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# Hannah Little

A digital enthusiast and linguist with extensive professional experience in research, teaching and science communication. I specialise in linguistic and cultural evolution, experimental methods and data analysis.

- Jan 2018 Postgraduate Certificate in Academic Practice, University of the West of England.
- 2012–2017 **PhD**, Artificial Intelligence Laboratory, Vrije Universiteit Brussel.

Thesis: It's not all in your Mind: Modality Effects on the Emergence of Speech Structure Supervisor: Prof. Dr. Bart de Boer

2010–2011 MSc Evolution of Language and Cognition, University of Edinburgh.

Thesis: "Foreigner Directed Speech: Its role in Cultural Transmission of Language & the resulting effects on Language Typology". Supervisor: Dr. Kenny Smith

2007–2010 **BA English Language and Linguistics**, *University of York*, (First Class Honors). Thesis: "Morphosyntactic Unification of Case Markers and Postpositions in Hungarian" Supervisor: Dr. George Tsoulas

#### Work Experience

- Oct 17 now Lecturer, Science Communication Unit, University of the West of England. Bristol, UK.

  I teach students at foundation, undergraduate and postgraduate levels methods for science and science communication. I specialise in units on digital communication.
  - Oct 17 **Data Annotator**, *The University of Cambridge, Cambridge, UK*. Learner corpus annotation for the ALTA Institute (short term casual contract)
- Sep 16–Sep 17 **PostDoc**, *Max Planck Institute for Psycholinguistics. Nijmegen, NL*.

  I worked on projects around the theme of language evolution. I design, build and run experiments, and disseminate the results in publications and presentations.
  - Sep 12 **Festival Communications Assistant**, *British Science Festival*, *Aberdeen*, *UK*.

    I liaised with journalists and speakers. I wrote and edited press releases and monitored press generated by the festival. I also helped promote and report on events on social media.
- Jan 12-Oct 12 STEM Outreach Coordinator, STEM Outreach, Newcastle College, Newcastle, UK.

I worked as a coordinator and administrator for the STEM Ambassadors Programme, Nuffield Research Placements and the British Science Association Crest Awards in the region. I liaised with science and technology organisations and educational institutes to organise outreach events. I worked extensively with schools to encourage engagement with the science outreach programmes mentioned above. I also maintained the organisation's blog and social media.

Web Literacy html5, javascript, Wordpress, Social Media

Programming R, python (including PsychoPy), jsPsych, E-Prime, praat, latex

**Courses Taught** (Teaching evaluations available on request)

- 2018 Lecturer on Writing Science module. MSc module.
- 2018 Lecturer on Science in Public Spaces module. MSc module.
- 2018 Lecturer on Science on Air and on Screen module. MSc module.
- 2018 Lecturer on Science Communication module. BSc module.
- 2018 Lecturer on People and Science module. Foundation level course.

- 2017 Course Tutor. Biomedical Skills. BSc Module.
- 2017 Convener/Lecturer. Minds, Mechanisms and Interaction in the Evolution of Language Summer School. I covered sections on open science, preregistration and data cleaning. MPI for Psycholinguistics, Nijmegen, Netherlands
- 2012–2015 Teaching assistant, Methods of Scientific Research (MSc Course), VUB, Brussels, Belgium

#### **Grants and Bursaries**

- 2017 Cultural Evolution Society Conference Travel Grant.
- 2017 Data on the Mind Workshop. Berkeley, University of California. Funded Participant.
- 2016–2017 Max Planck Institute Visitorship Grant
- 2012–2016 European Research Council, PhD studentship as part of the ABACUS project
  - 2015 VUB Doctoral School, NSE Travel Grant €750
  - 2012 British Interactive Group, Bursary to attend the BIG Annual Training Conference
  - 2012 Edinburgh Beltane, Bursary to attend the Science Communication Conference

#### **Academic Service**

Public Relations Officer for the International Association of Cognitive Semiotics (IACS)

Guest Editor, The Journal of Language Evolution, Special Issue on the Evolution of Sound Systems

Conference Evolang 2018, Toruń, Poland (Scientific Committee)

Organisation Modality Matters Workshop (Evolang 2018), with Ashley Micklos

Minds, Mechanisms and Interaction in the Evolution of Language Workshop, Max Planck Institute for Psycholinguistics (2017)

Advancing Behavioural and Cognitive Understanding of Speech workshop, Max Planck Institute for Psycholinguistics (2017)

The Evolution of Speech workshop, EvoLangXI (2016)

The Evolution of phonetic capabilities: causes, constraints and consequences, Satellite Meeting at the International Congress of Phonetic Sciences (2105)

#### Reviewing

Journals Interaction Studies, Cognitive Science, Literary and Linguistics Computing

Conferences EvoLangXII, CogSci2017, CogSci2016 (Program committee), EvoLangXI, CogSci2015,

EvoLangX

Books Routledge, SpringerBriefs in Linguistics

# **Publications**

#### **Journal Papers**

- 2017 **Little, Hannah**, Heikki Rasilo, Sabine van der Ham and Kerem Eryilmaz. Empirical approaches for investigating the origins of structure in speech. *Interaction Studies 18(3)*. 332-354. doi: 10.1075/is.18.3.03lit
- 2017 **Little, Hannah**, Kerem Eryilmaz and Bart de Boer. Conventionalisation and Discrimination as Competing Pressures on Continuous Speech-like Signals. *Interaction Studies 18(3)*. 355 378. doi: 10.1075/is.18.3.04lit

- 2017 **Little, Hannah**, Kerem Eryilmaz and Bart de Boer. Signal dimensionality and the emergence of structure. *Cognition 168* 1-15. doi: 10.1016/j.cognition.2017.06.011
- 2017 **Little, Hannah**. Introduction to the Special Issue on the Emergence of Sound Systems. *The Journal of Language Evolution 2(1)* 1-3. doi: 10.1093/jole/lzx014
- 2016 Eryilmaz, Kerem and **Hannah Little**. Using Leap Motion to investigate the emergence of structure in speech and language. *Behavior Research Methods* 49(5) 1748–1768. doi:10.3758/s13428-016-0818-x

#### Journal Papers submitted or near submission

- In revision Little, Hannah, Jack Wilson, Kerem Eryilmaz and Bart de Boer. "Structure as a product of restricted signal–meaning mapping."
  - proposal Perlman, Marcus, **Hannah Little**, Bill Thompson and Robin L. Thompson. "Iconicity in accepted Signed and Spoken Vocabulary: A Comparison between American Sign Language, British Sign Language, English, and Spanish." Target journal: Frontiers in Psychology. Research topic on Visual Language.
    - in prep **Little, Hannah**, Yasamin Motamedi, Alan Nielsen, Marcus Perlman and Justin Sulik. "Empirical Approaches to Measuring Iconicity." Target Journal: The Journal of Language Evolution.
    - in prep **Little, Hannah** and Marcus Perlman. "Repeated interaction can lead to an increase in iconicity." Target Journal: Language and Cognition.

# **Edited Volumes**

- 2017 **Little, Hannah** (Ed.). Special Issue on the Emergence of Sound Systems [Special Issue]. *The Journal of Language Evolution*, 2(1).
- 2015 **Little, Hannah**. Evolution of Phonetic Capabilities: Causes, Constraints and Consequences. *ICPhS Satellite Event*. Glasgow, UK.

### **Book Reviews**

- 2016 **Little, Hannah**. Review of Ljiljana Progovac: Evolutionary Syntax. Oxford: Oxford University Press, 2015. Linguist List 27(3298)
- 2014 **Little, Hannah**. Review of Denis Bouchard: The Nature and Origin of Language. Oxford: Oxford University Press, 2013. Linguist List 25(4460)

#### **Conference Proceedings**

- 2017 Sulik, Justin, Ashley Micklos and **Hannah Little**. "Interaction drives the evolution of informative signals theme session" *Proceedings of the Inaugural Cultural Evolution Society Conference*. Jena, Germany.
- 2017 **Little, Hannah**. "Interaction, Perspective Taking and the Emergence of Transparency" *Proceedings of the Inaugural Cultural Evolution Society Conference.* Jena, Germany.
- 2017 **Little, Hannah**, Marcus Perlman and Kerem Eryilmaz. "Repeated Interactions Can Lead to More Iconic Signals" In G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar (Eds.) *Proceedings of the 39th Annual Conference of the Cognitive Science Society.* (pp. 760–766) Austin, TX: Cognitive Science Society
- 2017 **Little, Hannah** and Marcus Perlman. "The transition from iconic signals to arbitrary signs depends on modality" In: *Proceedings of the 11th International Symposium on Iconicity in Language and Literature.* pp.37-39. Brighton, UK.

- 2017 **Little, Hannah.** "Causes for the inverse relationship between iconicity and phonological structure" In: *Proceedings of the 11th International Symposium on Iconicity in Language and Literature.* pp. 117-119. Brighton, UK.
- 2017 **Little, Hannah**, Kerem Eryilmaz and Bart de Boer. "Conventionalisation and Discrimination as Competing Pressures on Continuous Speech–like Signals." *Proceedings for CogLing7*. (pp. 38–39) Nijmegen, NL.
- 2016 **Little, Hannah** and Bart de Boer. "Did the pressure for discrimination trigger the emergence of combinatorial structure?" In: *Proceedings of the Second Conference of the International Association for Cognitive Semiotics.* (pp. 109–110) Lublin, Poland.
- 2016 Wilson, Jack J. and **Hannah Little**. "A Neo-Peircean Framework for Experimental Semiotics." In: *Proceedings of the Second Conference of the International Association for Cognitive Semiotics*. (pp. 171–173) Lublin, Poland.
- 2016 **Little, Hannah**. "Nahran Bhannamz: Language Evolution in an Online Zombie Apocalypse Game." In: *Createvolang: creativity and innovation in language evolution.* New Orleans, USA.
- 2016 Little, Hannah, Kerem Eryilmaz and Bart de Boer. "Differing signal-meaning dimensionalities facilitates the emergence of structure." In S.G. Roberts, C. Cuskley, L. McCrohon, L. Barceló-Coblijn, O. Feher & T. Verhoef (eds.) The Evolution of Language: Proceedings of the 11th international conference (EvoLangXI). (pp. 182–190) New Orleans, USA.
- 2016 Little, Hannah, Kerem Eryilmaz and Bart de Boer. "Emergence of Signal Structure: Effects of Duration Constraints." In S.G. Roberts, C. Cuskley, L. McCrohon, L. Barceló–Coblijn, O. Feher & T. Verhoef (eds.) The Evolution of Language: Proceedings of the 11th international conference (EvoLangXI). (pp. 468–470) New Orleans, USA.
- 2016 Eryilmaz, Kerem, Hannah Little and Bart de Boer. "Using HMMs to Attribute Structure to Artificial Languages." In S.G. Roberts, C. Cuskley, L. McCrohon, L. Barceló–Coblijn, O. Feher & T. Verhoef (eds.) The Evolution of Language: Proceedings of the 11th international conference (EvoLangXI). (pp. 407–410) New Orleans, USA.
- 2015 **Little, Hannah** "Introduction to the evolution of phonetic capabilities satellite meeting." In: Hannah Little, ed., *The proceedings of Evolution of Phonetic Capabilities: Causes, Constraints and Consequences.* pp 1. Glasgow, UK.
- 2015 Little, Hannah, Kerem Eryilmaz and Bart de Boer. "A new artificial signal-space proxy for investigating the emergence of structure and categories in speech." In *The Scottish Consortium for ICPhS 2015 (Ed.), Proceedings of the 18th International Congress of Phonetic Sciences*. Glasgow, UK: the University of Glasgow. ISBN 978-0-85261-941-4. Paper 31.
- 2015 Little, Hannah, Kerem Eryilmaz and Bart de Boer. "Linguistic Modality Affects the Creation of Structure and Iconicity in Signals." In D. C. Noelle, R. Dale, A. S. Warlaumont, J. Yoshimi, T. Matlock, C. D. Jennings, & P. P. Maglio (Eds.), Proceedings of the 37th Annual Conference of the Cognitive Science Society (pp. 1392–1398). Austin, TX: Cognitive Science Society.
- 2014 Little, Hannah and Catriona Silvey "Interpreting emerging structures: the interdependence of combinatoriality and compositionality". In First Conference of the International Association for Cognitive Semiotics (IACS 2014). pp 113–114. Lund, Sweden.
- 2014 **Little, Hannah** and Bart de Boer. "The effect of size of articulation space on the emergence of combinatorial structure". In: Erica A. Cartmill, Seán Roberts, Heidi Lyn and Hannah Cornish, ed., The Evolution of Language: *Proceedings of the 10th international conference (EvoLangX)*. pp. 479-481. Vienna, Austria.
- 2014 **Little, Hannah** and Kerem Eryilmaz "The effect of physical articulation constraints on the emergence of combinatorial structure". In: Bart de Boer and Tessa Verhoef, ed., *The EvoLangX Workshop on Evolution of Signals, Speech and Signs.* pp.11–17. Vienna, Austria.

- 2014 Littauer, Richard, Seán G. Roberts, James Winters, Rachael Bailes, Michael Pleyer and Hannah Little. "From the Savannah to the Cloud: Blogging Evolutionary Linguistics research". In: Luke McCrohon, Bill Thompson, Tessa Verhoef and Hajime Yamauchi, ed., The Past, Present and Future of Language Evolution Research. Student Volume of the 9th International Conference on the Evolution of Language. pp 121–133. Tokyo, Japan.
- 2013 Wilson, Jack, J. and **Hannah Little**. "Emerging languages in Esoteric and Exoteric Niches: evidence from Rural Sign Languages". In: *Ways to Protolanguage 3 book of abstracts.* pp. 54–55. Wroclaw, Poland.
- 2012 Littauer, Richard, James Winters, Seán G. Roberts, **Hannah Little**, Michael Pleyer and Bill Benzon. "Academic Research in the Blogosphere: Adapting to new opportunities and risks on the internet". In: Jan Christoph Meister, ed., *Digital Humanities 2012 Conference Abstracts*, pp. 268–269. Hamburg: Hamburg University Press.
- 2012 Little, Hannah "The Role of Foreigner-Directed Speech in Language Evolution". European Human Behaviour and Evolution Association Annual Meeting 2012 Poster Abstracts. pp. 7. Durham, UK.

### **Conference Presentations without Proceedings**

- 2016 **Little, Hannah**, Kerem Eryilmaz and Bart de Boer. "The effects of Communication on Iconicity in Continuous Speech–like Signals." Psycholinguistics in Flanders. Antwerp, Belgium.
- van der Ham, Sabine, **Hannah Little**, Kerem Eryilmaz and Bart de Boer. "Experimental Evidence on the Emergence of Phonological Structure." In: The proceedings of The 13th International Cognitive Linguistics Conference (ICLC-13). Newcastle, UK.
- 2014 **Little, Hannah**. "Experiments in the Emergence of Combinatorial Structure: Considering the Limitations of Articulation Space Proxies". Poster presentation. Nijmegen Lectures. 28 January 2014. Nijmegen, Netherlands.
- 2013 Wilson, Jack, J. and **Hannah Little**. "From Pragmatics to etymology: Evidence from Rural Sign Languages". Oral presentation. Language at Leeds PGR Group. 28 November 2013. Leeds, UK.

# **Invited Talks**

- 2017 **Little, Hannah**. "Biases born from modality affect the emergence of linguistic structure" *Minds, Mechanisms and Interation in the Evolution of Language*. MPI, Nijmegen, the Netherlands.
- 2017 Perlman, Marcus, **Hannah Little** and Robin L. Thompson. "Modality driven encoding of iconicity in signed and spoken vocabulary: A Comparison between British Sign Language and English" *Types of iconicity in language use, development and processing.* MPI, Nijmegen, the Netherlands.
- 2016 Little, Hannah. "It's not all in your Mind": Modality Effects on the Emergence of Combinatorial Structure" Invited Colloquium Diversity in Language, Culture and Cognition.
   8 December 2016. Max Plank Institute for Psycholinguistics. Nijmegen, The Netherlands
- 2015 Little, Hannah. "Extherements: An experimental investigation into signal space topology and the emergence of structure." Invited talk. The Language Evolution and Computation Unit. 17 March 2015. The University of Edinburgh, UK.

# **Public Engagement**

Public Engagement Articles (Full list including University Media and Blogging available on request)

- upcoming **Little, Hannah**. "Sci-Fi influences on Linguistics" Article series in Babel: The Language Magazine.
  - 2016 **Little, Hannah**. "How reliably can we measure the relatedness of two languages?" Ask a Linguist Feature. Babel: The Language Magazine 2016, Issue 16. Page 35.
  - 2015 **Little, Hannah**. "The Combinatorial Structure of Language, Music, Life and Everything". Cover Feature. Babel: The Language Magazine 2015, Issue 13. Pages 14–17.
- 2011 2012 Various Copy in EuSci: Student Science Magazine of the University of Edinburgh.
- 2010 present Blogging: replicatedtypo.com, lablit.com, geekfeminism.org

#### **Public Engagement Talks**

- 2017 "Where do words come from?" Radboud Talks, Nijmegen, the Netherlands.
- 2016 "Tweets and Waggles." Stand-up Comedy. Brussels Bright Club, Belgium.
- 2015 "Animal Communication." Let's talk Science Stand-up science show, Leuven, Belgium.
- 2012 "The evolution of language: culture or cognition?" Newcastle Skeptics in the Pub.
- 2012 "The Public Misunderstanding of Linguistics." Stand-up Comedy. Newcastle Bright Club.

#### Public Engagement Volunteer Work (Full list available on request)

- 2014 Greenlight for Girls (Kodu coding workshop), Brussels, Belgium
- 2013 I'm a Scientist get me out of here, Wellcome Trust, London
- 2013 The European Gender Summit, Brussels, Belgium
- 2012 Greenlight for Girls (Blockly coding workshop), Brussels, Belgium
- 2012 BBC, Science explainer on Mr. Bloom's Nursery Roadshow, Ready, Set, Grow!
- 2012 Newcastle Science Festival Roadshow
- 2011–2015 STEM (Science, Technology, Engineering and Maths) Ambassador, STEMNET
- 2011–2012 Member of the NE Science alliance
- 2011–2012 Member of the Newcastle Branch of the British Science Association

# **Public Engagement Speaking**

- 2017 "Where do words come from?" Radboud Talks, Nijmegen, the Netherlands.
- 2016 "Tweets and Waggles." Stand-up Comedy. Brussels Bright Club, Belgium.
- 2015 "Animal Communication." Let's talk Science Stand-up science show, Leuven, Belgium.
- 2012 "The evolution of language: culture or cognition?" Newcastle Skeptics in the Pub.
- 2012 "The Public Misunderstanding of Linguistics." Stand-up Comedy. Newcastle Bright Club.

#### Continuing Professional Development in Public Engagement

Storytelling training (Radboud Talks, Nijmegen), Let's talk Science (Science Communication Summer School, Leuven), Effective Science Communication Course (Principae, Brussels), Science Communication Conference 2011 & 2012, British Interactive Group (BIG) Event 2012, "Engaging Hard to Reach Users" Workshop (National Centre for Research Methods, Northumbria University), Twilight CPD Course for STEM Club leaders (STEM Clubs Network), Science Communication Training Workshop, Icebreakers & Games (The Training Group, Graphic Science), EUSci Popular Science Editing Workshop (University of Edinburgh)