

# Special Issue: “Cognitive Science in Moscow” 2019 Conference

The autumn issue of the Russian Journal of Cognitive Science is focused on work presented at the fifth “Cognitive Science in Moscow: New Research” conference that took place on June 19, 2019. “Cognitive Science in Moscow” is a biennial one-day event held in Moscow that brings together participants from all over Russia. This time, the Russian Journal of Cognitive Science was one of the official conference co-organizers, inviting authors of those conference papers highly rated by the program committee to submit their research to the special issue in English. Hereby we continue the series of special issues dedicated to the third (2015) and fourth (2017) conferences.

The present issue includes several works featuring experimental-psychological approaches to perception, memory, thinking and speech.

“Eye Movement Strategies in Facial Expression Recognition are Not Related to the Strength of Inversion and Thatcherization Effects” by Elizaveta Luniakova and Jahan Gani-zada details a study aimed at uncovering mechanisms of the visual perception of emotional facial expressions. The inversion effect refers to the decreasing accuracy of face identification and facial expression recognition when observers look at vertically inverted (i.e., upside down) faces. The famous Thatcher illusion is named after Margaret Thatcher, whose photograph was used in the original design. When looking at an upside down face, an observer is unlikely to notice anything strange despite the fact that some facial features (eyes and mouth) are presented in upright position and therefore do not match a holistic facial pattern. Luniakova and Gani-zada looked for correspondence between the strength of inversion and thatcherization effects on the one hand and eye movement strategies on the other hand while participants viewed regular, inverted and thatcherized face images. Such correspondence would be indicative of eye movement correlates of the holistic vs. analytic modes of face processing.

Research by Maria Zherdeva, Tatyana Kotova and Alexey Kotov titled “Nameability of Spatial Locations and Category Learning in Children” also uses methods of psychophysics, but addresses the role of speech in cognitive development. The authors propose that the nameability of a to-be-categorized object or its features impacts learning efficiency in category learning tasks. To test this hypothesis, the research group conducted a series of experiments, with the one presented in the current issue devoted to the spatial location nameability effect on category learning and determining the age when this effect emerges.

“Chunk Decomposition in Anagram Solving Tasks” by Dmitrii Kozlov and Olga Petseva describes an attempt to discover how a short word embedded into an anagram

influences the solving of this anagram. Although this research question seems technical at the first glance, it is of substantial interest to cognitive scientists since anagram solving is widely used as a model of various processes in memory research and creative thinking. At the conference, the Samara group (Olga Petseva and Dmitrii Kozlov) was not the only one presenting research on this topic. At the same time a group from Yaroslavl (Natalya Lazareva, Alexandra Chistopolskaya and Natalya Akatova) presented a methodologically similar study that pursued a different theoretical goal<sup>1</sup>.

All aforementioned research is available not only in English (the present issue) but also in Russian in the conference [proceedings volume](#)<sup>2</sup> that includes more than a hundred papers by Russian cognitive scientists.

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<sup>1</sup> For a detailed account of the theory behind semantic chunks, see Chistopolskaya, A.V., Lazareva, N.Yu., Markina, P.N., & Vladimirov, I.Yu. (2019). [The concept of high-level and low-level processes in cognitive psychology. S. Olsson’s representational change theory from the position of the level approach]. *Vestnik Yaroslavskogo Gosudarstvennogo Universiteta Im. P.G. Demidova. Seriya Gumanitarnye Nauki*, 49(3), 94–101 [In Russian] and article by Dmitrii Kozlov and Olga Petseva in the current issue.

<sup>2</sup> Pechenkova, E.V. & Falikman, M.V. (Eds.)(2019). [Cognitive Science in Moscow: New Research] (In Russian). Moscow: BukiVedi, IPPiP.