

Andrei Popa, PhD

andreipopa515@gmail.com

www.andreipopa515.com

<https://osf.io/myprojects/#preprints>

https://www.researchgate.net/profile/Andrei_Popa5

EDUCATION

- 2013 Ph.D. in Psychology, Cognition and Development Program, Emory University
Thesis: *An Evolutionary Theory of Behavior Dynamics - Complexity, Darwinism, and the Emergence of High-Level Phenotypes*
- 2009 M.A. in Psychology, Cognition and Development Program, Emory University
Thesis: *The Effects of Hamming Distances in a Computational Model of Selection by Consequences*

PROFESSIONAL APPOINTMENTS

- 2018 – 2019 Online Instructor (Stats, Methods, Intro to Psychology; Princeton Review)
- 2017 – 2018 Adjunct Assistant Professor of Psychology, Emory University, Oxford College
- 2015 – 2016 Visiting Assistant Professor of Psychology, Agnes Scott College (Decatur, GA)
- 2012 – 2015 Visiting Lecturer (4/4/2 load), Georgia State University (Atlanta, GA)

AWARDS AND FELLOWSHIPS

- O.R.D.E.R. Fellow (On Recent Discoveries by Emory Researchers; 2011-2012)
Emory University/Howard Hughes Medical Institute Teacher-Scholar Award (2012)

PREPRINTS / PROJECTS

- Popa, A.** (current project). *Evolutionary Dynamics in Context*: an evolutionary theory of behavior dynamics that implements the learning trifecta: *action*, *context*, and *consequence*.
- Popa, A.** (2019, September 30). *Imperfect Automata: Effects of “mutation” on the evolution of automaton 01101110 (Rule 110)*. <https://doi.org/10.31234/osf.io/wgp4e>
- Popa, A.** (2019, September 8). *Psychology 2.0: The Emergence of Individuality*. <https://doi.org/10.31234/osf.io/m87an>

PEER-REVIEWED PUBLICATIONS

- Popa, A., & McDowell, J. J.** (2016). *Behavioral Variability in an Evolutionary Theory of Behavior Dynamics*. *The Journal of the Experimental Analysis of Behavior*, 105 (2), 270-290.

McDowell, J. J., **Popa, A.**, & Calvin, N. (2012). [Selection Dynamics in Joint Matching to Rate and Magnitude of Reinforcement](#). *Journal of the Experimental Analysis of Behavior*, 98, 199-212.

McDowell, J. J., & **Popa, A.** (2010). [Toward a mechanics of adaptive behavior: Evolutionary dynamics and matching theory statics](#). *Journal of the Experimental Analysis of Behavior*, 94, 241-260.

Popa, A., & McDowell, J. J. (2010). [The effect of Hamming distances in a computational model of selection by consequences](#). *Behavioural Processes*, 84, 428-434.

McDowell, J. J., & **Popa, A.** (2009). [Beyond continuous mathematics and traditional scientific analysis: Understanding and mining Wolfram's *A new kind of science*](#). *Behavioural Processes*, 81, 343-352.

INVITED TALKS

Popa, A. (2018). *Writing with Purpose*. Oxford Writing Center, Oxford College of Emory University, Atlanta, GA.

Popa, A. (2016). *Population Thinking, Psychodiversity, and Human Development*. Darwin Day Lecture Series, Georgia State University, Atlanta, GA.

Popa, A. (2015). *Towards an Evolutionary Account for the Dynamics of Cognizant Systems*. Darwin Day Lecture Series, Georgia State University, Atlanta, GA.

Popa, A., & McDowell, J. J. (2010). *Evolutionary Behavior Dynamics causally generates both molar and molecular properties of behavior*. Symposium: The Molar-Molecular debate: A further discussion on the unresolved issue. Discussant: William M. Baum, Ph.D. Presented at the 36th Annual Convention of the Association for Behavior Analysis International, San Antonio, TX.

Popa, A., & McDowell, J. J. (2009). *A Computational Model of Adaptive Behavior Dynamics*. Emory University, Department of Psychology, Annual Research Festival. Atlanta, GA.

CONTRIBUTED TALKS

^U = Undergraduate collaborator

Popa, A., (2017). *Towards a Dynamic Account of Human Development*. Talk presented at the 43rd Annual Convention of the Association for Behavior Analysis International, Denver, CO.

Popa, A. & ^UGrissom, M. K. (2017). *Extinction-Induced Variability on Negatively Reinforced Human Behavior*. Talk presented at the Winter Conference on Animal Learning and Behavior, Park City, UT.

^UGrissom, M. K., & **Popa, A.** (2016). *Effects of Extinction on Human Escape Behavior*. Talk presented at the Spring Annual Research Conference, Agnes Scott College, Decatur, GA.

^UShen, R. & **Popa, A.** (2016). *Is Competition Sufficient to Increase the Motivation to “Do Well”?* Talk presented at the Spring Annual Research Conference, Agnes Scott College, Decatur, GA.

^UWaithe, O. Y., & **Popa, A.** (2016). *The Effects of Imagery on Psychological Discomfort*. Talk presented at the Spring Annual Research Conference, Agnes Scott College, Decatur, GA.

Popa, A., Calvin, N., & McDowell, J J. (2014). *Multifinality and Equifinality in an Evolutionary Theory of Behavior Dynamics*. Talk presented at the 40th Annual Convention of the Association for Behavior Analysis International, Chicago, IL.

Popa, A., Calvin, N., & McDowell, J J. (2013). *Complexity, Emergence, and the Behavior of Organisms*. Talk presented at the 39th Annual Convention of the Association for Behavior Analysis International, Minneapolis, MN.

Popa, A., & McDowell, J J. (2012). *The Computational Theory of Behavior Dynamics Predicts Effects of COD on Behavioral Variability: Evidence from experiments with human participants*. Talk presented at the 38th Annual Convention of the Association for Behavior Analysis International, Seattle, WA.

Popa, A., & McDowell, J J. (2011). *A Computational Model of Selection by Consequences: Evidence that Mutation is Computationally Equivalent to Impulsivity*. Talk presented at the 37th Annual Convention of the Association for Behavior Analysis International, Denver, CO.

CONTRIBUTED POSTERS

^U = Undergraduate collaborator

^UAdekunle, O. & **Popa, A.** (2016). *Higher Payoff or More Options?* Poster presented at the Spring Annual Research Conference, Agnes Scott College, Decatur, GA.

^UBooher, C. & **Popa, A.** (2016). *Choice Behavior in Unsignaled Environments With and Without Immediate Negative Feedback*. Poster presented at the Spring Annual Research Conference, Agnes Scott College, Decatur, GA.

^UForbes, V., & **Popa, A.** (2016). *Human Choice Behaviors Before and After Extinction*. Poster presented at the Spring Annual Research Conference, Agnes Scott College, Decatur, GA.

^UTang, X., & **Popa, A.** (2016). *Choice Behavior in Low Discriminability Conditions: Effects of the Operant Class Size*. Poster presented at the Spring Annual Research Conference, Agnes Scott College, Decatur, GA.

Popa, A., & McDowell, J J. (2011). *A Computational Model of Selection by Consequences: Effects of the changeover delay (COD) on the impulsive behavior of a virtual organism*.

Poster presented at the Annual Symposium of the Society for Quantitative Analyses of Behavior, Denver, CO.

Popa, A., & McDowell, J J. (2010). *Effects of overall absolute reinforcement rate in a computational model of selection by consequences*. Poster presented at the Annual Meeting of the Society for the Quantitative Analysis of Behavior, San Antonio, TX.

Popa, A., & McDowell, J J. (2009). *A computational model of selection by consequences: Effect of Hamming distances*. Poster presented at the Annual Meeting of the Society for the Quantitative Analysis of Behavior, Phoenix, AZ.

TEACHING EXPERIENCE

Emory University, Oxford College (2017 - 2018): Introductory Psychology; Psychobiology.

Agnes Scott College (2015 - 2016): Research Lab (*Choice and Preference*); Research Methods, Introduction to Psychology (3 sections); Social Psychology

Georgia State University (2012 - 2015): Introduction to Psychology (5 sections); Abnormal Psychology (8 sections); Theories of Personality (13 sections)

Emory University: The Evolution of Acquired Behavior (2013); Complexity and Psychology (2011-2012; freshmen and senior interdisciplinary O.R.D.E.R. seminars).

Teaching Assistantships (Emory University, 2008-2012): Behavior Modification, Introduction to Psychology, Research Methods, Applied Statistics.

SERVICE

Ad Hoc Reviewer, *Behavior Developmental Bulletin* (2017)

Expert Panel, *Neurotechnologies that Penetrate the Mind*, Georgia Institute of Technology (2013)

Fellowship Advisory Board, On Recent Discoveries by Emory Researchers (O.R.D.E.R.), Emory University (2012)

Discussion Panel, Teaching Assistant Training and Teaching Opportunity (T.A.T.T.O.), Emory University, Laney Graduate School (2011).

LANGUAGES AND TECHNOLOGY

Languages:	English, French, Romanian (native)
Programming:	Python, Visual Basic.Net
Data analysis:	Python, Excel, SPSS
Python libraries:	NumPy, SciPy, Pandas, Tkinter, SQLite,
LMS:	Blackboard, D2L/Brightspace, Moodle, Canvas

TRAINING (2018-2019)

- 2019 SQL Bootcamp (Udemy)
- 2018 Machine Learning by Stanford University on Coursera (Andrew Ng)
- 2018 Data Science Track with Python (DataCamp)
- 2018 Python 3 Bootcamp (Udemy)

REFERENCES

Kenneth Carter, Ph.D., Charles Howard Candler Professor of Psychology (research & teaching)

Oxford College of Emory University
 801 Emory Street,
 Oxford, GA 30054
 Phone: 770-784-8439
 Email: kcart01@emory.edu

Kenneth Anderson, Ph.D., Dean of Academic Affairs, Chief Academic Officer, Professor of Philosophy (teaching)

Oxford College of Emory University
 801 Emory Street,
 Oxford, GA 30054
 Phone: 770-784-8384
 Email: ken.anderson@emory.edu

Scott O. Lilienfeld, Ph.D., Samuel Candler Dobbs Professor of Psychology (research & teaching)

Department of Psychology
 Emory University
 473 Psychology Building
 36 Eagle Row
 Atlanta, GA 30322
 Phone: 404-727-1125
 Email: slilien@emory.edu

David Lynn, Ph.D., Professor of Biomolecular Chemistry and Chair | ([O.R.D.E.R.](#) Fellowship coordinator)

Department of Chemistry
 Emory University
 1515 Pierce Drive
 Atlanta, GA 30322
 Phone: 404-727-9348
 Email: dlynn2@emory.edu