting competence in students of interpreting training. In addition, with performance data from Chinese-English bilingual participants, he has explored language transfer and automaticity from the perspective of semantic gender information processing in personal pronouns.

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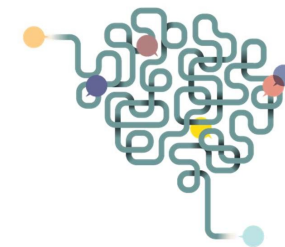
Computer-Aided Interpreting in the Consecutive Mode:
A Practical Training Proposal

Sijia CHEN   Southwest University, China

The development in the field of interpreting has long been accompanied by technological advancements. Training on computer-aided interpreting (CAI) could not only better prepare students for the interpreting profession in the Information Age, but also contribute to continued professional development for practising interpreters who are looking to expand their skill set. This study introduces a practical proposal for training on computer-aided interpreting (CAI) in the consecutive mode featuring speech recognition (SR) and machine translation (MT).

First, the CAI consecutive mode is presented, described and compared to the conventional mode. In the new CI mode, note-taking is replaced by respeaking and note-reading is replaced by reading of the SR source text and its MT results (Figure 1). In phase I of the new mode, the interpreter listens to the source speech, respeaks it into an SR software, which automatically creates a transcript of the speech and inputs it into an MT software for translation. In phase II of the new mode, the interpreter produces a target speech with the help of the source transcript and the MT results.

Figure 1 The new technology-assisted CI mode

Second, a proposal for training students to perform the new CI mode through a combination of online and offline training is put forward. Six students participated in the training which lasted ten weeks. The participants were English majors who were enrolled in a Bachelor of Arts program at a university in China. The online training was carried out alongside their interpreting course. A full account is given of the instructional design, skills required for the new mode, and the assessment.

Third, some preliminary results of a pilot study on the CAI consecutive mode are presented. Data were collected on both the process and product while the trainees performed the conventional and the CAI consecutive modes. Comparisons are made between the two modes in terms of processing (with a special focus on cognitive load) and product (with a special focus on information completeness, fluency of delivery, and target language quality).

About the Presenter :

Sijia Chen is Associate Professor in the College of Internationals Studies at Southwest University and an Honorary Research Fellow at Macquarie University. She is interested in cross-disciplinary research on cognitive processes in translation and interpreting, using a combination of methods such as pen recording, eye tracking, psychometrics, and think-aloud protocols.

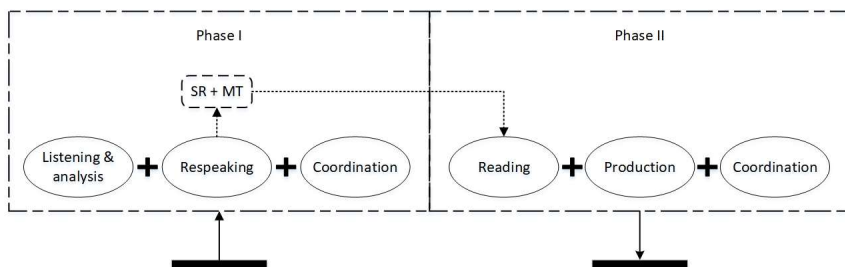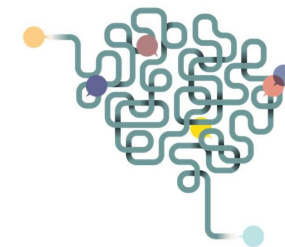**Email**: sijia.rachel.chen@gmail.com

Session 5:
Cognitive Considerations in Machine-Aided Interpreting

Cognitive Load in ASR-Aided Interpreting: A Look at Pauses and EVS

Bianca PRANDI   Johannes-Gutenberg Universität Mainz, Germany

The penetration of information technologies into the interpreting profession has reached an unprecedented speed in recent years, in particular due to advances in artificial intelligence. This is true both for technologies mediating the provision of interpreting services, such as RSI platforms, for computer-assisted interpreting (CAI) tools, and for speech translation, or machine interpreting, a technology often seen as a threat to the very livelihood of interpreters. One of the main components of machine interpreting, automatic speech recognition (ASR), has however already been integrated into CAI tools to provide live support to interpreters in processing typical problem triggers such as numbers, specialized terminology, and named entities.

Several recent studies have explored the performance of ASR support tools for interpreters, in particular in terms of the precision of number recognition by said tools and the quality of renditions by interpreters. Currently, the most widespread approach to the investigation of (simultaneous) interpreting with technology support is thus product-based.

In order to evaluate the effects of online support provided by AI-enhanced CAI tools on the cognitive processes involved in SI, we propose to expand the analysis by adopting a mixed-method approach triangulating product-based measures and process-based data.
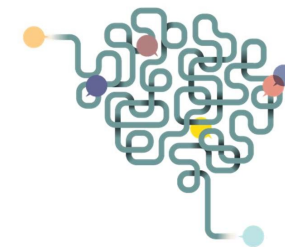
In our presentation, we will describe the experimental setup of our empirical investigation, which involved a training phase and the collection of both product and process data to compare an ASR-enhanced CAI tool with traditional digital glossaries and CAI tools. In particular, we will discuss how data was collected and prepared, highlighting methodological challenges in the hope of promoting a fruitful discussion on experimental designs in this relatively new field of interpreting research. We will present the evaluation of terminological quality and triangulate it with an analysis of the ear-voice-span (EVS) of trainee interpreters for the three conditions (traditional glossary, CAI tool, ASR tool), as well as an exploration of pause lengths between sentence clusters interpreted by test subjects. Finally, we will address whether ASR-enhanced CAI tools can provide an advantage to conference interpreters, both in terms of terminological quality and in terms of mental effort, as indicated by pause length and EVS measures, in the hope to inform the development of AI-enhanced live support tools for interpreters.

About the Presenters :

Bianca Prandi is a research associate at the University of Mainz (Germersheim campus), where she will collaborate on the research project on speech translation M.INTerpreting until March 2021. She holds an M.A. in Interpreting from the University of Bologna/Forlì and is currently a Ph.D. candidate at the University of Mainz/Germersheim. Her research focuses on the impact of computer-assisted interpreting (CAI) tools on terminological quality and cognitive processes in simultaneous interpreting. Her research interests include artificial intelligence, technology applied to interpreting, terminology management for interpreters, and cognition. She regularly provides training on CAI.

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Session 6:
Cognitive Workload in Interpreting

An Eye-Movement Analysis of Visual Attention, Cognitive Load, and Interpreting Performance during Consecutive and Simultaneous Interpreting Modes in a Remotely Interpreted Investigative Interview

Stephen DOHERTY   The University of New South Wales, Australia
Sandra HALE   The University of New South Wales, Australia
Natalie MARTSCHUK   Charles Sturt University, Australia
Jane GOODMAN-DELAHUNTY   Charles Sturt University, Australia

Recent technological advances have facilitated remote interpreting in which the interpreter is not physically present at the same location as the other speakers. This form of interpreting is increasingly employed worldwide in a variety of contexts, including legal, due to its potential to reduce the time and cost. Distance is particularly problematic for certain language pairs and interpreting specializations where the availability of qualified interpreters is limited. The events of 2020 have also brought the topic of remote interpreting to the fore and to significant local, national, and international attention, where the impact of COVID-19 may indeed make long-term changes to the provision of interpreting services. However, there remains limited empirical research into videolink remote interpreting to inform best practice, particularly, the optimal mode(s) of remote interpreting and the consequent cognitive processing of this complex multimodal language input. This study provides insight into this topic by using eye tracking to examine visual attention and cognitive load (indexed by pupil dilation and blink rate) in consecutive versus simultaneous interpreting modes in a remote setting in which an English-speaking police interviewer interacts with a non-English-speaking Suspect in person, for whom interpretation is provided in real time. We compared eye-movement data from 50 professionally accredited interpreters who interpreted via audio- or video-link where consecutive and simultaneous interpreting modes were counterbalanced and randomly assigned. Taking interpreting performance into account, our results showed that, the consecutive mode yielded significantly less gaze time and therefore significantly less on-screen visual attention due to off-screen notetaking, an essential component of this interpreting mode. Relative to gaze time, the consecutive mode resulted in significantly more and longer fixations and shifts between parties. Participants in both modes allocated significantly more visual attention to the Interviewer than the Suspect. Further, the consecutive mode yielded significantly higher pupil dilation and blink rate, indicative of greater cognitive load. We also found consistent correlations between eye tracking measures and interpreting performance as measured by accuracy, verbal rapport, and management. Finally, no significant differences emerged between audio and video conditions, or between the three language pairs tested: English<>Arabic, English<>Chinese, and English<>Spanish. We conclude with a discussion of the contributions and limitations of the current study and outline future work on this topic.
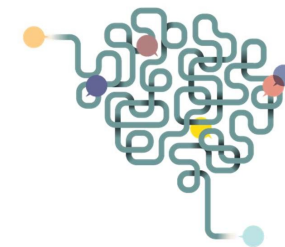
About the Presenters :

Dr. Stephen Doherty is Associate Professor in Linguistics, Interpreting, and Translation at the University of New South Wales, Sydney, Australia. With a focus on the psychology of language and technology, his research investigates human and machine language processing using natural language processing techniques and combinations of online and offline methods, mainly eye tracking and psychometrics. He is the author of *Eye Tracking in Translation* (Routledge) and co-editor of *Translation Quality Assessment* (Springer).

Dr. Sandra Hale is Professor of Interpreting and Translation at the University of New South Wales, Sydney, Australia. She is the sole author of the monographs: *The Discourse of Court Interpreting* (John Benjamins) and *Community Interpreting* (Palgrave Macmillan) and co-author of *Research Methods in Interpreting* (Bloomsbury).

Dr. Natalie Martschuk is Research Associate at School of Psychology, Charles Sturt University Australia. She has research expertise in conducting systematic reviews and meta-analyses (leading author of *Memory for faces in old age: A meta-analysis*) and producing quantitative outcomes from qualitative data.

Dr. Jane Goodman-Delahunty is Research Professor at Charles Sturt University and member of the NSW Civil and Administrative Tribunal. Her recent books include *Legal psychology in Australia* (2015, Thomson Reuters), *Juries and expert evidence in criminal trials* (2016, Oxford University Press), and *Trends in legal advocacy: Interviews with leading prosecutors and defence lawyers around the globe* (2017, Taylor & Francis).

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English as a Lingua Franca-Induced Effects on Cognitive Load and Interpreting

Michaela ALBL-MIKASA   Zurich University of Applied Sciences, Switzerland
Anne Catherine GIESHOFF Zurich University of Applied Sciences, Switzerland

Over the last decades, English has become the unchallenged lingua franca at international gatherings. English as a lingua franca (ELF) is not without consequences for interpreters in that they increasingly face the difficult task of having to interpret non-native speakers. Much of the ELF-related research in interpreting studies has so far focused on non-native accented speech. Current surveys among interpreters suggest, however, that accent is not the only difficulty. Instead, it seems that non-native speeches are characterized by a wide range of phenomena such as lack of cohesion and unclear argumentation, lexical and grammatical irregularities, increased explicitness and signs of processing, all of which may contribute to adding to the interpreters' cognitive burden. In the SNSF-funded CLINT-project, we are currently addressing this research gap.

Ongoing data collection allows us to look at the simultaneous English to German interpretations of 20 professional interpreters for the investigation of the effect of ELF on interpreting. The authentic source speech delivered at a conference on energy-related matters was produced by a non-native English speaker.   It was recorded, transcribed and re-spoken by a Canadian native speaker to control for accent. In-depth analysis confirmed that it contained a considerable number of phenomena typical of ELF-speeches, which may affect interpreters' cognitive load. Interpreters were also presented with a second version of the same speech which was edited to comply with standard British English. Ten participants interpreted the original ELF-version of the speech, the other ten participants interpreted the edited version of the same speech.

Based on the assumption of higher cognitive load involved in interpreting an ELF speech, we expected to find an overall lower interpreting quality as well as an effect of fatigue, reflected in an earlier decline in interpreting quality. Interpreting quality is a multifaceted concept, a major aspect of which is accuracy or, more precisely, completeness and sense consistency with the source text. At the HKBU Conference we propose to present a promising method for the quantitative assessment of sense consistency and completeness of a target text over time.
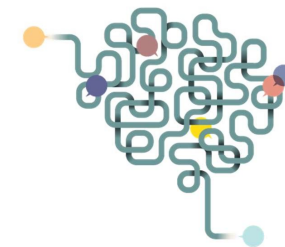
The newly designed method has been used on the first set of data, or first 20 interpretations, procured as part of the above-mentioned project.

About the Presenters :

Michaela Albl-Mikasa is Professor of Interpreting Studies at Zurich University of Applied Sciences. Her research and publications focus on ITELF (interpreting, translation and English as a lingua franca), the cognitive foundations of conference and community interpreting, the development of interpreting expertise, and medical interpreting. She is principal investigator of the SNSF Sinergia project C*ognitive Load in Interpreting and Translation* (CLINT).

Anne Catherine Gieshoff holds a Ph.D. in interpreting studies and a post-doc position in the interdisciplinary SNSF Synergia project *CLINT – Cognitive load in Interpreting and Translating*, where she has been collecting first-hand experience in employing quantitative and psychophysiological methods. Her research focuses on cognitive load and visual input in interpreting.

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Let the Eyes Do the Talking – A Study on Trainee Interpreters'
Cognitive Load during Notetaking in Consecutive Interpreting
Using Gaze Aversion (GA) Paradigm

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Cognitive psychologists report that when answering difficult questions, people would look away from the interlocutor. This behaviour, Gaze Aversion (GA), is found to indicate thinking and enhance cognitive performances by facilitating individuals to shut down from the distractions and thereby channelling more mental resources to the task. GA, therefore, could suggest high cognitive loads (Glenburg, Schroeder, Robertson, 1998; Doherty-Sneddon and Phelps, 2005).

Sixteen trainee interpreters from the T&I programme in Newcastle University participated in an experiment dedicated to investigating interpreters' GAs during notetaking in Consecutive Interpreting (English>Chinese). The materials are two English speeches, A and B, each of which contains two chunks with each chunk lasting 3.5 minutes and covering 489 words. Speech A (easy) contains only simple sentences and common words. Speech B (difficult) contains an equal proportion of simple sentences with Low-Frequency Words (LFWs), complex sentences with LFWs, and complex sentences with common words. Participants were primed with a full list of LFWs from each chunk in Speech B, but one list is presented longer than the other. All participants interpreted both speeches in a counterbalanced order. Participants were instructed to use Livescribe Echo Smartpens to produce live notes and record their faces during the experiment. The study specifically aims to a) test if GA is associated with high speech difficulty defined by LFWs or by challenging syntactic complexity or by both; and b) explore the role of priming in modulating note-taking efforts and affecting cognitive load.

Both qualitative and quantitative data analyses are being conducted. Currently, granule data show that i) GAs obtained under the difficult speech are significantly more and longer than those under the easy speech; ii) participants tend to avert gazes more often when they are more familiar with the LFWs; iii) no GAs are obtained from some participants whose performances are noticeably inferior to their counterparts. Data analyses in the next stage will focus on 1) scoring for completeness and accuracy for both source speeches, which will indicate if GAs could enhance performance; 2) combining GAs with live notes to study what precedes each GA; 3) quantitatively analysing (t test) data to find correlations across different conditions.

About the Presenters :

I began to work as a freelance interpreter and translator in mid-2013 in mainland China. My experience as an interpreter and translator has been enriched over the years of freelancing. In 2016, I obtained my Master's in Interpreting from Newcastle University. Intrigued by the cognitive process in interpreters' "black box", in 2017, I returned to Newcastle University to pursue an NUORS award-winning Ph.D. project. 2021 will be the fourth and final year of the project. I am pleased and honoured to be able to share the methods and findings with colleagues around the world.

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About the Centre for Translation, Hong Kong Baptist University
https://ctn.hkbu.edu.hk

The Centre for Translation was established in 1994 as a University-wide research unit. Committed both to academic research and to fostering links with the translation profession and the community, the Centre aims to provide a focal point for research in Translation and Interpreting Studies and to promote knowledge transfer through a variety of consultancy projects.

The Centre's research activities include academic publishing, seminars and conferences, as well as research projects of its Fellows. Since its establishment, the Centre has published a series of monographs in collaboration with different publishers and was awarded funding from the Hong Kong Arts Development Council to co-publish "Jane Lai Drama Translation Series", a total of 21 play scripts translated into Cantonese by Professor Jane Lai. Centre Research Fellows have a strong record of research grant success and have pursued research projects under the auspices of the Centre, covering areas such as Chinese and Western translation theories, museum translation, translation of *Materia Medica*, legal translation, interpreting, literary translation, and drama translation.

In 2001, the "Translation Seminar Series", online since 2020, was launched to provide a platform to facilitate a dialogue among scholars. Nearly 190 seminars have been organized with over 140 speakers, including Basil Hatim, Kirsten Malmkjaer, Mona Baker, Theo Hermans, Douglas Robinson, José Lambert, Antony Pym, Daniel Gile, Arnt Lykke Jakobsen and Franz Pöchhacker, to name only a few. Throughout the years, the Centre has also held many research summer schools and international conferences, such as the 2018 IATIS Conference.

The Centre is also dedicated to the translation profession and works in synergy with the Department of Translation, Interpreting and Intercultural Studies to offer students valuable experience in professional translation. The Centre has involved students in large scale translation projects, including the Chinese translation of *The Oxford Children's Encyclopedia*.

The Centre has actively engaged in public service, consultancy and collaborative work with the community to provide translation and editing services. The Centre served as partner to various local cultural events, such as the Hong Kong International Poetry Festival, "Eye on Hong Kong", Asian Cultural Co-operation Forum, the Mediterranean Arts Festival, the Hong Kong Photo Festival, and the "Hong Kong Memory" website.

For recent updates on the Centre's activities, please visit the Centre Website.

About the Department of Translation, Interpreting and Intercultural Studies, Hong Kong Baptist University
https://tiis.hkbu.edu.hk *(to be launched soon)*

The Department of Translation, Interpreting and Intercultural Studies was established in 1990 as the "Translation Programme" and was granted full departmental status in September 2019.

Since its inception, the Department has offered a B.A. (Hons.) in Translation and an M.Phil./Ph.D. postgraduate research programme in the field of translation studies. It also launched a self-funded taught M.A. Programme in Translation and Bilingual Communication in 2008, adding an Interpreting Stream in 2016 and a Technology Stream in 2021.

The Department's curriculum is designed to train bilingual and bicultural communicators to operate in local, national and international markets in the 21st century. The Department closely follows Hong Kong Baptist University's general mission of "commitment to academic excellence in teaching, research and service", and to the development of "whole person" education. More specifically, it is committed to providing professional training in translation and interpreting through a liberal arts university education.

The Department currently has eleven academic staff, whose research interests include, amongst others, translation and the Web, literary translation, interpreting, and minority regional languages and cultures such as Tibetan. Teachers of the Department share with students their expertise in academic research, their experience in frontline fieldwork in interlingual and intercultural communication, and their pedagogic vision. Students are thus prepared to meet the cultural, socio-political and economic needs of the local community, as well as those of a rapidly developing China.