

## Curriculum Vitae

Professor Padraic Monaghan  
Lancaster University

### Academic Qualifications

- 2000: PhD, Cognitive Science, University of Edinburgh, UK.
- 1995: MSc Cognitive Science and Natural Language, University of Edinburgh, UK, Distinction.
- 1994: BSc Mathematics and Philosophy, University of Manchester, UK 1<sup>st</sup> class Honours.

### Current and Past Posts

- 2007 – present: Professor of Cognition, Department of Psychology, Lancaster University, UK.
- 2016 – present: Research associate of Max Planck Institute for Psycholinguistics.
- 2013 – present: co-director ESRC International Centre for Language and Communicative Development.
- 2008-2009: Honorary research fellow, Second Language Learning group (Jan Hulstijn), ACLC, Universiteit van Amsterdam.
- 2003 – 2007: Lecturer, Department of Psychology, University of York, and Research Fellow at York Neuroimaging Centre, UK.
- 2002 –2003: Research Fellow, Department of Psychology, University of Warwick, UK.
- 2000 - 2002: Research Fellow, Division of Informatics, University of Edinburgh, UK.
- 1995 - 1996: Research Associate, Centre for Cognitive Science, University of Edinburgh, UK.

### Prizes and Awards

- Cognitive Science Society best paper in computational modelling of language (2016).
- Royal Society Visiting Fellowship (2014), to ILLC, Universiteit van Amsterdam.
- British Psychological Society Award for Outstanding Contribution to Research in Cognitive Psychology (2013).
- British Psychological Society Spearman Medal for outstanding published work in Psychology (2005).
- University of York Anniversary Lectureship (2005-6).
- EU short-term fellowship in Neuroinformatics (2001).

### Teaching

- *Undergraduate*: Psycholinguistics, Cognitive Psychology, Cognitive Neuroscience, Historical and Conceptual Issues, Personality and Psychometrics, Research Methods
- *Postgraduate*: Computational Models of Language and Developmental Disorders; Psychology of Advertising

### Supervision and examining

- 9 PhD students supervised to completion (all successfully completed on time), 5 current PhD students.
- 35 MSc students supervised to completion.
- External examiner for 13 PhDs, internal examiner for 14 PhDs.

- External consultant examiner for Birkbeck University of London, MSc Computational Neuroscience (2012-15); Nottingham University BSc Psychology and Psychology and Neuroscience (2013-16); Keele University BSc Psychology (2010-2013).

#### Senior administration

- 2013-present: Director of Lancaster site of ESRC International Centre for Language and Communicative Development.
- 2010–2014: Director Centre for Research in Human Development and Learning, Lancaster University, comprising 14 Faculty, 10 postdoctoral researchers.
- 2009–2014: Deputy Head of Department.
- 2008–2010, 2012-2014: Psychology Department Research Coordinator.

#### External Positions of Responsibility

- Associate Editor, Cognitive Science (2015-present).
- Editorial panel, Frontiers in Language Sciences (2011-present).
- Cognitive Science Society Programme Committee (2012-present).

#### *Invited External Seminars (since 2009)*

- Centre for Research in Language and Communication, Universiteit van Amsterdam (2009); Psychology Department, Birkbeck University of London (2009); Psychology Department, Aberdeen University (2009); Psychology Department, Birmingham University (2009); Psychology Department, Bonn Universitaet (2009); Psychology Department, Northumbria University (2010); Max Planck Institute for Psycholinguistics, Nijmegen (2011); Department of Information Science, Rijksuniversiteit Groningen (2011); Psychology Department, Universitat Pompeu Fabra Barcelona (2013); Psychology Department, Sheffield University (2014); ILLC, University of Amsterdam (2014); Cognition and Grammar group, University of Amsterdam (2014); Psychology Department, Leiden University (2014); Max Planck Institute for Psycholinguistics, Nijmegen (2014); Linguistics Department, Edinburgh University (2015); Psychology Department, Royal Holloway University of London (2015); Department of Computational Linguistics, University of Saarland (2016); Department of Psychology, University of Kaiserslautern (2016); Language and Speech colloquium, Radboud University (2017).

#### *Invited Presentations at Conferences/Workshops (since 2009):*

- Glenfinnan Language and Brain workshop (2009); British Psychological Society Annual Conference (2009); Scientific Studies of Reading Conference, Berlin (2010); Origins of Language workshop, University College London (2012); British Psychological Society Cognition and Developmental Psychology conference (2013); Form-meaning workshop, Cambridge (2013); Lorentz Center: Reappraising the Role of Linear Structure in Language (2015); Explicit and Implicit Language Learning workshop, Lancaster (2015); UK Psychology postgraduates annual conference, Glasgow (2015); AmLaP, Malta (2015); Lorentz Center: The Comparative Biology of Language Learning (2017); Biennial Conference on the Linguistics of Contemporary English, Vigo (2017).

#### Grants (total income > €3 million)

- 2015-2018. ESRC grant, Principal Investigator, with Stephen Welbourne (Manchester) and Fernando Cuetos (Oviedo), £361,080.
- 2014-2019. ESRC International Centre for Language and Communicative Development, Director with Elena Lieven & Anna Theakston (Manchester), Julian Pine & Caroline Rowland (Liverpool), £9,300,000. Personal responsibility for £2,241,641.

- 2010-2011. ESRC grant, PI with Tom Ormerod (Lancaster), £98,000.
- 2007-2008. ESRC grant, sole PI, £96,000.
- 2005-2006. ESRC grant, PI with Nick Chater (Warwick), £42,868.62.
- 2005-2009. EU Sixth Framework Research Training Network Grant, CI with 12 others, €3,000,000. Personal responsibility for €161,932.

## Publications

### *Peer-reviewed Journal Articles*

- Monaghan, P., & Rowland, C.F. (in press). Combining language corpora with experimental and computational approaches for language acquisition research. *Language Learning, in press*.
- Taylor, G., Monaghan, P., & Westermann, G. (in press). The role of children's media exposure in accounting for variability in vocabulary size. *Journal of Children and Media, in press*.
- Frost, R.L.A., & Monaghan, P. (2017). Sleep-driven computations in speech processing. *PloS one, 12, e0169538*.
- Frost, R.L.A., Monaghan, P., & Tatsumi, T. (2017). Domain-general mechanisms for speech segmentation: The role of duration information in language learning. *Journal of Experimental Psychology: Human Perception and Performance, 43, 466-476*.
- Monaghan, P. (2017). Canalization of language structure from environmental constraints: A computational model of word learning from multiple cues. *Topics in Cognitive Science, 9, 21-34*.
- Monaghan, P., Chang, Y.N., Welbourne, S., & Brysbaert, M. (2017). Exploring the relations between word frequency, language exposure, and bilingualism in a computational model of reading. *Journal of Memory and Language, 93, 1-21*.
- Monaghan, P., Shaw, J. J., Ashworth-Lord, A., & Newbury, C. (2017). Hemispheric processing of memory is affected by sleep. *Brain and Language, 167, 36-43*.
- Smith, A.C., Monaghan, P., & Huettig, F. (2017). The multimodal nature of spoken word processing in the visual world: Testing the predictions of alternative models of multimodal integration. *Journal of Memory and Language, 93, 276-303*.
- Christiansen, M.H. & Monaghan, P. (2016). Division of labor in vocabulary structure: Insights from corpus analysis. *Topics in Cognitive Science, 8, 610-624*.
- Frost, R. L. A., & Monaghan, P. (2016). Simultaneous segmentation and generalisation of non-adjacent dependencies from continuous speech. *Cognition, 147, 70-74*.
- Kalashnikova, M., Mattock, K., & Monaghan, P. (2016). Flexible use of mutual exclusivity in word learning. *Language Learning and Development, 12, 79-91*.
- Kalashnikova, M., Mattock, K., & Monaghan, P. (2016). Mutual exclusivity develops as a consequence of abstract rather than particular vocabulary knowledge. *First Language, 36, 451-464*.
- Dingemanse, M., Blasi, D. E., Lupyan, G., Christiansen, M. H., & Monaghan, P. (2015). Arbitrariness, iconicity and systematicity in language. *Trends in Cognitive Sciences, 19, 603-615*.
- Kalashnikova, M., Mattock, K., & Monaghan, P. (2015). The effects of linguistic experience on the flexible use of mutual exclusivity in word learning. *Bilingualism: Language and Cognition, 18, 626-638*.
- Monaghan, P., Mattock, K., Davies, R., & Smith, A.C. (2015). Gavagai is as gavagai does: Learning nouns and verbs from cross-situational statistics. *Cognitive Science, 39, 1099-1112*.

- Monaghan, P., Sio, U. N., Lau, S. W., Woo, H. K., Linkenauger, S. A., & Ormerod, T. C. (2015). Sleep promotes analogical transfer in problem solving. *Cognition*, *143*, 25-30.
- Taylor, J.S.H., Duff, F.J., Woollams, A., Monaghan, P., & Ricketts, J. (2015). How word meaning influences word reading. *Current Directions in Psychological Science*, *4*, 322-338.
- Kalashnikova, M., Mattock, K., & Monaghan, P. (2014). Disambiguation of novel labels and referential facts: A developmental perspective. *First Language*, *34*, 125-135.
- Monaghan, P. (2014). Age of acquisition predicts rate of lexical evolution. *Cognition*, *133*, 530-534.
- Monaghan, P., Shillcock, R.C., Christiansen, M.H., & Kirby, S. (2014). How arbitrary is language? *Philosophical Transactions of the Royal Society B*, 369 20130299.
- Smith, A.C., Monaghan, P., & Huettig, F. (2014). Literacy effects on language and vision: Emergent effects from an amodal shared resource (ASR) computational model. *Cognitive Psychology*, *75*, 28-54.
- Monaghan, P., White, L., & Merkx, M. (2013). Disambiguating durational cues for speech segmentation. *Journal of the Acoustical Society of America*, *134*, EL45-EL51.
- Sio, U.N., Monaghan, P., & Ormerod, T. (2013). Sleep on it, but only if it's difficult: Effects of sleep on problem solving. *Memory and Cognition*, *41*, 159-166.
- Smith, A.C., Monaghan, P., & Huettig, F. (2013). An amodal shared resource model of language-mediated visual attention. *Frontiers in Language Sciences*, *4*, 00528.
- Fargier, F., Paulignan, Y., Boulenger, V., Monaghan, P., Reboul, A., & Nazir, T.A. (2012). Learning to associate novel words with motor actions: Language-induced motor activity following short training. *Cortex*, *48*, 888-899.
- Monaghan, P. & Mattock, K. (2012). Integrating constraints for learning word referent mappings. *Cognition*, *123*, 133-143.
- Monaghan, P., Mattock, K., & Walker, P. (2012). The role of sound symbolism in language learning. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 1152-1164.
- Farmer, T.A., Monaghan, P., Misyak, J.B., & Christiansen, M.H., (2011). Phonological typicality influences sentence processing in predictive contexts: A reply to Staub et al. (2009). *Journal of Experimental Psychology: Learning, Memory and Cognition*, *37*, 1318-1325.
- Monaghan, P., Christiansen, M.H., & Fitneva, S.A. (2011). The arbitrariness of the sign: Learning advantages from the structure of the vocabulary. *Journal of Experimental Psychology: General*, *140*, 325-347.
- Arciuli, J., Monaghan, P., & Seva, N. (2010). Learning to assign lexical stress during reading aloud: Corpus, behavioural, and computational investigations. *Journal of Memory and Language*, *63*, 180-196.
- Arciuli, J., Rankine, T., & Monaghan, P. (2010). Top down modulation of bottom up processes is associated with reading ability. *Laterality*, *15*, 343-360.
- Monaghan, P., Christiansen, M.H., Farmer, T.A., & Fitneva, S.A. (2010). Measures of phonological typicality: Robust coherence and psychological validity. *The Mental Lexicon*, *5*, 281-299.
- Monaghan, P., & Christiansen, M.H. (2010). Words in puddles of sound: Modelling psycholinguistic effects in speech segmentation. *Journal of Child Language*, *37*, 545-564.
- Monaghan, P. & Ellis, A.W. (2010). Modeling reading development: Cumulative, incremental learning in a computational model of word naming. *Journal of Memory and Language*, *63*, 506-525.

- Pagliuca, G. & Monaghan, P. (2010). Discovering large grain-sizes in a transparent orthography: Insights from a connectionist model of reading aloud for Italian. *European Journal of Cognitive Psychology*, 22, 813-835.
- St Clair, M.C., Monaghan, P., & Christiansen, M.H. (2010). Learning grammatical categories from distributional cues: Flexible frames for language acquisition. *Cognition*, 116, 341-360.
- Arciuli, J. & Monaghan, P. (2009). Probabilistic cues to grammatical category in English orthography and their influence during reading. *Scientific Studies of Reading*, 13, 73-93.
- Fitneva, S., Christiansen, M.H., & Monaghan, P. (2009). From sound to syntax: Phonological constraints on children's lexical categorization of new words. *Journal of Child Language*, 36, 967-997.
- Seva, N., Monaghan, P., & Arciuli, J. (2009). Stressing what is important: Orthographic cues and lexical stress assignment. *Journal of Neurolinguistics*, 22, 237-249.
- St Clair, M., Monaghan, P., & Ramscar, M. (2009). Relationships between language structure and language learning: The suffixing preference and grammatical categorization. *Cognitive Science*, 33, 1317-1329.
- de Vries, M., Monaghan, P., Knecht, S., & Zwitserlood, P. (2008). Syntactic structure and artificial grammar learning: The learnability of embedded hierarchical structures. *Cognition*, 106, 763-774.
- Monaghan, P. & Rowson, C. (2008). Repetition and similarity in sequence learning. *Memory and Cognition*, 36, 1509-1514.
- Monaghan, P. & Shillcock, R.C. (2008). Hemispheric dissociation and dyslexia in a computational model of reading. *Brain and Language*, 107, 185-193.
- Monaghan, P., Christiansen, M.H., & Chater, N. (2007). The Phonological Distributional coherence Hypothesis: Cross-linguistic evidence in language acquisition. *Cognitive Psychology*, 55, 259-305.
- Monaghan, P. & Shillcock, R.C. (2007). Levels of description in consonant/vowel processing: Reply to Knobel and Caramazza. *Brain and Language*, 100, 101-108.
- Farmer, T.A., Christiansen, M.H., & Monaghan, P. (2006). Phonological typicality influences on-line sentence comprehension. *Proceedings of the National Academy of Sciences*, 103, 12203-12208.
- Monaghan, P., Chater, N., & Christiansen, M.H. (2005). The differential contribution of phonological and distributional cues in grammatical categorisation. *Cognition*, 96, 143-182.
- Onnis, L., Monaghan, P., Richmond, K., & Chater, N. (2005). Phonology impacts segmentation in speech processing. *Journal of Memory and Language*, 53, 225-237.
- Monaghan, P. & Shillcock, R.C. (2004). Hemispheric asymmetries in cognitive modelling: Connectionist modelling of unilateral visual neglect. *Psychological Review*, 111, 283-308.
- Monaghan, P., Shillcock, R.C. & McDonald, S. (2004). Hemispheric asymmetries in the split-fovea model of semantic processing. *Brain and Language*. 88(3), 339-354
- Monaghan, P. & Pollmann, S. (2003). Division of labour between the hemispheres for complex but not simple tasks: An implemented connectionist model. *Journal of Experimental Psychology: General*, 132(3), 379-399.
- Monaghan, P. & Shillcock, R.C. (2003). Connectionist modelling of the separable processing of consonants and vowels. *Brain and Language*, 86(1), 83-98.
- Shillcock, R.C. & Monaghan, P. (2001). The computational exploration of visual word recognition in a split model. *Neural Computation*, 13, 1171-1198.

- Shillcock, R. Ellison, M.T. & Monaghan, P. (2000). Eye-fixation behaviour, lexical storage and visual word recognition in a split processing model. *Psychological Review*, 107, 824-851.
- Oberlander, J., Monaghan, P., Cox, R., Stenning, K., & Tobin, R. (1999). Unnatural language discourse: an empirical study of multimodal proof styles. *Journal of Logic, Language and Information*, 8, 363-384.
- Monaghan, P. & Shillcock, R. (1998). The cross-over effect in unilateral neglect: modelling detailed data in the line-bisection task. *Brain*, 121, 907-921.
- Shillcock, R., Kelly, M.L., & Monaghan, P. (1998). Processing of palindromes in neglect dyslexia. *Neuroreport*, 9, 3081-3083.

#### *Peer-reviewed Conference Proceedings*

- Chang, Y.-N., Taylor, J., Rastle, K., & Monaghan, P. (2017). Exploring the relations between oral language and reading instruction in a computational model of reading. *Proceedings of the 39<sup>th</sup> Cognitive Science Society Conference*.
- Monaghan, P., Brand, J., Taylor, G., & Frost, R.L.A. (2017). Multiple variable cues in the environment promote accurate and robust word learning. *Proceedings of the 39<sup>th</sup> Cognitive Science Society Conference*.
- Monaghan, P., Chang, Y.-N., & Welbourne, S. (2017). Different processes for reading words learned before and after onset of literacy. *Proceedings of the 39<sup>th</sup> Cognitive Science Society Conference*.
- Monaghan, P. & Woollams, A. W. (2017). Implementing the "Simple" model of reading deficits: A connectionist investigation of interactivity. In K. Twomey, A. C. S. Smith, G. Westermann, & P. Monaghan (Eds.), *Proceedings of the 14th Neural Computation and Psychology Workshop (Vol. 22)* pp.69-82. Singapore: World Scientific.
- Smith, A. C., Monaghan, P., & Huettig, F. (2017). Complex word recognition behaviour emerges from the richness of the word learning environment. In K. Twomey, A. C. S. Smith, G. Westermann, & P. Monaghan (Eds.), *Proceedings of the 14th Neural Computation and Psychology Workshop (Vol. 22)*, pp.99-114. Singapore: World Scientific.
- Walker, N., Schoetensack, C., Monaghan, P., & Rebuschat, P. (2017). Simultaneous acquisition of vocabulary and grammar in an artificial language learning task. *Proceedings of the 39th Cognitive Science Society Conference*.
- Chang, Y.-N., Monaghan, P., & Welbourne, S. (2016). Effects of experience in a developmental model of reading. *Proceedings of the 38th Cognitive Science Society Conference*.
- Frost, R. L. A., Monaghan, P., & Christiansen, M. H. (2016). Using statistics to learn words and rules: How high frequency words assist language acquisition. *Proceedings of the 38th Cognitive Science Society Conference*.
- Monaghan, P. (2016). Degeneracy results in canalisation of language structure: A computational model of word reading. *Proceedings of the 38th Cognitive Science Society Conference*.
- Monaghan, P. & Zuidema, W.H. (2015). General purpose cognitive processing constraints and phonotactic properties of the vocabulary. In *Proceedings of the workshop on the evolution of phonetic capabilities. International Congress of Phonetic Sciences*, Glasgow.
- Monaghan, P., Christiansen, M.H., & Lupyan, G. (2014). The systematicity of the sign: Modeling activation of semantic attributes from nonwords. *Proceedings of the 36th Cognitive Science Society Conference*.

- Monaghan, P., Ormerod, T., & Sio, U.N. (2014). Interactive activation networks for modelling problem solving. In Mayor, J. & Gomez, P. (Eds.), *Computational models of cognitive processes: Proceedings of the 13th Neural Computation and Psychology Workshop (Vol. 21)*, 185-195. Singapore: World Scientific.
- Smith, A.C., Monaghan, P., & Huettig, F. (2014). Examining strains and symptoms of the 'Literacy Virus': The effects of orthographic transparency on phonological processing in a connectionist model of reading. *Proceedings of the 36th Cognitive Science Society Conference*.
- Smith, A.C., Monaghan, P., & Huettig, F. (2014). A comprehensive model of spoken word recognition must be multimodal: Evidence from studies of language mediated visual attention. *Proceedings of the 36th Cognitive Science Society Conference*.
- Smith, A.C., Monaghan, P., & Huettig, F. (2013). Modeling the effects of formal literacy training on language mediated visual attention. *Proceedings of the 35th Conference Society Conference*.
- Monaghan, P. (2011). Design features of language emerge from general purpose learning mechanisms. *Proceedings of the 33rd Annual Conference of the Cognitive Science Society*. Boston, MA: Cognitive Science Society.
- Smith, A.C. & Monaghan, P. (2011). What are the functional units in reading? Evidence for statistical variation influencing word processing. In E. Davelaar (Ed.), *Connectionist models of behaviour and cognition 12..* Singapore: World Scientific.
- Monaghan, P., Christiansen, M. H., & Fitneva, S. (2010). Balancing arbitrariness and systematicity in language evolution. In A.D.M. Smith, Schouwstra, M., de Boer, B., & Smith, K. (Eds.), *Evolution of language*, pp.465-466. London: World Scientific.
- Monaghan, P. & Mattock, K. (2009). Cross-situational language learning: The effects of grammatical categories as constraints on referential labelling. *Cognitive Science Society Conference Proceedings..* Mahwah, NJ: Lawrence Erlbaum.
- Monaghan, P. & Nazir, T. (2009). Modelling sensory integration and embodied cognition in a model of word recognition. In J. Mayor, N. Ruh, & K. Plunkett (Eds.), *Connectionist models of behaviour and cognition II*, pp.337-348. Singapore: World Scientific.
- Pagliuca, G. & Monaghan, P. (2009). A connectionist model of reading for Italian. In J. Mayor, N. Ruh, & K. Plunkett (Eds.), *Connectionist models of behaviour and cognition II*, pp.301-312. Singapore: World Scientific.
- Monaghan, P., Arciuli, J., & Seva, N. (2008). Constraints for computational models of reading: Evidence from learning lexical stress. *Proceedings of the 30th Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Lawrence Erlbaum.
- Pagliuca, G. & Monaghan, P. (2008). Variable vulnerability of words to visual impairment: exploring grain-size effects in reading. *Proceedings of the 30th Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Lawrence Erlbaum.
- St Clair, M.C. & Monaghan, P. (2008). Language abstraction: Consolidation of language structure during sleep. *Proceedings of the 30th Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Lawrence Erlbaum.
- Merx, M. & Monaghan, P. (2006). A hierarchy of prosodic cues in speech processing. *Proceedings of the 28th Annual Conference of the Cognitive Science Society*.
- Monaghan, P. & Christiansen, M.H. (2006). Why form-meaning mappings are not entirely arbitrary in language. *Proceedings of the 28th Annual Conference of the Cognitive Science Society*.
- Monaghan, P. & Christiansen, M.H. (2006). Iconic versus arbitrary mappings and the cultural transmission of language. In Cangelosi, A., Smith, A.D.M., & Smith, K. (Eds.), *The evolution of language*, 430-432. New Jersey: World Scientific.

- Pagliuca, G. & Monaghan, P. (2006). Dissociating word reading and lexical decision in neglect dyslexia: A connectionist account. *Proceedings of the 28th Annual Conference of the Cognitive Science Society*.
- Monaghan, P., Chater, N., & Hulme, C. (2005). Levels of representation in language development. *Proceedings of the 27th Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Lawrence Erlbaum.
- St Clair, M.C. & Monaghan, P. (2005). Categorizing grammar: Differential effects of preceding and succeeding contextual cues. *Proceedings of the 27th Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Lawrence Erlbaum.
- Monaghan, P. & Christiansen, M.H. (2004). What distributional information is useful and usable in language acquisition? *Proceedings of the 26th Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Lawrence Erlbaum.
- Onnis, L., Monaghan, P., Christiansen, M.H. & Chater, N. (2004). Variability is the spice of learning, and a crucial ingredient for detecting and generalizing in nonadjacent dependencies. *Proceedings of the 26th Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Lawrence Erlbaum.
- Shillcock, R.C. & Monaghan, P. (2004). Reading, sublexical units and scrambled words: Capturing the human data. Bowman, H. & Labiouse, C. (Eds.), *Proceedings of the Eighth Neural Computation and Psychology Workshop: Connectionist Models of Cognition and Perception II*, Volume 15 of Progress in Neural Processing, 221-230. Singapore: World Scientific.
- Monaghan, P., Chater, N. & Christiansen, M.H. (2003). Inequality between the classes: Phonological and distributional typicality as predictors of lexical processing. *Proceedings of the 25th Annual Conference of the Cognitive Science Society*.
- Monaghan, P., Gonitzke, M. & Chater, N. (2003). Two wrongs make a right: Learnability and word order consistency. *Proceedings of the 25th Annual Conference of the Cognitive Science Society*.
- Reali, F., Christiansen, M.H. & Monaghan, P. (2003). Phonological and Distributional Cues in Syntax Acquisition: Scaling-Up the Connectionist Approach to Multiple-Cue Integration. *Proceedings of the 25th Annual Conference of the Cognitive Science Society*.
- Monaghan, P. & Shillcock, R.C. (2001). Applying neuroanatomical distinctions to connectionist cognitive modelling. In R. French (Ed.) *Proceedings of the 6th neural computation and psychology workshop*. London: Springer-Verlag, pp.1-12.
- Shillcock, R.C. & Monaghan, P. (2001). Connectionist modelling of surface dyslexia based on foveal splitting: Impaired pronunciation after only two half pints. *Proceedings of the 23rd Annual Conference of the Cognitive Science Society*. Edinburgh: Lawrence Erlbaum Associates, pp.916-921.
- Shillcock, R.C. & Monaghan, P. (2001). Understanding dyslexia in terms of the neuro-anatomy of normal visual word recognition. In *Proceedings of the 5th British Dyslexia Association International Conference*.
- Monaghan, P., Stenning, K., Oberlander, J. & Sonstroff, C. (1999). Integrating psychometric and computational approaches to individual differences in multimodal reasoning. *Proceedings of the 21st Annual Conference of the Cognitive Science Society*. Vancouver: Lawrence Erlbaum Associates, pp.405-410.
- Shillcock, R., Monaghan, P. & Ellison, M.T. (1999). The SPLIT model of visual word recognition: Complementary connectionist and statistical cognitive modelling. In D.Heinke, G.W.Humphreys & A.Olson (Eds.) *Connectionist models in cognitive neuroscience: the 5th neural computation and psychology workshop*. London: Springer-Verlag, pp. 3-12.

- Shillcock, R., Ellison, M.T. & Monaghan, P. (1999). The optimal behaviour of a split model of word recognition resembles observed fixation behaviour. *Proceedings of the 21st Annual Conference of the Cognitive Science Society*. Vancouver: Lawrence Erlbaum Associates, pp.653-658.
- Monaghan, P. & Stenning, K. (1998). Effects of representational modality and thinking style on learning to solve reasoning problems. *Proceedings of the 20th Annual Conference of the Cognitive Science Society*. Madison, WI: Lawrence Erlbaum Associates, pp.716-721.
- Shillcock, R. & Monaghan, P. (1998). Using physiological information to enrich the connectionist modelling of normal and impaired visual word recognition. *Proceedings of the 20th Annual Conference of the Cognitive Science Society*. Madison, WI: Lawrence Erlbaum Associates, pp.945-950.
- Oberlander, J., Cox, R., Monaghan, P., Stenning, K., & Tobin, R. (1996). Individual differences in proof structures following multimodal logic teaching. *Proceedings of the Eighteenth Annual Meeting of the Cognitive Science Society*, (pp. 201-206). La Jolla, CA: Lawrence Erlbaum Associates.

#### *Book Chapters and Other Articles*

- Monaghan, P., Kalashnikova, M., & Mattock, K. (in press). Intrinsic and extrinsic cues to word learning. In Westermann, G., & Mani, N. (Eds.), *Early word learning*. Psychology Press.
- Monaghan, P., Arciuli, J. & Seva, N. (2016). Cross-linguistic evidence for probabilistic orthographic cues to lexical stress. In Thomson, J. & Jarmulowicz, L. (Eds.), *Linguistic rhythm and literacy*. Trends in Language Acquisition Research series (TiLAR), pp.215-236. John Benjamins Publishing: Amsterdam.
- McCauley, S.M., Monaghan, P. & Christiansen, M.H. (2015). Language emergence in development: A computational perspective. In B. MacWhinney & W. Grady (Eds.), *The handbook of language emergence*. Hoboken, NJ: Wiley-Blackwell.
- Monaghan, P. & Christiansen, M.H. (2014). Multiple-cue integration in language acquisition. In P. Brooks & V. Kempe (Eds.), *Encyclopedia of Language Development*. Thousand Oaks, CA: Sage Publications.
- St. Clair, M., Monaghan, P., & Christiansen, M.H. (2014). Acquisition of grammatical categories. In P. Brooks & V. Kempe (Eds.), *Encyclopedia of Language Development*. Thousand Oaks, CA: Sage Publications.
- Monaghan, P., Keidel, J., Burton, A.M., & Westermann, G. (2010). What computers have shown us about the mind. *The Psychologist*, 23, 642-645.
- Monaghan, P. & Christiansen, M.H. (2008). Integration of multiple probabilistic cues in syntax acquisition. In Behrens, H. (Ed.), *Corpora in language acquisition research: History, methods, perspectives*, pp.139-164. Amsterdam: John Benjamins.
- Christiansen, M.H. & Monaghan, P. (2006). Discovering verbs through multiple-cue integration. In K. Hirsh-Pasek & R.M. Golinkoff (Eds.). *Action Meets Word: How Children Learn Verbs*. Oxford: Oxford University Press.
- Monaghan, P. (2006). Left and right brain: Insights from neural networks. *The Psychologist*, 19 (5), 274-277.
- Monaghan, P. & Stenning, K. (2003). Generalising individual differences and strategies across different deductive reasoning domains. D. Hardman & L. Macchi (Eds.) *Thinking: Psychological Perspectives on Reasoning, Judgement and Decision Making*, pp.45-62. Chichester: Wiley.

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