Abstracts
of the Psychonomic Society

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60TH ANNUAL MEETING

**Palais des congrès de Montréal (Montréal Convention Centre), Québec, Canada
Thursday, November 14-Sunday, November 17, 2019**

REGISTRATION

Level 5 Foyer
Wednesday, November 13 .. 4:00 p.m.-8:00 p.m.
Thursday, November 14........ 7:30 a.m.-8:30 p.m.
Friday, November 15............. 7:30 a.m.-6:00 p.m.
Saturday, November 16........ 7:30 a.m.-5:00 p.m.
Sunday, November 17 .... 7:30 a.m.-12:00 p.m.

OPENING SESSION/KEYNOTE ADDRESS

Room 517D, Level 5
Thursday, November 14........ 7:30 p.m.-8:30 p.m.
- Bilingualism Reveals the Networks that Shape the Mind and Brain
  Judith Kroll, *University of California, Irvine*

OPENING RECEPTION

Room 517B, Level 5
Thursday, November 14.. Immediately Following Keynote Address

SYMPOSIA

Room 517D, Level 5
Friday, November 15, 10:00 a.m.-12:00 p.m.
Symposium I: What Memory Quirks, Hiccups, and Odd Phenomena Tell Us

Room 517D, Level 5
Friday, November 15, 1:30 p.m.-3:30 p.m.
Symposium II: Re-organizing our Understanding of Semantic and Episodic Memory

Room 517D, Level 5
Saturday, November 16, 10:00 a.m.-12:00 p.m.
Symposium III: Seeking Explicit Cognitive Processes in Animals

Room 517D, Level 5
Saturday, November 16, 1:30 p.m.-3:30 p.m.
Symposium IV: Beyond a Single Participant: Interactive Social Cognition in Dyads and Groups

POSTER SESSIONS

Room 517B, Level 5
Session I
    Thursday, November 14........ 6:00 p.m.-7:30 p.m.
Session II
    Friday, November 15........... 12:00 p.m.-1:30 p.m.
Session III
    Friday, November 15............. 6:00 p.m.-7:30 p.m.
Session IV
    Saturday, November 16...... 12:00 p.m.-1:30 p.m.
Session V
    Saturday, November 16........ 6:00 p.m.-7:30 p.m.

BUSINESS, AWARDS, AND HAPPY 60TH BIRTHDAY CHAMPAGNE CELEBRATION

Room 524A, Level 5
    Saturday, November 16........ 5:10 p.m.-6:30 p.m.
- Presentation of all Psychonomic Society Awards
- Business of the Psychonomic Society

60TH ANNIVERSARY CELEBRATION

Level 5 Foyer
    Saturday, November 16........ 6:30 p.m.-7:30 p.m.

FUTURE MEETINGS

2020 – Austin, TX – November 19-22

2021 – San Diego, CA – November 18-21

2022 – Washington, DC – November 17-20

2023 – San Francisco, CA – November 16-19

2024 – New York City, NY – November 21-24

2025 – Denver, CO – November 20-23

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or command, were used. The results also showed that the patterns of task execution were different when different forms of instructions were used. When instructions were in the forms of request or command, participants' task execution patterns follow a traditional theory. On the other hand, when other expressions were used, participants tended to carry out the task without sharing what they performed or completed with others.
Email: Yoshiko Kawabata, ykawabat@gmail.com

6:00-7:30 PM (3118)
How Do You Measure a Neighborhood? Exploring How Multiple Measures of Phonological Network Structure Jointly Relate to Lexical Processing. MATTHEW T. CARLSON, *Pennsylvania State University*, VICTORIA GERTEL, *Pennsylvania State University*, DOMINICK DIMERCURIO, MICHELE T. DIAZ, and CHALEECE W. SANDBERG, *Pennsylvania State University* (Presented by Matthew Carlson) – Lexical access exhibits well-known local phonological neighbor effects, and specific measures of the interconnectivity among neighborhoods have also been found. However, a comprehensive view of how processing reflects this global connectivity implies the joint influence of many interrelated measures of neighborhood organization. Therefore, using 20,930 words from the English Lexicon Project, we analyzed the joint effects of nine network-theoretic measures (e.g. degree, centrality), together with three lexical properties (e.g., frequency), on response times. In a partial least squares regression, three components sufficiently captured the systematicity in the data ($R^2_{lexical-decision}$ = .44, R^2_{naming} = .34). All predictors loaded similarly on the first two, with the third revealing some differentiation among the network measures. Decision tree analysis yielded similar results—frequency was the strongest predictor, and network measures became important after controlling for lexical properties. This more comprehensive approach helps focus theoretical accounts of the phonological organization of the mental lexicon.
Email: Matthew T. Carlson, mtc173@psu.edu

6:00-7:30 PM (3119)
Native Speakers Show Semantically Based Generalization During Processing of Novel Phrases: Evidence from Judgements and Brain Potentials. MANUEL F. PULIDO and PAOLA E. DUSSIAS, *Pennsylvania State University* (Sponsored by Paola Dussias) – Native speakers innovate and are able to understand non-conventional input produced by others, but it is not clear what mechanisms allow for comprehension of novelty. To investigate whether, and how, semantic relatedness facilitates comprehension of novel Verb-Noun phrases, we recorded ERPs while participants provided a judgement task. Twenty native Spanish speakers completed an acceptability judgement task containing conventionalized phrases (e.g., "dirigir un negocio" 'manage a business'), non-conventional phrases containing the same verbs and semantically related nouns ("dirigir un bazar" 'manage a bazaar') and frequency-matched controls containing the same verbs re-paired with semantically unrelated nouns ("reconocer un bazar" 'recognize a bazaar', "dirigir los días" 'manage the days'). Results showed that semantic relatedness with the nouns of conventional phrases was correlated with acceptability (r_s=0.51, p<0.0001). ERPs revealed (1) an attenuated N400 for conventional phrases relative to all novel phrases; (2) a negativity 500-700ms in novel-unrelated relative to novel-related phrases.
Email: Manuel F. Pulido, mpulido@psu.edu

6:00-7:30 PM (3120)
The Effect of Semantic Priming on Morphological Segmentation of Compounds. ALEXANDER TAIKH, CHRISTINA L. GAGNÉ, and THOMAS L. SPALDING, *University of Alberta* – In two experiments, we examine whether automatic morphological segmentation occurs when processing compound words. In Experiment 1, we report a transposition-letter priming effect, where interfering with the morpheme boundary by replacing rather than transposing letters of a compound masked prime slows down the recognition of its first morpheme target. Thus, altering the morphemic boundary slows down recognition of the compound by interfering with morphological decomposition. In Experiment 2, we examined whether facilitating early access to the lexical representation of the compound could facilitate its segmentation. A visible semantic prime related (vs. unrelated) to the compound preceded the compound masked prime and the first morpheme target (*flag - highlight - high)* in a lexical decision task. Importantly, the first morpheme did not retain the meaning of the compound. The related semantic primes reduced the transposition-letter effect, suggesting that facilitating lexical access to a compound facilitates its morphological segmentation.
Email: Alexander Taikh, taikh@ualberta.ca

6:00-7:30 PM (3121)
Semantic Dynamics and Sense Uncertainty Effects – Predictive Power and Limitations of the Ssd Model. KSENIJA MISIC and DUŠICA FILIPOVIĆ ĐURĐEVIĆ, *University of Belgrade* (Sponsored by Gareth Gaskell) – The Semantic Settling Dynamics (SSD) model was proposed to account for the large body of inconsistent findings on processing of lexical ambiguity (Armstrong & Plaut, 2016). However, the evaluation of this model is still at its roots. We focused on polysemes (words with multiple related senses) and tested the prediction that an increase in time spent in processing would be followed by a decrease in polysemy advantage in a lexical decision task (LDT). We described polysemy by using a continuous measure of sense uncertainty (entropy) and focused on the slope of entropy effect in relation to the time spent in processing. In the standard visual LDT (baseline) we replicated the finding that polysemous words with higher entropy (high number of balanced senses) were processed faster (Filipović Đurđević, 2007). An attempt to prolong the processing by reducing the contrast between the stimuli and the background did not affect the time spent in processing, but neither did it affect the slope of the entropy effect. Finally, presenting the same stimuli in auditory LDT prolonged the processing and cancelled out the entropy effect. Our results speak in favor of the SSD model, but also point to certain limitations which we will discuss in detail.
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