

Vencislav Popov

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Education

- 2015 - present Ph.D., Psychology, Carnegie Mellon University
Area: Cognitive neuroscience, Adviser: Lynne M. Reder
- 2013 - 2015 B.A., Psychology, New Bulgarian University
GPA: 6.00 out of 6.00 maximum, expected graduation date: June, 2015
- 2011 - 2013 B.A., Psychology, Sofia University "St. Kliment Ohridsky"
GPA: 6.00 out of 6.00 maximum, transferred to NBU before completion

Research and work experience

- 01.2015 - 08.2015 Research assistant, Bulgarian Addictions Institute
Directors: Jasmin Vassileva, Ph.D., & Georgi Vasilev, M.D.
I was mainly responsible for data analysis on an international research project funded by grant 2R01DA021421 from the National Institute on Drug Abuse (NIDA) - USA, that aims to explore how different personality and neurocognitive aspects of impulsivity can affect and be affected by drug addiction.
- 03.2013 - 12.2014 Researcher, Experimental Psychology Lab, NBU
Director: Assist. Prof. Penka Hristova
I planned, designed and executed behavioral experiments on analogy-making, constructive memory, concepts and categorization and language comprehension. Other activities included generating stimuli, data analysis, creating e-prime scripts, preparing manuscripts and weekly presentations during seminars.
- 09.2013 - 09.2014 Lab coordinator, Experimental psychology laboratory, NBU
Director: Assist. Prof. Penka Hristova
I was responsible for the day-to-day operations of the lab: preparing schedules, organizing several courses for student participation in experiments for course credit, training of students to run experiments, coordinating the lab resources, etc.

Research interests

Neural mechanisms of memory formation, consolidation and retrieval. Representation of semantic knowledge in the brain. Computational modeling of neural and psychological mechanisms. Other topics:

brain-computer interfaces, relational reasoning, concepts and categorization, problem-solving, cognitive modeling, connectionism, philosophy of science

Publications

Peer-reviewed publications

- 2015 Reder, L. M., Liu, X. L., Keinath, A., **Popov, V.** (2015). Building knowledge requires bricks, not sand: The critical role of familiar constituents in learning. *Psychonomic Bulletin & Review*. Advance online publication

Popov, V. & Hristova, P. (2015). Unintentional and efficient relational priming. *Memory & Cognition*, 46(6), 866-878.

Popov, V., Bozgunov, K., Vasilev, G., & Vassileva, J. (In press). Psychometric Characteristics of the Bulgarian Version of Levensons Self-report Psychopathy Scale. *Bulgarian Journal of Psychology*. (In Bulgarian)

- 2014 **Popov, V.** & Hristova, P. (2014). Automatic analogical reasoning underlies structural priming in comprehension of ambiguous sentences. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 1192-1197). Austin, TX: Cognitive Science Society.

Popov, V. & Petkov, G. (2014). The level of processing affects the magnitude of induced retrograde amnesia. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society* (pp. 2787-2792). Austin, TX: Cognitive Science Society.

Published abstracts

- 2015 **Popov, V.**, Hristova, P. & Anders, R. (2015). Retrieval of relational information during associative recognition. In *Abstracts of the 56th Annual Meeting of the Psychonomic Society*. Chicago, IL

Reder, L. M., Liu, X. L., Keinath, A. & **Popov, V.** (2015). Building knowledge requires bricks, not sand: The critical role of familiar constituents in learning. In *Abstracts of the 56th Annual Meeting of the Psychonomic Society*. Chicago, IL

Popov, V. (2015). A spreading-activation model of associates retrieval in a discrete free association task. In N. Taatgen, M. van Vugt, J. Borst, & K. Mehlhorn (Eds.), *Proceedings of the 13th International Conference on Cognitive Modeling*. Groenigen: Rijksuniversiteit Groenigen

- 2014 **Popov, V.** & Hristova, P. (2014). Unconscious, unintended and efficient analogies in lexical decision under dual-task conditions. In P. Bello, M. Guarini, M. McShane, & B. Scassellati (Eds.), *Proceedings of the 36th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.

Popov, V. & Hristova, P. (2014). Priming thematic structure during sentence comprehension in the absence of syntactic repetition. In *Abstracts of the VI. Dubrovnik Conference on Cognitive Science*. Dubrovnik, Croatia.

Popov, V. (2014). Malleability of the basic level effect in categorical induction for biological categories. In *Abstracts of the VI. Dubrovnik Conference on Cognitive Science*. Dubrovnik, Croatia.

- 2013 **Popov, V.** (2013). Fixation on Failure: Failing to Solve a Problem Hinders Subsequent Problem-Solving Ability. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society* (p. 4080). Austin, TX: CSS.

Works in progress

Popov, V., Hristova, P., & Anders, R. (in preparation). Retrieval of relational information during associative recognition.

Popov, V., Petkov, G., & Imreorova, E. (in preparation). Induced retrograde amnesia depends on the level of processing.

Conference presentations

- 2015 Retrieval of relational information during associative recognition. *Poster to be presented at Psychonomic Society's 56th Annual Meeting*. Chicago, Illinois

A spreading-activation model of associates retrieval in a discrete free association task. *Poster presented at the 13th International Conference on Cognitive Modeling*. Groenigen, Germany

Unintentional relational priming. *Oral presentation at the Annual Conference of the Department of Cognitive Science and Psychology*. Kazanlak, Bulgaria

- 2014 Priming of relations: Unintended, unconscious and efficient. *Oral presentation during the European Campus of Excellence Summer School in Memory and Mind: Perspectives from Philosophy and Neuroscience*. Germany, Bochum: Ruhr University Bochum

Automatic analogical reasoning underlies structural priming in comprehension of ambiguous sentences. *Oral presentation at the 36th Annual Conference of the Cognitive Science Society*. Quebec City, Canada.

The level of processing affects the magnitude of induced retrograde amnesia. *Poster presented at the 36th Annual Conference of the Cognitive Science Society*. Quebec City, Canada.

Unconscious, unintended and efficient analogies in lexical decision under dual-task conditions. *Poster presented at the 36th Annual Conference of the Cognitive Science Society*. Quebec City, Canada.

Malleability of the basic level effect in categorical induction for biological categories. *Poster presented at the VI. Dubrovnik Conference on Cognitive Science*. Dubrovnik, Croatia.

Priming thematic structure during sentence comprehension in the absence of syntactic repetition. *Poster presented at the VI. Dubrovnik Conference on Cognitive Science*. Dubrovnik, Croatia.

Retrograde amnesia as a function of the level of processing. *Oral presentation at the Annual Conference of the Department of Cognitive Science and Psychology*. Belmeken, Bulgaria: NBU

Automatic analogies in language comprehension. *Oral presentation at the Annual Conference of the Department of Cognitive Science and Psychology*. Belmeken, Bulgaria: NBU

- 2013 Fixation on Failure: Failing to Solve a Problem Hinders Subsequent Problem-Solving Ability. *Poster presented at the 35th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.

Research plan: Demonstrating automatic analogies in structural ambiguity comprehension. *Oral presentation at a participant symposium during the 20th International Summer School in Cognitive Science*. Sofia, Bulgaria: New Bulgarian University

Experiencing failure increases problem-solving time in current performance. *Oral presentation at the Annual Conference of the Department of Cognitive Science and Psychology*. Ribaritz, Bulgaria: NBU

Professional activities

Memberships

Psychonomic Society, student member - 2015

Cognitive Science Society (CSS), student member - 2013, 2014

Central European Cognitive Science Association (CECOG), member - 2014, 2015

Ad hoc Reviewer

Quarterly Journal of Experimental Psychology

Cognitive Science Society Conference

Additional education and professional training

European Campus of Excellence Summer School, Memory and Mind: Perspectives from Philosophy and Neuroscience. Germany, Bochum: Ruhr University Bochum, 7-21 September (2014)

20th International Summer School in Cognitive Science. Sofia, Bulgaria: NBU (2013)

19th International Summer School in Cognitive Science. Sofia, Bulgaria: NBU (2012)

Winter School in Cognitive Science. Belmeken, Bulgaria: NBU (2014)

Winter School in Cognitive Science. Ribaritz, Bulgaria: NBU (2013)

Weekly Graduate Seminar in Memory and Analogy. Sofia, Bulgaria: NBU (2013-2014)

Scholarships and Awards

Full academic scholarship, Carnegie Mellon University (2015 - 2020)

Full academic scholarship, New Bulgarian University (2014-2015)

Academic excellence scholarships, "Student scholarships", European Union (2012-2015)

Fifteen research excellency awards, "Student scholarships", European Union (2013-2015)

Scholarship for accommodation, travel and full tuition waiver by Stiftung Mercator for attending "European Campus of Excellence Summer School" at the Ruhr University Bochum, Germany (2014)

Travel grant by the Central fond of strategic development at NBU for participating in the 36th Annual Conference of the Cognitive Science Society (2014)

Travel grant and full fee waiver by Central European Cognitive Science Association for participating in the VI. Dubrovnik Conference on Cognitive Science (2014)

Joint travel grant by the Central fond of strategic development at NBU and the student council at NBU for participating in the 35th Annual Conference of the Cognitive Science Society (2013)

Full academic scholarship, Sofia University "St. Kliment Ohridsky" (2012-2013)

Other information

Technical competencies

Data analysis, modeling and visualization with R

SPSS, LaTeX, Advanced MS OFFICE skills

E-prime 2.0, OpenSesame, Python, working knowledge of Matlab

Basic knowledge in PHP, HTML, MYSQL, Photoshop

Language competencies

Bulgarian (mother tongue) | English (116/120 TOEFL) | German (A2 in the European Framework)

Graduate record examination (GRE)

VR: 167/170; 97 percentile rank; QR: 170/170; 98 percentile rank, AW: 5.0/6.0; 93 percentile rank