# Stem-, Spraak- en Taalpathologie

# 20th International Science of Aphasia Conference: Abstracts

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# Science of Aphasia XX Rome, September 23-26, 2019

# The temporal lobe revisited: Neural and Functional updates

# **PROGRAM**

# Monday 23 September

9.00 –12.00 Invited talks: **Anatomical and functional overview** 

Marco Catani (NatBrainLab, King's College, London, UK)

David Poeppel (Max-Planck-Institut fur empirische Aesthetik, Frankfurt, Germany)

12.00 –13.00 Lunch

13.00 - 15.00 Oral presentations 1

- 1. **Joanna Sierpowska**, Katherine L. Bryant, Manon Römkens, Margot Mangnus, Nikki Janssen, Roy Kessels, Ardi Roelofs, Rogier Mars & Vitoria Piai The functional neuroanatomy of the left temporal lobe white matter —an interdisciplinary approach based on intraoperative and comparative studies
- 2. **Jun Soo Noh**, Sekwang Lee, Yoonhye Na, Minjae Cho, Yu Mi Hwang, Woo-Suk Tae & Sung-Bom Pyun The Role of Arcuate Fasciculus on Severity of Language Impairments in Subcortical Stroke Patients
- 3. Ileana Camerino, Joanna Sierpowska, Nathalie Meyer, Anil Tuladhar, Roy Kessels, Frank-Erik de Leeuw & Vitória Piai White-matter bottleneck in small vessel disease: A lesion-symptom mapping study of executive-language functions
- 4. Elissa Asp, Antoine Tremblay, Graham Flick & Aaron Newman CForests in the trees: Using conditional inference random forests on MEG data to explore 'what fires together' in a picture naming task
- Wei Ping Sze, Jane Warren, Solène Hameau & Wendy Best What are the active ingredients in anomia therapy? A random forest analysis of anomia research from 2009-2018
- 6. **Edith Durand**, Pierre Berroir & Ana Inés Ansaldo Neural substrates associated with the recovery of verb anomia: the role of sensorimotor strategies in the improvement of naming abilities in aphasia
- 7. **Sonia Montemurro**, Gonia Jarema & Sara Mondini Lexical Frequency, Lexical Semantics in interaction with Cognitive Reserve in healthy older adults

15.00 - 15.30	Coffee
15.30 -16.15	Flash presentations poster session 1
16:15 -17.00	Poster session 1

- 1. M. De Martino, A. Mancuso, A. G. Russo, A. Elia, F. Di Salle, R. Saponiero, S. Vietri, F. Esposito & A. Laudanna Inflecting regular and irregular verbs: neuroimaging and behavioural data from the three Italian conjugations
- 2. **Johémie Boucher**, Karine Marcotte, Amélie Brisebois, Marianne Désilets-Barnabé, Alberto Osa García, Elizabeth Rochon, Carol Leonard, Alex Desautels, Simona Brambati Confrontation-naming and connected speech production in early post-stroke aphasia
- 3. Martina Garzon, Federica Biddau, Giorgio Arcara, Francesca Meneghello, Daniela D'Imperio, Giulia Bencini Investigating the potential of structural priming as a form of constraint-induced language therapy in post-stroke aphasia
- 4. Nour Ezzeddine & Barbara Köpke Adaptation of the Bilingual Aphasia Test to Lebanese Arabic
- 5. **Hüsnünur Aslantürk**, Nurten Tiryaki & Bülent Toğram The Experiences of Aphasia Caregivers In Turkey
- 6. Bülent Toğram Public Awareness of Aphasia in Turkey
- 7. Svetlana Malyutina, Yulia Akinina & Valeriya Zelenkova The subject-object-verb word order as a self-cueing strategy in aphasia: An exploratory study
- 8. **Giulia Krethlow**, Grégoire Python & Marina Laganaro Differences in semantic priming during lifespan and in aphasia
- 9. Brisotto, C., Biddau, F. & **Nordio, S.** Speech and language therapy for acquired dysgraphia in neurological patients: a systematic review
- 10. **Sabrina Beber**, Rita Capasso & Gabriele Miceli Neurofunctional correlates of auditory and visual sentence comprehension: Evidence from aphasia
- 11. Lucy Dipper, Madeline Cruice, Jane Marshall, Nicola Botting, Mary Boyle, Deborah Hersh & Madeleine Pritchard Characterising the Nature of Discourse Treatment in Aphasia Rehabilitation Research
- 12. **Ingrid Aichert**, Katharina Lehner, Simone Falk, Mona Späth, Mona Franke & Wolfram Ziegler In Time with the Beat: Entrainment in Patients with Phonological Impairment, Apraxia of speech and Parkinson's disease
- 13. Svetlana Kuptsova, Anastasia Ulicheva, Olga Dragoy & Maria Ivanova Impairment of switching attention in patients with fluent aphasia and temporal lobe damage
- 14. Elissa-Marie Cocquyt, Patrick Santens, Pieter van Mierlo, Wouter Duyck, Arnaud Szmalec & Miet De Letter Age-related differences in auditory semantic priming: the development of normative electrophysiological data in the Dutch population

# Tuesday 24 September

9.00 –12.00 Invited talks: Auditory and music perception

Isabelle Peretz (University of Montréal, Canada)

Gabriele Miceli (CIMeC, University of Trento, and Centro Interdisciplinare Linceo, Rome)

12.00 - 13.00 Lunch

13.00-14.15 Oral presentations 2

- 1. Olga Dragoy, Ekaterina Stupina, Andrey Zyryanov, Marina Chernova, Elizaveta Gordeyeva, Natalya Gronskaya, Galina Gunenko, Sergey Chernov, Dmitry Kopachev, Igor Medyanik, Nikita Pedyash, Igor Pronin, Andrey Sitnikov, Konstantin Yashin, Andrey Zuev 'A moderate global aphasia': the pattern of language deficits in acute post-surgical tumor patients
- 2. Karine Marcotte, Alberto Osa, Johémie Boucher, Bérengère Houzé, Christophe Bedetti, Amélie Brisebois, Alex Desautels & Simona Maria Brambati Right-hemisphere density reduction in acute post-stroke aphasia
- 3. Olga Buivolova, Oxana Vinter, Roelien Bastiaanse & Olga Dragoy Validation of the Aphasia Rapid Test in the Russian-speaking post-stroke population
- 4. **Yulia Akinina**, Olga Buivolova, Olga Soloukhina & Roelien Bastiaanse Psychometric Properties of the Token Test App
- 5. **C. Jacquemot**, C. Schramm, L. Lemoine, K. Youssof & AC. Bachoud-Lévi Coupling language and executive functions for premanifest and early Huntington's Disease follow up

14:15-14:45 Coffee 14:45-15:30 Flash presentations poster session 2 15:30-16-30 Poster session 2

- 1. Svetlana Averina, Olga Dragoy & Roelien Bastiaanse The role of the white matter pathways in spontaneous speech in aphasia
- 2. **Brianne Chiappetta**, Matthew Walenski, Elena Barbieri, Aniruddh Patel & Cynthia Thompson Musical and linguistic syntactic processing in agrammatic aphasia: An ERP study
- 3. **Cristina Rosazza**, Maria Gazzotti, Paolo Urso, Valentina Impagnatiello, Cinzia Crivellaro & Valeria Isella Brain metabolic correlates of errors on picture naming in Alzheimer's Disease
- 4. **Ikram Methqal** & Yves Joanette When Trade-Offs in NeuroCognitive Resources Determine Word Production Efficiency in Aging
- 5. **Liyana Low**, Susan Rickard Liow, Melvin Yap, Tng Siok Keng & Rebecca Heywood Written Language in Mandarin-dominant Older Adults with Hearing Loss
- 6. Roelant Ossewaarde, Roel Jonkers & Roelien Bastiaanse Determining the ideal length of spontaneous speech fragments for predictive analysis
- 7. **Xabi Ansorena**, Mireia Hernández, Manuel Carreiras, José Ignacio Quemada & Simona Mancini Short Term Memory and sentence processing in deep dysphasia

# The investigation of paraphasias in speakers with fluent and non-fluent aphasia

Mile Vuković & Irena Vuković

University of Belgrade - Faculty of Special Education and Rehabilitation, Serbia Veljko Ramadanovic School for Visually Impaired Students, Zemun-Belgrade, Serbia

# Introduction

A paraphasia is a symptom of aphasia in which an intended or targeted word is substituted for an incorrect word. Praphasias are produced unintentionally and are more typical for patients whose speech is uttered fluently. The major types of paraphasia are the phonemic, verbal, and neologistic. This study examines the occurrence and types of paraphasias in speakers with fluent and non-fluent aphasia. In addition, we wanted to explore the influence of language tasks on occurrence of paraphasia.

# Methods

A total of 30 patients (15 with fluent and 15 with nonfluent aphasia), aged 55-73 participated in this study. All patients were right-handed, with a single left hemisphere CVA. The diagnsois and type of aphasia was done by Boston Diagnostic Aphasia Examination (Goodglas and Kaplan, 1983). For the analysis of paraphasia the following subtest from the BDAE were used: The Cookie theft picture, Repetition of words, Responsive naming, Visual Confrontation naming, as well as Boston naming test (Kaplan et al., 1983).

# Results

The resuls have showen that both group of patients produce paraphasic errorrs during all kind of language tasks. Howevere, paraphasias are significantly more appeared in patients with fluent aphasia than in patients with nonfluent aphasia. Both group of speakers (fluent and non-fluent) had more phonemic praphasias than verbal and neologistic. Language task has significant impact on the frequency of paraphasias: the paraphasias were more appeared during confrontation naming and repetition than during expository speech.

# Discussion

We could hypothesize that an impairment in lexical and phonological processing contributes to the occurrence of paraphasia in fluent and in nonfluent aphasia. The analysis of paraphasia in aphasic patients can provide additional information in understanding the nature of word production deficits and can assist in patient management.

# Acknowledgment

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### References

- Laganaro, M. & Zimmermann, C. (2010). Origin of phoneme substitution and phoneme movement errors in aphasia. Language and Cognitive Processes, 25, 1, 1-37.
- Schwartz, F.M., Dell, S.G., Martin, N., Gahl, S., Sobel, P. (2006). A case-series test of the interactive two-step model of lexical access: Evidence from picture naming. *Journal of Memory and Language* 54, 228–264.
- Schwartz, F. M. (2015). Theoretical analysis of word production deficits in adult aphasia. *Phil. Trans. R. Soc. B* 369: 20120390. http://dx.doi.org/10.1098/rstb.2012.0390.