

Nathalie N. Bélanger – Research Scientist

Laboratory for Language & Cognitive Neuroscience (LLCN) • San Diego State University • 6495 Alvarado Road, Suite 200, San Diego, CA 92120 • (619) 594-1355 • nbelanger@mail.sdsu.edu

Education and Research Experience

- 2015- ... Research Scientist, Laboratory for Language & Cognitive Neuroscience, San Diego State University.
2012-2016 Assistant Research Scientist, Rayner Eyetracking Lab, University of California, San Diego.
2009-2012 Post-Doctoral Fellow, Rayner Eyetracking Lab, University of California, San Diego.
2002-2008 Ph.D. Communication Sciences and Disorders, McGill University, Montréal.
Reading is in the eye of the beholder: Eye movements and early word processes in deaf readers of French. Co-supervisors: Dr. Rachel I. Mayberry & Dr. Shari R. Baum
2000-2002 M.A. Teaching French as a Second Language, Université du Québec à Montréal, Montréal.
Title - Évaluation des effets du logiciel *Le français sur le bout des doigts* sur la reconnaissance et la compréhension du vocabulaire du français par des adultes sourds gestuels [Assessment of Word Recognition and Reading Comprehension Skills of Signing Deaf Adults after their Use of the *Le français sur le bout des doigts* Software]
1992-1994, 2000 B.A. Translation and Linguistics, Université de Montréal, Canada.

Research Grants

- 2012-2014 *Reading processes in skilled and less skilled profoundly deaf adult readers*
R03 Small Grants program – NIH/NIDCD 5R03DC011352-02
PI : Dr. Nathalie N. Bélanger
- 2009-2011 *Une étude oculométrique de l'impact de la morphologie en lecture* Social Sciences and Humanities Research Council of Canada
PI : Dr. Phaedra Royle; Co-Investigator: Dr. Nathalie N. Bélanger

Fellowships, Scholarships, and Activities

- 2017-2019 Marie Curie Fellowship
2013-present Psychonomic Society Fellow
2009-2011 Postdoctoral Fellowship (FQRSC)
2006- 2007 McGill's Internal Grants Program, Social Sciences and Humanities Research Subcommittee.
2002- 2006 Doctoral Fellowship, Social Sciences and Humanities Research Council (SSHRC).
2002- 2006 Doctoral Fellowship Supplement, National Literacy Secretariat/SSHRC.
2002-2005 Doctoral Fellowship, Fonds québécois de la recherche sur la société et la culture (FQRSC).
2001-2002 Master's Scholarship, Centre de recherche interdisciplinaire en réadaptation du Montréal métropolitain (CRIR).
2000 Master's and Doctoral Funding Program, Fondation de l'UQÀM.

Prizes and Honors

- 2016 Recognition of my “outstanding service in providing accommodation to UC San Diego students with disabilities” from the Office for Students with Disabilities, UCSD.
2008 IODE “Silence to Sound” Award for my research with deaf individuals.
2007-2008 Bridge Funding Award, Centre for Research on Language, Mind and Brain, McGill University.
2007 Montreal League for the Hard of Hearing Award.
2000 Pelchat-Labelle Award for Linguistics/Second Language Teaching, Fondation de l'Université du Québec à Montréal.

Publications

- Bélanger, N.N., Lee, M., & Schotter, L.** (invited submission under review). Young skilled deaf readers have an enhanced perceptual span in reading. *Quarterly Journal of Experimental Psychology, Special Issue in honour of Keith Rayner*.
- Feng, X., Lia, L., Zhang, M., Yang, X., Tian, M., Xie, W., Lu, Y., Liu, L., **N. N. Bélanger**, Xiangzhi Meng, X., Ding, G., (Accepted) Dyslexic children show atypical cerebellar activation and cerebro-cerebellar functional connectivity in orthographic and phonological processing. *The Cerebellum*.
- Bélanger, N.N. & Rayner, K.** (2015). What eye movements reveal about deaf readers. *Current Directions in Psychological Science, Vol. 24*(3) 220-226.
- Yan, M., Pan, J., **Bélanger, N.N. & Shu, H.** (2015). Chinese deaf readers have early access to parafoveal semantics. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 41*(1), 254-261.
- Frisson, S., **Bélanger, N.N. & Rayner, K.** (2014). Phonological and orthographic overlap effects in fast and masked priming. *Quarterly Journal of Experimental Psychology, 67*(9), 1742-1767.
- Bélanger, N.N., & Rayner, K.** (2013). Frequency and predictability effects in eye fixations for skilled and less-skilled deaf readers. *Visual Cognition, 21*(4), 477-497.
- Bélanger, N.N., Mayberry, R. I. & Rayner, K.** (2013). Orthographic and phonological preview benefits: Parafoveal processing in skilled and less-skilled deaf readers. *Quarterly Journal of Experimental Psychology, 66*(11), 2237-2252.
- Bélanger, N.N., Slattery, T.J., Mayberry, R.I. & Rayner K.** (2012). Skilled deaf readers have an enhanced perceptual span in reading. *Psychological Science, 23*(7), 816-823.
- Bélanger, N.N., Baum, S.R., & Mayberry, R.I.** (2012). Reading difficulties in adult deaf readers of French: Phonological codes, not guilty! *Scientific Studies of Reading, 16*(3), 263-285.
- Rayner, K., Slattery, T.J., & **Bélanger, N.N.** (2010). Eye movements, the perceptual span, and reading speed. *Psychonomic Bulletin & Review, 17*(6), 834-839
- Bélanger, N., Baum, S.R., & Titone, D.** (2009). Use of prosodic cues in the production of idiomatic and literal sentences by right- and left-hemisphere damaged patients. *Brain & Language, 110*(1), 38-42.

Invited Talks and Symposia

- Bélanger, N.N.** (Guest Speaker, March 2017) What Can the Reading Processes of Skilled Deaf Readers Teach Us?, 2nd *International Conference on Teaching Deaf Learners*, Amsterdam, Netherlands.
- Bélanger, N.N.** (September 2015) Deaf Readers' Processing Efficiency. Visual Cognition Laboratory, Bournemouth University, England.
- Bélanger, N.N., Schotter, E., & Rayner, K.** (August 2015) Young Skilled Deaf Readers have an Enhanced Perceptual Span in Reading, *18th European Conference on Eye Movements*, Vienna, Austria.
- Bélanger, N.N.** (March 2015) Deaf Readers' Processing Efficiency. *Symposium on Visual Aspects of Reading*, Grasmere, England.
- Bélanger, N.N.** (May 2014). What eye movements reveal about young deaf readers. *Presentation for the California Deaf Education Resource Center (CDERC) staff*. California School for the Deaf, Fremont.
- Bélanger, N.N., & Rayner, K.** (April 2014). What eye movements reveal about deaf readers. *The VL2 Meeting*. Gallaudet, Online Meeting.
- Bélanger, N.N., Mayberry, R. I. & Rayner, K.** (July 2012). Dissociation of orthographic and phonological codes in signing adult deaf readers: How does the use of these codes relate to reading level? Talk presented at the *Nineteenth Annual Meeting Society for the Scientific Study of Reading*, Montréal, Canada.
- Bélanger, N.N., Mayberry, R. I. & Rayner, K.** (June 2012). Orthographic and phonological preview benefits: Parafoveal processing in skilled and less-skilled deaf readers. Talk presented at the *Fifth China International Conference on Eye Movements*, University of Liaoning, Dalian, China.
- Bélanger, N.N. & Rayner, K.** (November 2011). Reading difficulties in adult deaf readers of French: Phonological codes, not guilty!, Talk presented at the *Visual Language Summit, Center for Mind and Brain*, University of California, Davis.
- Bélanger, N.** (May 2011). Étude du mouvement des yeux et des processus de reconnaissance des mots chez des adultes sourds gestuels, Talk presented at the *Beaux-Midis*, École d'orthophonie et d'audiologie, Université de Montréal, Montréal.

- Bélanger, N.N.** (May 2009). Reading difficulties in adult deaf readers of French: Phonological codes, not guilty!, Talk presented at the *Center for Research in Language Talks*, University of California, San Diego.
- Bélanger, N.** (December 2008). Étude du mouvement des yeux et des processus de reconnaissance des mots chez des adultes sourds gestuels, Talk presented at the *Conférence-midi IRD*, Institut Raymond-Dewar, Montréal.
- Bélanger, N.** (April 2008). The use of phonological and orthographic information during word recognition by skilled and less skilled deaf readers of French, Talk presented at the *Centre for Research on Language, Mind and Brain - Bag Lunch Series*, McGill University, Montréal.
- Bélanger N. & Rayner. K.** (2007). Seminar on the main results, applications, models, strengths and pitfalls of eye movement research. *SCSD-666 Seminar on Research Techniques in Cognitive Neuroscience*, McGill University, Montréal.
- Bélanger, N.** (June 2006). Introduction to eyetracking research, presented at the *Centre for Research on Language, Mind and Brain - Bag Lunch Series*, McGill University, Montréal.
- Parisot, A.-M., **Bélanger, N.** & Langevin, M. (April, 2004). *Le français sur le bout des doigts: la recherche au service des communautés [Le français sur le bout des doigts : Community-oriented research]*, *Conférences du Centre de recherche interdisciplinaire en réadaptation*, presented at the Institut Raymond-Dewar, Montréal.
- Parisot, A.-M. & **Bélanger, N.** (February 2002). La morphologie de la LSQ et l'accès au lexique mental [Morphological processes in Quebec Sign Language and access to the mental lexicon], presented to the *International Mental Lexicon Research Group*, McGill University, Montréal.
- Bélanger, N.** (October 2000 – December 2000; May 2001). Adaptation de textes écrits pour les Sourds. [How to adapt written communication addressed to deaf people], presented at the Institut Raymond-Dewar, Montréal and at the Institut de réadaptation en déficience physique de Québec, Québec City.

Selected Poster Presentations and Talks

- Bélanger, N.N., Brederson, R., & Morford, J.P.** (November 2016) Automatic American Sign Language (ASL) activation in parafoveal vision during reading in ASL-English deaf bilinguals. Talk presented at the *57th Meeting of the Psychonomic Society*, Boston.
- Bélanger, N.N.** (November 2015) Deaf Readers' Processing Efficiency. Talk presented at the *56th Meeting of the Psychonomic Society*, Chicago.
- Bélanger, N.N., Schotter, E., & Rayner, K.** (November 2014) Young Deaf Readers' Word Processing Efficiency. Poster presented at the *55th Meeting of the Psychonomic Society*, Long Beach.
- Bélanger, N.N., Schotter, E., & Rayner, K.** (June 2014) Young Deaf Readers' Word Processing Efficiency. Poster presented at the *VL2-NSF Site Visit*, Gallaudet University, Washington D.C.
- Bélanger, N.N., Morford, J., & Rayner, K.** (October 2013). Automatic American Sign Language (ASL) activation during reading in ASL-English deaf bilinguals. Poster presented at the *International Conference on Multilingualism*, McGill University, Montréal, Canada.
- Bélanger, N.N., Morford, J., & Rayner, K.** (August 2013). Automatic American Sign Language (ASL) activation during reading in ASL-English deaf bilinguals. Poster presented at the *17th European Conference on Eye Movements*, Lund University, Sweden.
- Bélanger, N.N., Mayberry, R. I. & Rayner, K.** (November 2012). Orthographic and phonological preview benefits: Parafoveal processing in skilled and less-skilled deaf readers. Poster presented at the *53rd Meeting of the Psychonomic Society*, Minneapolis.
- Leinenger, M., **Bélanger, N.N., Slattery, T.J. & Rayner, K.** (November 2012). Bilingual interlingual homograph processing: The relative influences of semantic and language contexts. Poster presented at the *53rd Meeting of the Psychonomic Society*, Minneapolis.
- Bélanger, N.N., Leinenger, M., Slattery, T.J. & Rayner, K.** (October 2012). The relative influences of semantic context and language context on bilinguals reading interlingual homographs. Poster presented at the *Eighth International Conference on the Mental Lexicon*, McGill University, Montréal.
- Leinenger, M., **Bélanger, N.N., Slattery, T.J. & Rayner, K.** (November 2012). The relative influences of semantic context and language context on bilinguals reading interlingual homographs. Poster presented at the *31st Second Language Research Forum*. Pittsburgh.
- Bélanger, N.N., Mayberry, R.I., Slattery, T.J. & Rayner, K.** (November 2011). Skilled deaf readers have an enhanced perceptual span in reading, Poster presented at the *52nd Meeting of the Psychonomic Society*, Seattle.

- Bélanger, N.N.**, Mayberry, R.I., Slattery, T.J. & Rayner, K. (August 2011). Skilled deaf readers have an enhanced perceptual span in reading, Poster presented at the *16th European Conference on Eye Movements*, University of Provence in Marseille, France.
- Bélanger, N.N.**, & Mayberry, R.I. (2009). Orthographic and phonological preview benefits in skilled and less skilled deaf readers, Poster presented at the *15th European Conference on Eye Movements*, University of Southampton, England.
- Bélanger, N.**, Mayberry, R.I. & Baum, S.R. (August, 2007). Eye movement characteristics of skilled and less skilled deaf readers, Poster presented at the *14th European Conference on Eye Movements*, University of Potsdam, Germany.
- Bélanger, N.** & Mayberry, R.I. (October, 2006). Bilingual effects at the onset of word recognition: orthographic and phonological information in early word recognition in French-English bilinguals, Poster presented at the *Fifth International Conference on the Mental Lexicon*, McGill University, Montréal (Also presented at the CRLMB Student Poster Day, McGill University, Montréal, December 2006).
- Bastien, M., Dubuisson, C., **Bélanger, N.** & Daigle, D. (October, 2006). Relationship between morphology, reading and vocabulary knowledge in deaf adults, Talk presented at the *Second Language Research Forum*, University of Washington, Seattle.
- Berthiaume, R. & **Bélanger, N.** (May, 2006). The role of morphographic information in the process of learning to read in deaf children. Poster presented at the *First Language Acquisition and Bilingualism Conference*, York University, Toronto.
- Bélanger, N.** & Bastien, M. (May, 2003). Computer-assisted French vocabulary learning by signing deaf adults using *Le français sur le bout des doigts*. Talk presented at the *Calico 2003: Collaborative CALL Conference*, Ottawa University, Ottawa.
- Bélanger, N.**, Bastien, M. & Dubuisson, C. (May, 2002). L'apprentissage du vocabulaire du français écrit par des apprenants adultes sourds [French vocabulary acquisition by deaf adults], Paper presented at the *Canadian Association of Applied Linguistics Conference*, York University, Toronto.

Ad-hoc Reviewer

Language Learning, Journal of Speech, Language, and Hearing Research, Scientific Studies of Reading, Journal of Cognitive Psychology, American Journal of Psychology, Applied Psycholinguistics, Second Language Research, PLoS ONE.

Social Sciences and Humanities Research Council (SSHRC, Canadian Funding Agency)

Teaching and Research Experience

Instructor

Spring 2015 PSYC 145 – Psychology of Language (52 students) – Upper Division Undergraduate Course, Department of Psychology, University of California, San Diego.

Guest Lecturer

- 2016 *Child Language Acquisition* (LING 171)
Undergraduate level class, Linguistics Department, University of California, San Diego.
- Reading Development and Disorders
- 2016 *Sign Languages and Deaf Culture* (SLHS 150)
Undergraduate level class, School of Speech, Language, and Hearing Sciences, San Diego State University, San Diego
- Reading and Deafness
- 2013, 2015 *Psycholinguistics of Sign Language* (LING 148)
Undergraduate level class, Linguistics Department, University of California, San Diego.
- Reading and Deafness
- 2012 *Child Language Acquisition* (LING 171)
Undergraduate level class, Linguistics Department, University of California, San Diego.
- Reading Development and Disorders

- 2004- 2008 *Language Processes* (SCSD 624)
Master's level course, School of Communication Sciences and Disorders, McGill University.
- Sign language processing
- 2005 *Troubles du langage à l'oral et à l'écrit* (ORA 3358 - Written and Oral Language Disorders)
Undergraduate course, École d'orthophonie et d'audiologie [School of Speech Language Therapy and Audiology], Université de Montréal.
- 2005- 2008 *Language Development* (SCSD 633)
Master's level class, School of Communication Sciences and Disorders, McGill University.
- Sign language acquisition
- 2004 *Language Development* (SCSD 633)
Master's level class, School of Communication Sciences and Disorders, McGill University.
- 2003 *Language Development* (SCSD 633)
Master's level class, School of Communication Sciences and Disorders, McGill University.
- Reading development

Teaching Assistant

- 2001 *Didactique du français langue seconde et technologies* (LIN 6410 – Communication Technologies in the Teaching of French as a Second Language) Undergraduate level, Departement of Linguistics and Second Language Didactics, Université du Québec à Montréal.
- 2001 *Didactique du français langue seconde: langue orale* (LIN 1140 – Teaching Oral Comprehension and Production in French as a Second Language) Undergraduate level, Departement of Linguistics and Second Language Didactics, Université du Québec à Montréal.

Research Assistant

- 2007-2009 *Neurolinguistics Lab* (www.mcgill.ca/neurolinguistics-lab/), School of Communication Sciences and Disorders, McGill University, Montréal. I worked under the supervision of Dr. Shari R. Baum.
- 2000-2004 *Groupe de recherche sur la LSQ et le bilinguisme sourd* (www.unites.uqam.ca/surdite/index.htm), Université du Québec à Montréal. I worked under the supervision of Dr. Colette Dubuisson.

Work Experience and Training Related to Deafness

- 2009, 2015 American Sign Language – private lessons
- 1996-1999 Teacher aide - van Asch Deaf Education Centre (a primary and secondary school for Deaf children in New Zealand - <http://www.vanasch.school.nz/>). A letter of reference can be provided upon request.
- 1998-1999 Volunteer interpreter (non-certified) - New Zealand Sign Language/English. I interpreted in school settings and also in a Dragon Boat team for ten deaf paddlers.
- 1996 New Zealand Sign Language, Levels 1, 2 and 3 – van Asch Deaf Education Centre, New-Zealand.
- 1995, 1999, 2000. Quebec Sign Language, levels 1, 2, 3 and 4 - Institut Raymond Dewar, Montréal.

LANGUAGES French (native) • English (advanced) • Spanish (intermediate/advanced) • American Sign Language (intermediate) • New Zealand Sign Language (fluent 15 years ago) • Quebec Sign Language (intermediate)