

# Aaron Apple

303 Ilchester Avenue – Baltimore MD, 21218  
(847) 970-0924 • apple@cogsci.jhu.edu • aaronapple.github.io/

## Profile

Cognitive scientist with a focus on human development and language, interested in improving learning outcomes in U.S. schools by applying quantitative methods to problems at the intersection of the learning sciences and education policy.

## Education

### Johns Hopkins University

*Masters of Arts in Cognitive Science.*

Advisors: Dr. Akira Omaki & Dr. Kyle Rawlins

Capstone Project: Filler-gap adaptation in coordinate structures

**Baltimore, MD**  
Aug. 2015 - Aug. 2016

### Linguistics Society of America

*Graduate of the 2015 LSA Summer Institute at the University of Chicago*

**Chicago, IL**  
Jul. 2015 - Aug. 2015

### New York University

*Bachelors of Arts in Language and Mind (Psychology and Linguistics). GPA 3.36.*

**New York, NY**  
Aug. 2008 - Dec. 2012

## Skills

**Research:** Research design; Statistical analysis; Scientific writing; Public speaking; Grant editing; Data management

**Programming languages:** R; Python; MATLAB

**Software:** Microsoft Word, Excel & Powerpoint; Adobe Photoshop & Illustrator; FileMaker Pro; Audacity

## Professional Experience

### Manager of the Language Processing and Development Lab

*PI: Dr. Akira Omaki, Department of Cognitive Science, The Johns Hopkins University.*

**Baltimore, MD**  
Jan. 2013 - Jul. 2015

- Designed two experiments on child comprehension of syntactic ambiguities and adult comprehension of relative clause structures.
- Developed pipelines to manage, clean, and analyze data in R for psycholinguistic research from five methodologies: question answering, preferential looking, visual-world eye-tracking, eye-tracking during reading, and self-paced reading.
- Analyzed and visualized findings in R and Python for 12 experiments, primarily using multilevel regression methods.
- Wrote and edited three scientific articles submitted to peer-reviewed journals.
- Presented research findings in one conference talk and one poster presentation.
- Edited NSF grant application for a project on child sentence processing and executive control.
- Supervised five research assistants in designing and collecting data for four research projects.

### Research Assistant in the Davachi Memory Lab

*PI: Dr. Lila Davachi, Department of Psychology, New York University.*

**New York, NY**  
May 2012 - Dec. 2012

- Assisted in design, MATLAB programming, and data collection for an MEG experiment on the time-course of memory reactivation.

### Research Assistant in the Consciousness and Computation Lab

*PI: Dr. Hakwan Lau, Department of Psychology, Columbia University.*

**New York, NY**  
May 2012 - Dec. 2012

- Collected data for research on the dynamics of visual awareness as modulated by attention.

### Research Assistant in the Neurolinguistics Lab

*PI: Dr. Liina Pykkänen, Department of Linguistics, New York University.*

**New York, NY**  
Sept. 2011 - April 2012

- Designed experiment and collected data for research on the domain generality of compositional semantic processing in the ventromedial prefrontal cortex.

### Intern at 826CHI

- Administrated the after-school tutoring program of 30 children and tutors.
- Taught writing as a teaching assistant in two English classes in a Chicago public high school.

**Chicago, IL**  
Aug. 2010 - Dec. 2010

## Publications, Presentations and Awards

Apple, A., Omaki, A. (In preparation). The role of incremental parsing on Japanese infants' word learning.

**Apple, A., Omaki, A.** (In preparation). Japanese infants' abstract knowledge of word order.

**Apple, A., Omaki, A.** (In preparation). Filler-gap processing in coordinate structures.

**Apple, A., Omaki, A.** (In preparation). Incrementality and garden-path recovery in child resolution of complement ambiguity.

Atkinson, E., **Apple, A., Omaki, A.** (2016). Similarity of Wh-Phrases and Acceptability Variation in Wh-Islands. *Frontiers in Psychology*, 6.

Omaki, A, Lau, E . F., Davidson White, I., Dakan, M., **Apple, A.,** & Phillips, C. (2015). Hyper-active gap filling. *Frontiers in Psychology*, 6.

**Apple, A. & Omaki, A.** (2015). Incrementality and garden-path recovery in children's resolution of direct object vs. sentential complement ambiguity. Paper presented at the *Boston University Conference on Language Development*, November 13, 2015.

**Apple, A. & Omaki, A.** (2015). Development of sentential complement ambiguity processing. Poster presented at the *CUNY 2015 Conference on Sentence Processing*, March 21.

Omaki, A. & **Apple, A.** (2014). Adaptation of active gap filling in coordinated sentences. Talk presented at the *AMLaP 2014*, September 4.

**Apple, A., Bemis, D., Marcus, G., Pylkkänen, L.** (2012). Domain General Compositional Processing: An MEG Study. *Dean's Undergraduate Research Fund*, NYU. Poster presented at the Dean's Undergraduate Research conference and grant recipient of the highest award, \$1000.

## Volunteering

### Harwood Community Association

*Volunteer and organizer*

**Baltimore, MD**

*Jul. 2015 - Aug. 2016*

- **Harwood's 2016 National Night Out Against Crime:** Solicited food donations from local businesses, ran the BBQ grill, and assisted in managing other volunteers.
- **The 2015 Ilchester Back to School Block Party:** Solicited school supplies donations from local businesses and assisted in managing other volunteers.