# **Aaron Apple**

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#### **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** 

Baltimore, MD

Masters of Arts in Cognitive Science.

Aug. 2015 - Aug. 2016

Advisors: Dr. Akira Omaki & Dr. Kyle Rawlins

Capstone Project: Filler-gap adaptation in coordinate structures

**Linguistics Society of America** 

Chicago, IL

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

Jul. 2015 - Aug. 2015

**New York University** 

New York, NY

Bachelors of Arts in Language and Mind, Minor in Creative Writing

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; SR

Research Experiment Builder & Data Viewer

# **Professional Experience**

#### Manager of the Language Processing and Development Lab

Baltimore, MD

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

Jan. 2013 - Jul. 2015

- o 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.
- o 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.
- o Supervised five research assistants in designing and collecting data for four research projects.

#### Research Assistant in the Davachi Memory Lab

New York, NY

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

May 2012 - Dec. 2012

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

#### Research Assistant in the Consciousness and Computation Lab

New York, NY

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

May 2012 - Dec. 2012

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

#### **Research Assistant in the Neurolinguistics Lab**

New York, NY

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

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 Chicago, IL

• Administrated the after-school tutoring program of 30 children and tutors.

- Aug. 2010 Dec. 2010
- Taught writing as a teaching assistant in two English classes in a Chicago public high school.

# **Publications, Presentations and Awards**

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.

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.

## **Volunteering**

#### **Harwood Community Association**

Baltimore, MD

Volunteer and organizer

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.