

Suzy J Styles

Director of the Brain Language and Intersensory Perception Lab (BLIP Lab) at NTU

Current Position

Aug 2014 - Present Nanyang Assistant Professor in Psychology, Division of Psychology, School of Social Sciences, NTU, Singapore

Academic Qualifications

2009 Doctor of Philosophy in Experimental Psychology, University of Oxford.

Thesis: 'From *cat* to *dog*: Investigating organization in the infant lexicon'
Supervisor: Professor Kim Plunkett, Department of Experimental Psychology.

2003 Bachelor of Arts, First Class Honours in Linguistics. Australian National University.

2003 Bachelor of Asian Studies (Japanese Specialist). Australian National University.

Professional Memberships

July 2015 Affiliate of CRADLE@NTU: Centre for Research on Development and Learning.

September 2015 Fellow of the Institute on Asian Consumer Insights

Employment History

Jan 2013 - June 2013 Lecturer in Psychology
Faculty of Design Engineering and, Computer Science Bournemouth University.

April 2009 - Dec 2012 Career Development Fellow in Experimental Psychology
St Hugh's College & Department of Experimental Psychology, University of Oxford.

Sept 2008 - Dec 2012 Post-Doctoral Researcher, Oxford University BabyLab
Department of Experimental Psychology, University of Oxford.

2006 - 2012 Undergraduate Admissions Interview Panel.
St Hugh's College, University of Oxford.

Sept - Dec 2008 Heath Harrison Teaching Fellow in Psycholinguistics,
Linguistics & Philology, Faculty of Modern Languages, University of Oxford.

Oct 2007 - Sept 2008 Junior Advisor, International Visiting Student Scheme.
St Edmund Hall, University of Oxford.

Oct 2005 - Sept 2008 Course Tutor in Experimental Psychology
Department of Experimental Psychology, University of Oxford.

March 2003 - Dec 2003 Course Tutor in Linguistics, School of Language Studies
Australian National University.

Guest Lectureships/Fellowships

August 2015 **Residential Fellowship** at Johannesburg Institute for Advanced Studies (JIAS), for the duration of the *Inaugural JIAS Colloquium 'Why the Brain Matters: The Social Brain'*. Johannesburg, South Africa.

External Funding

CRADLE@NTU – Johns Hopkins University Collaboration Grant 2016:

Linking the home language environment to language learning in infancy

PI: Suzy Styles

Co-PIs: Asst Prof Luca Onnis (LMS, NTU), Prof Barbara Landau (Department of Cognitive Science, JHU), Assoc. Prof. Sanjeev Khundanpur (Department of Electrical and Computer Engineering, JHU), Assoc. Prof. Justin Dauwels (School of Electrical and Electronic Engineering, NTU)

Grant Funding: \$878,256

Grant Duration: Oct 2016-Sept 2018

CRADLE@NTU – Johns Hopkins University Collaboration Grant 2016:

Technologies for 21st Century Learning and Education

PI: Assoc. Prof. Justin Dauwels (School of Electrical and Electronic Engineering, NTU)

Co-PIs: Asst Prof Suzy Styles (Psych, NTU), Asst Prof Luca Onnis (LMS, NTU), Dr Hong Huaqing, Yuan Junsong, Assoc. Prof. Sanjeev Khundanpur (Department of Electrical and Computer Engineering, JHU), Rebecca Bull (ECDL, NIE), Kerry Lee (ECDL, NIE)

Grant Funding: \$500,000

Grant Duration: Oct 2016-Sept 2018

NRF Planning Grant for Science of Learning Initiative

Caregiver interactions and perceptual learning in language acquisition

PI: Suzy Styles

Co-PIs: Asst Prof Luca Onnis (LMS, NTU), Asst Prof Alice Chan (LMS, NTU), Assoc Prof Annabel Chen (Psych, NTU)

Planning Grant Funding: \$80,000

Grant Duration: Jan 2015-Dec 2016

NRF Science of Learning: Full Proposal

How language mixes contribute to effective bilingualism and effective biliteracy in Singapore

PI: Suzy Styles

Co-PIs: Luca Onnis (LMS, NTU), Justin Dauwels (EEE, NTU), Beth O'Brien (NIE),

Approved Funding: \$5.1m

Duration: 5 years

Digital Research Profiles

ORCID:	orcid.org/0000-0003-3517-9680
SCOPUS:	35103599900
Research Gate	https://www.researchgate.net/profile/Suzy_Styles
Academia.edu	http://nanyang.academia.edu/SuzyStyles
Twitter	@suzyjstyles
FigShare	https://figshare.com/authors/Suzy_Styles/2563447
Open Science Framework	https://osf.io/y5qm4

Publications

Journal Articles

- Turoman N & **Styles SJ** (accepted). Glyph guessing for 'oo' and 'ee': Spatial frequency information and sound symbolic matching in ancient and unfamiliar scripts. *Royal Society Open Science*.
- Styles SJ** & Gawne L (in press). Word 'wordiness': Two key failures show that phonology and phonotactics matter in maluma/takete tasks. *i-Perception*. 8:4. 1-14. doi: 10.1177/2041669517724807
- Ković V, Sucević J & **Styles SJ** (2017). To call a cloud cirrus: Sound symbolism in category and item labels, *PeerJ*. 5, e3466. <https://doi.org/10.7717/peerj.3466>
- Hung S, **Styles SJ** & Hsieh P (2017). Can a Word Sound Like a Shape Before You Have Seen It? Sound-Shape Mapping Prior to Conscious Awareness. *Psychological Science*, 28(3) 263-275.
- Styles SJ**, Plunkett K & Duta MD (2015). Infant VEPs reveal neural correlates of implicit naming: Lateralized differences between lexicalized versus name-unknown pictures. *Neuropsychologia*, 77,177-84.
- Sučević J, Savić, A, Popović A, **Styles SJ** & Ković V (2015). Balloons and bavoons vs spikes and shikes: ERPs reveal shared neural processes for shape-sound-meaning congruence in words, and shape-sound congruence in pseudowords. *Brain & Language*, 145-146, 11-22.
- Ilić O, Ković V, & **Styles SJ** (2013). In the Absence of Animacy: Superordinate Category Structure Affects Subordinate Label Verification. *PLoS ONE*, 8(12). <https://doi.org/10.1371/journal.pone.0083282>
- Duta MD, **Styles SJ** & Plunkett K (2012). ERP correlates of unexpected word forms in a picture-word study of adults and infants. *Developmental Cognitive Neuroscience*, 2, 223-234.
- Styles SJ** & Plunkett K (2009). How do infants build a semantic system? *Language and Cognition* 1(1), 1-24. (C)
- Styles SJ** & Plunkett K (2009). What is 'word understanding' for the parent of a one-year-old? Matching the difficulty of a lexical comprehension task to parental CDI report, *Journal of Child Language*, 36, 895-908.

Proceedings

- (Eds.) Lindborg PM & **Styles SJ** (2016). *ICMA Array*, Special Issue: Proceedings of the 2nd International Symposium on Sound and Interactivity (si15~sound:senses). August 2015, Singapore. <http://www.computermusic.org/media/documents/array/arraySi15.pdf>
- Styles SJ** (2016). The Language of Dance: Testing a model of cross-modal communication in the performing arts. *ICMA Array*, Special Issue: Proceedings Si15. Singapore, August 2015. <https://dx.doi.org/10.6084/m9.figshare.3437279.v1>
- Lim J & **Styles SJ** (2016) 'Guitar Face: Super-normal integration of sound and vision in *ICMA Array*, Special Issue: Proceedings Si15. Singapore, August 2015.
- Turoman N & **Styles SJ** (2016) 'How well do Humans Capture the Sounds of Speech in Writing?' *ICMA Array*, Special Issue: Proceedings Si15. Singapore, August 2015. August 2015.
- Shang N & **Styles SJ** (2016) 'An implicit association test on audiovisual cross-modal correspondences' *ICMA Array*, Special Issue: Proceedings Si15. Singapore, August 2015.

Hung SM, **Styles SJ** & Hsieh PJ (2016) 'Pre-conscious Automaticity of Sound-Shape Mapping' *ICMA Array*, Special Issue: Proceedings Si15. Singapore, August 2015.

Styles SJ, Arias-Trejo N & Plunkett K (2008). Lexical priming and interference in infancy, In Love BC, McRae K & Sloutsky VM, (Eds.), *Proceedings of the 30th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society, 651-656.

Book Chapters

Styles SJ & Plunkett K, (2011). 'Early Links in the Early Lexicon', in G Gaskell & P Zwitserlood (eds) *Lexical representation: a multi-disciplinary approach* (pp.51-88). Mouton de Gruyter: Berlin. – one

Data Sets (Open Access, CC-BY)

Turoman N & **Styles SJ** (2017, July 3). Ancient & Unfamiliar Letter-Pairs for /i/ and /u/ with norms for letter guessing. Open Science Framework: <https://osf.io/xufmd>

Gawne L & Styles SJ (2017, July 10), Cross-sensory perception for tone. Open Science Framework: <https://osf.io/wt95v>

Kovic V & **Styles SJ** (2017, June 8) Sound Symbolism for category names and item names with Vincasso stimuli. Open Science Framework: <https://osf.io/2wvug>

Pre-Registrations

Styles SJ (2017) AsPredicted: 4711. Registration Date: 07/03/2017. Current status: Private

Woon FT & **Styles SJ** (2017) AsPredicted: 4599. Registration Date: 06/22/2017. Current: Private

Sci-Comms Data-Vis

Styles, S. J. (Aug 2017). "ee" and "oo" around the world. figshare.
<https://doi.org/10.6084/m9.figshare.5309953>

Styles, SJ (May 2017). The Commonest Speech Sounds: Prevalence Rates for Phonemes of the World. figshare. <https://doi.org/10.6084/m9.figshare.5047747>

Methods Reports / Training Materials (Open Access, CC-BY)

Styles SJ & Ković V (2017). Experimental Pragmatics and the Experimenter-As-Idiot Fallacy, Or, The Curious Case of the Poorly Understood Instructions: A mystery in data. Open Science Framework: <https://osf.io/gkz2w/>

Styles SJ (under informal peer review 2017). Ethics in Practice: A workbook for junior investigators in psychology, medicine and the behavioural and social sciences (Version 3).

DIY Guides for Classroom/Public Psycholinguistics Demonstrations (CC-BY)

Styles SJ & Turoman N (2017) Let's invent new letters: Public Science demonstration on cross-modal correspondences and linguistic sound symbolism (DIY Guide). Open Science Framework: <https://osf.io/5ds3j/>

Styles SJ (2017) A word in the hand: Live audience demonstration of lexical priming using finger clicking (DIY Guide). Figshare: <https://doi.org/10.6084/m9.figshare.5081971.v1>

Online lecture supplements

Styles SJ (2010) *Garden Path Sentence Explained: The horse raced past the barn fell*. YouTube. <https://www.youtube.com/watch?v=QdS4vB5pSvw>

Invited Conference Presentations

- Styles SJ** (2016) Letting the hitchhiker drive: How language modulates brain development, shapes sensation, and co-creates conscious experience at 'Why the Brain Matters Colloquium: Session 4 – The Social Brain, Johannesburg Institute for Advanced Study, August 2016
- Styles SJ** (2016) 'Auditory and Cross-Modal Perception from an Individual Differences Perspective' Invited presentation at 'Driven to Distraction' Symposium, NIE, Singapore, August 2016.
- Styles SJ** (2016) 'Language in Cross-modal perception: Default sensory settings and language-specific perceptual tuning in cross-modal processing of speech sounds.' Invited presentation at the International Symposium on Cognition and Neuroscience, Singapore, 29 Feb-1 Mar 2016.
- Styles SJ** (2015) 'Perceptual tuning and its multisensory outcomes: Language adaptation influences crossmodal processing' Invited presentation at Asia Pacific Conference on Vision, Singapore, July 2015.

Peer Reviewed Conference Presentations

- Woon FT & **Styles SJ** (2017) 'Linguistic Sound Symbolism and Learning to Read: Preliminary results from a large-scale prospective study.' *Society for Research on Child Development (SRCD)*, Austin, TX, April 2017.
- Styles SJ** (2016) 'Sensory worlds: Multisensory outcomes of sensory tuning to phoneme structure' Presentation at the 5th Southern African Microlinguistics Workshop, Bloemfontein, South Africa, November 2016.
- Styles SJ** (2016) 'Sound symbolism in guessing and learning: a recognition/production divide?' Poster presented at *Architectures and Mechanisms of Language Processing (AMLaP)*, Bilbao, Sept 2016. <https://doi.org/10.6084/m9.figshare.3804321.v1>
- Styles SJ** & Ković V (2016) 'Cascading interactive activation between phonemes and letters in the Serbian writing system - a language with two scripts' Poster presented at *Architectures and Mechanisms of Language Processing (AMLaP)*, Bilbao, Sept 2016. <https://doi.org/10.6084/m9.figshare.3798279.v1>
- Lalić B, **Styles SJ** & Ković V (2016) 'How are sound symbolism and phonological discriminability related in category learning'. Poster presented at *Architectures and Mechanisms of Language Processing (AMLaP)*, Bilbao, Sept 2016.
- Styles SJ** & Shang N (2016) 'Is a high tone sharp or smooth? Sound symbolism and the limits of 'perceptual tuning' to tone in language'. Poster presented at the Society for the Neurobiology of Language, London, August 2016.
- Shang N & **Styles SJ** (2016) 'Attention modulates automatic cross-modal perceptions of Chinese tones.' Poster presented at the *International Symposium on Cognitive Neuroscience*, Singapore, Feb/Mar 2016.
- Woon FT & **Styles SJ** (2016) 'Linguistic Sound Symbolism and Learning to read: Developing a large-scale screening for pre-schoolers.' Poster presented at the *International Symposium on Cognitive Neuroscience*, Singapore, Feb/Mar 2016.
- Liew K, Lindborg PM & **Styles SJ** (2016) 'Auditory Roughness: A new dimension in cross-modal perception.' Poster presented at the *International Symposium on Cognitive Neuroscience*, Singapore, Feb/Mar 2016.
- Styles SJ** (2015) '10 Things I like about /y/: Cue trading in perceptual mappings between the fine-structure of speech, and other sensory domains,' Presentation at *European Society for Cognitive Psychology (ES COP)*, Cyprus, September 2015.

- Styles SJ** (2015). 'The Language of Dance: Testing a population model of cross-modal communication in the performing arts'. Invited with peer review as a presentation at the 2nd *International Symposium of Sound and Interactivity* Singapore, August 2015.
- Hung S, **Styles SJ** & Hsieh P (2015) 'Pre-conscious automaticity of sound-shape mapping' poster presented at the 2nd *International Symposium of Sound and Interactivity*, Singapore, August 2015.
- Turoman N & **Styles SJ** (2015) 'How well do humans capture the sounds of speech in writing?' poster presented at the 2nd *International Symposium of Sound and Interactivity*, Singapore, August 2015.
- Lim J & **Styles SJ** (2015) 'Guitar Face: Super-normal integration of sound and vision in Performance' poster presented at the 2nd *International Symposium of Sound and Interactivity*, Singapore, August, 2015.
- Shang N & **Styles SJ** (2015) 'An implicit association test on audiovisual cross-modal correspondences' poster presented at the 2nd *International Symposium of Sound and Interactivity*, Singapore, August, 2015.
- Styles SJ** (2015) 'Giving shape to the voices of instruments: Audio-visual correspondences between spatial and temporal frequencies' Presentation at *Asia Pacific Conference on Vision*, Singapore, July 2015. <https://dx.doi.org/10.6084/m9.figshare.3437471.v1>
- Shang N & **Styles SJ** (2015) 'Language backgrounds tune cross-modal perception between linguistic pitch and shape' Poster presented at *International Multisensory Research Forum*, Pisa, June 2015.
- Styles SJ** (2015) 'A bitter touch of chocolate' Presentation at the *International Multisensory Research Forum*, Pisa, June 2015.
- Styles SJ** (2015) 'Tuning the ear and the eye by tongue: Linguistic adaptation, inter-sensory perception, and cross-modal learning' Presentation at *Redesigning Pedagogy*, NIE, June 2015.
- Styles SJ** (2014) 'Sound symbolism is not universal: A phonological/tonological basis for matching speech-sounds to shapes' Presentation at *International Multisensory Research Forum*, Amsterdam, June 2014.
- Styles SJ** (2014) 'What can ancient scripts tell us about sound symbolism?' Poster presented at *International Multisensory Research Forum*, Amsterdam, June 2014. <https://dx.doi.org/10.6084/m9.figshare.3187387.v1>
- Styles SJ** (2014) 'Psychoacoustic correlates of speech-sound/shape/size mapping in a 121-alternative forced-choice task' Poster presented at *International Multisensory Research Forum*, Amsterdam, June 2014. <https://dx.doi.org/10.6084/m9.figshare.3467909.v1>
- Shang N & **Styles SJ** (2014) 'Cross-modal correspondences between visual shape and Mandarin Chinese tone in speakers with different language backgrounds' Poster presented at *International Multisensory Research Forum*, Amsterdam, June 2014.
- Kyjonkova H, **Styles SJ** & Plunkett K (2012) 'Emergent word learning over multiple exposures: Do 16-month-olds show an advantage for synaesthetic congruence?' *BPS Developmental Section Conference*, September 2012.
- Styles SJ** & Plunkett K (2011) 'Bananas make birds harder to find: Cohort size in a phonological picture-priming task at 24-months.' Presentation: *International Child Phonology Conference*, University of York, June 2011.
- Duta MD, **Styles SJ** & Plunkett K (2011) 'Mapping sounds to meaning: An ERP study of vowel processing in infants and adults.' Poster: *International Child Phonology Conference*, University of York, June 2011.
- Styles SJ** (2011) 'The time course of toddlers' visual disambiguation following auditory priming by taxonomic associates.' Presentation: *Society for Research into Child Development Biennial Conference*, Montreal, April 2011.

- Duta MD, **Styles SJ**, Lahiri A, Mills D & Plunkett K (2011) 'Sub-lexical phonological mapping in infants and adults.' Poster: *Society for Research into Child Development Biennial Conference*, Montreal, April 2011.
- Styles SJ** (2010) 'Links between words in the second year: Priming reveals (discrete/distributed) lexical networks.' Presentation: *International Conference on Infant Studies*, Baltimore, March 2010.
- Duta MD, **Styles SJ**, Lahiri A, Mills D and Plunkett K (2010) 'Is "fesh" a fish? Toddlers show sensitivity to underspecified vowel mispronunciations in an ERP picture-speech mismatch paradigm.' Poster: *International Conference on Infant Studies*, Baltimore, March 2010.
- Styles SJ** & Plunkett K (2007) 'Lexicon size: Differential effects on 'naming' and 'priming' in the second year.' Presentation: *British Psychological Society Developmental Section Conference*, University of Plymouth, August 2007.
- Styles SJ** & Plunkett K (2007) 'The time course of lexical priming for infants in their second year.' Presentation: *Child Language Seminar*, University of Reading, July 2007.
- Styles SJ** & Plunkett K (2006) 'Semantic priming at 18-months.' Presentation: *British Psychological Society Developmental Section Conference*, Royal Holloway, September 2006.
- Styles SJ** & Plunkett K (2006) 'Cat-dog: Links in the lexicons of 18- & 24-month-olds.' Presentation: *International Conference on Infant Studies*, Kyoto, June 2006.