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Education

2004 Ph.D., Psychology, University of Michigan, Ann Arbor
2001 M.A., Anthropology, University of Michigan, Ann Arbor
1992 B.A. with High Distinction, Russian and Japanese, University of Iowa

Employment

2005-present Assistant Professor, Cognitive Sciences, University of California, Irvine.
2004-2005 Postdoctoral Fellow, Department of Psychology, Harvard University
1996-2004 Medical interpreter (Russian/English and Japanese/English), University of Michigan Hospitals and Clinics
1993-1996 English teacher in Japanese public schools, Shirane Town Board of Education, Yamanashi Prefecture, Japan
1991 Russian/English interpreter, Hermitage Museum, St. Petersburg, Russia

Grants, Fellowships & Awards

2010-2015 *CAREER: Early Number-Concept Development in Low-Income English-Language Learners: Observation and Intervention.* NSF-DRL 0953521.
2008-2010 *Number Words and Number Concepts.* NIH-NICHD R03HD054654.
2005-2008 *How Do Preschoolers Learn Numerals?* NIH F32HD050036 (declined).
2004-2005 NIH-NRSA Post-Doctoral Traineeship, Harvard University.
2004 NSF-ROLE Post-Doctoral Fellowship, Harvard University.
2003 Rackham Dissertation Fellowship, University of Michigan.
2001-2003 US Dept of Education Foreign Language/Area Studies Fellowship (declined 2nd year).
2000-2001 Culture & Cognition Graduate Fellowship, University of Michigan.
1997-1999 NIH Graduate Fellowship, University of Michigan.
1996-1999 University of Michigan Regents' Fellowship (declined 2nd and 3rd years).
1991 Phi Beta Kappa, University of Iowa.

PUBLICATIONS

Peer-Reviewed Journal Articles

8. Slusser, E. & **Sarnecka**, B.W. (in press). Find the picture of eight turtles: A link between children's counting and their knowledge of number-word semantics. *Journal of Experimental Child Psychology*.
7. Lee, M.D. & **Sarnecka**, B.W. (in press) Number-knower levels in young children: Insights from a Bayesian model. *Cognition*.
6. Lee, M.D. & **Sarnecka**, B.W. (2010). A model of knower-level behavior in number-concept development. *Cognitive Science*, 34, 51-67.
5. **Sarnecka**, B.W. & Lee, M. D. (2009) Levels of number knowledge during early childhood. *Journal of Experimental Child Psychology*, 103, 325-337.
4. **Sarnecka**, B.W. & Carey, S. (2008) How counting represents number: What children must learn and when they learn it. *Cognition*, 108, 662-674.
3. Gelman, S.A., Goetz, P.J., **Sarnecka**, B.W., & Flukes, J. (2008). Generic language in parent-child conversations. *Language Learning and Development*, 4, 1-31.
2. **Sarnecka**, B.W., Kamenskaya, V.G., Yamana, Y., Ogura, T., & Yudovina, J.B. (2007). From grammatical number to exact numbers: Early meanings of "one," "two," and "three" in English, Russian, and Japanese. *Cognitive Psychology*, 55, 136-168.
1. **Sarnecka**, B.W. & Gelman, S.A. (2004). Six does not just mean a lot: Preschoolers see number words as specific. *Cognition*, 92, 329-352.

Manuscripts Under Review

6. Negen, J., **Sarnecka**, B.W. & Lee, M.D. (under review). *An Excel sheet for inferring number-knower levels from Give-N data*.
5. **Sarnecka**, B.W. & Wright, C.E. (under review). *The exact-numbers idea: Concepts of cardinality and equinumerosity in development*.
4. Slusser, E. & **Sarnecka**, B. W. (under review). *Connecting numbers to discrete quantification: A step in the child's construction of integer concepts*.
3. Negen, J. & **Sarnecka**, B.W. (under review). *Number-word learning predicts attention and memory for set sizes in young children*.
2. Negen, J. & **Sarnecka**, B.W. (under review). *Number-concept acquisition and general vocabulary development*
1. Negen, J. & **Sarnecka**, B.W. (under review). *Analogue magnitudes and knower levels: Revisiting the variability argument*.

Peer-Reviewed Book Chapters and Conference Proceedings

4. Negen, J. & **Sarnecka**, B.W. (2011) Analogue Magnitudes and Knower-Levels: Re-Visiting the Variability Argument. *Proceedings of the 32nd Annual Meeting of the Cognitive Science Society*. Red Hook, NY: Curran Associates, Inc.

3. Negen, J. & **Sarnecka**, B. W. (2010) Young Children's Number-Word Knowledge Predicts Their Performance on a Nonlinguistic Number Task. In N. Taatgen (Ed.), *Proceedings of the 31st Annual Meeting of the Cognitive Science Society*. Red Hook, NY: Curran Associates, Inc.
2. Carey, S. & **Sarnecka**, B.W. (2006). The development of human conceptual representations. M. Johnson & Y. Munakata (Eds.), *Processes of Change in Brain and Cognitive Development: Attention and Performance XXI*, 473-496.
1. **Sarnecka**, B.W., Kamenskaya, V.G., Ogura, T., Yamana, Y., & Yudovina, J.B. (2004). Language as lens: Plurality marking and numeral learning in English, Japanese, and Russian. In *Proceedings of the 28th annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press.

Other Publications & Papers

7. **Sarnecka**, B.W. (2008) SEVEN does not mean NATURAL NUMBER, and children know more than you think. [Commentary]. *Behavioral & Brain Sciences*, 31, 668.
6. **Sarnecka**, B.W. (2006) [Review of the book *Language development across childhood and adolescence* by Ruth A. Berman, Ed.] *Studies in Second Language Acquisition*, 28, 535-537.
5. **Sarnecka**, B., & Cerutti, A. (2005) *Specificity, direction, and unit-of-one: Piecing together the logic of number words*. [Abstract]. 4th Biennial Meeting of the Cognitive Development Society, San Diego, CA.
4. **Sarnecka**, B.W. (2004) *Language as Lens: Plurality marking and numeral learning in English, Japanese, and Russian*. Unpublished doctoral dissertation, University of Michigan.
3. **Sarnecka**, B.W. (2002). [Review of the book *Human language and our reptilian brain: The subcortical bases of speech, syntax and thought* by Philip Lieberman]. *Journal of Cognition and Culture* 2, 161-162.
2. **Sarnecka**, B.W. (2002). [Review of the book *Language and gesture* by David McNeill, Ed.]. *Journal of Cognition and Culture*, 2, 81-82.
1. **Sarnecka**, B.W. (2001). [Review of the book *The neurolinguistics of bilingualism: An introduction* by Franco Fabbro]. *Journal of Cognition and Culture*, 1, 359-360.

Peer-Reviewed Conference Presentations

18. Goldman, M., Negen, J., & **Sarnecka**, B.W. (2011, June). *Do bilingual children perform better on a number-estimation task?* Poster to be presented at the meeting of the Jean Piaget Society, Berkeley, CA.
17. Negen, J. & **Sarnecka**, B.W. (2011, March). *Number-word knowledge and the acuity of the approximate number system*. Poster presented at the biennial meeting of the Society for Research in Child Development, Montreal, Canada.
16. Slusser, E.B. & **Sarnecka**, B. W. (2011, March). Extending representations of discrete and continuous quantities to early number-word learning. Paper given as part of symposium *The development of discrete and continuous quantification from*

infant to childhood (M. Le Corre & P. Cheung, Chairs) at the biennial meeting of the Society for Research in Child Development, Montreal, Canada.

15. **Sarnecka**, B.W., Wright, C.E., & Goldman, M. (2011, March). *Cross-linguistic associations in the vocabularies of bilingual children: Number words vs. color words and common nouns*. Poster presented at the biennial meeting of the Society for Research in Child Development, Montreal, Canada.
14. House, B., Silk, J., Henrich, J. & **Sarnecka**, B.W. (2011, March). *Does reciprocity motivate prosocial behavior in young children?* Poster presented at the biennial meeting of the Society for Research in Child Development, Montreal, Canada.
13. Negen, J. & **Sarnecka**, B.W. (2010, July). *An ANS-based model of children's small-set size judgements*. Poster Presented at the meeting of the Society for Mathematical Psychology 2010, Portland, Oregon.
12. Negen, J. & **Sarnecka**, B.W. (2010, July). *Analogue magnitudes and knower levels: Re-visiting the variability argument*. Paper to be presented at the Annual Meeting of the Cognitive Science Society, Portland, Oregon.
11. Slusser, E.B. & **Sarnecka**, B. W. (2010, March). Children's use of morpho-syntactic information to connect number words to discrete quantification. Paper given as part of symposium *Early Links Among Number, Plural, and Discrete Objects* (Lisa Cantrell, Chair), International Conference on Infant Studies, Baltimore, MD.
10. Negen, J., & **Sarnecka**, B. W. (2009, July). *Young children's number-word knowledge predicts their performance on a nonlinguistic number task*. Paper presented at the annual meeting of the Cognitive Science Society, Amsterdam.
9. Lee, M.D. & **Sarnecka**, B.W. (2009, May). *A model of knower-level behavior in number-concept development*. Paper presented at the Workshop on Probabilistic Models of Cognitive Development, Banff, Canada.
8. Slusser, E.B., & **Sarnecka**, B. W. (2009, April). *Children's partial understanding of number words*. Poster presented at the biennial meeting of the Society for Research in Child Development, Denver, Colorado.
7. **Sarnecka**, B. W. (2007, June) Young children figure out how counting works when they grasp the successor function. In M. Wiser, M. LeCorre & H. Wiese (Chairs), *Symbolic and Conceptual Development in Children's Early Understanding of Number*. Symposium conducted at the annual meeting of the Jean Piaget Society, Amsterdam.
6. Slusser, E. B., & **Sarnecka**, B.W. (2007, April). *When do young children connect number words to discrete quantification?* Poster presented at the biennial meeting of the Society for Research in Child Development, Boston, Massachusetts.
5. **Sarnecka**, B.W., Kamenskaya, V.G., Ogura, T., Yamana, Y., & Yudovina, J.B. (2005, April). *Plurality marking helps children construct small-number concepts: Evidence from English, Japanese, and Russian*. Paper presented at the biennial meeting of the Society for Research in Child Development, Atlanta, GA.

4. **Sarnecka**, B.W., Kamenskaya, V.G., Ogura, T., Yamana, Y., & Yudovina, J.B. (2003, December). *Plurality marking and numeral learning in English, Japanese, and Russian*. Poster presented at the Kyoto University International Symposium on Self, Cognition, and Emotion, Ann Arbor, MI.
3. **Sarnecka**, B.W., Kamenskaya, V.G., Ogura, T., Yamana, Y., & Yudovina, J.B. (2003, October). *Language as lens: Morphological cues guide children's attention to number*. Paper presented at the Boston University Conference on Language Development, Boston, MA.
2. Yamana, Y., Ogura, T. & **Sarnecka**, B.W. (2003, August). *Suu shi kakutoku no nichibei hikaku* (A study on the acquisition of number words: Comparison of Japanese children and American children). Paper presented at the annual meeting of the *Nihon Kyouiku Shinri Gakkai* (Japanese Educational Psychology Association), Osaka, Japan.
1. **Sarnecka**, B.W. (2003, April). Six does not just mean a lot: Preschoolers see number words as specific. In B.W. Sarnecka (Chair), *Number concepts and number language*. Symposium conducted at the biennial meeting of the Society for Research in Child Development, Tampa, FL.

Invited Talks and Media Interview

- CNN Headline News Interview (Charter Local Edition, July 2010)
- Keynote speaker, *Réseau Neurosciences Cognitives du Développement*, Neurospin, Saint Aubin/Saclay, France. (2010)
- Inside Edge Foundation for Education, Irvine, California (2010)
- University of California – Riverside, Department of Psychology (2010)
- University of California – San Diego, Department of Psychology (2010)
- University of Arizona, Department of Psychology (2008)
- University of California – Los Angeles, Department of Psychology (2006)
- Harvard University, Department of Psychology (2005)
- Massachusetts Institute of Technology, Dept. of Brain & Cognitive Sciences (2005)

Professional Service

- Ad-Hoc Reviewer: *British Journal of Developmental Psychology*; *Child Development*; *Cognition*; *Cognitive Science*; *Developmental Psychology*; *Developmental Science*, *European Journal of Psychology of Education*; *Experimental Psychology*; French National Research Agency (ANR); *Infant and Child Development*; Israel Science Foundation; *Journal of Child Language*; *Journal of East Asian Linguistics*; *Journal of Experimental Child Psychology*; *Journal of Genetic Psychology*; *Language Learning & Development*; National Science Foundation; *Proceedings of Foundations of the Formal Sciences VII*; *Proceedings of the National Academy of Sciences*; *Proceedings of the Royal Society – Biological Sciences*;

Psychological Science, Society for Research in Child Development; *Trends in Cognitive Sciences*.

- Founder, SoCaL Development (annual Symposium on Cognitive and Language Development research in Southern California)
- Consulting Editor, *Journal of Genetic Psychology*
- Advisor, *Early Childhood Research – Integrated Design of Exhibits*, Lawrence Hall of Science, UC-Berkeley.