

## **Language and Poverty: Beyond the Word Gap (Ling 849, HESP 818)**

**Instructor:** Jan Edwards and Jeff Lidz

**Class Time:** Mondays 2-5 PM

**Place:** Language Science Center, HJP 2124

**Office hours:** by appointment

**e-mail:** [edwards@umd.edu](mailto:edwards@umd.edu), [jlidz@umd.edu](mailto:jlidz@umd.edu)

**The idea:** Poverty is bad for people and it is particularly bad for children. There is a large body of research documenting the negative effect of poverty on children's physical, socio-emotional, and cognitive development. The focus of this seminar is on how poverty affects children's linguistic development. In recent years, research on poverty and language has focused on the "word gap," the oft-cited observation from Hart and Risley (1995) that by age 3, children growing up in poverty have been exposed to 30 million fewer words than their peers growing up in upper-middle class families. This word gap has been shown to be directly related to smaller vocabularies and slower rates of vocabulary growth. The word gap is now considered a public health problem and a variety of interventions have been proposed to combat it. However, vocabulary acquisition is a very small part of language development more generally and there are many other interactions between language development and poverty that have received much less attention. The purpose of this seminar is to explore some of these other relationships between language and poverty. The purpose of this seminar is to explore some of these other relationships between language and poverty, especially as they relate to the complex relation among experience, cognitive development and the acquisition of grammar.

### **RESPONSIBILITIES AND GRADES**

- 1. Class participation (10%):** Do the assigned readings and come to class prepared to talk about them.
- 2. Discussion leaders (20%, 2 x 10%):** Each student is responsible for leading the discussion on two of the class days. These responsibilities may be shared among two students, depending on the number of attendees.
- 3. Reaction papers (25%, 5 x 5%):** Write 5 reaction papers based on the assigned readings. You are free to choose which weeks you will write your reaction papers, given your own time constraints. We do not want just a summary of the articles you read. Rather, we want any thoughts or questions that you came up with while doing the reading; this will help prepare for discussion in class. Ideally, these papers should synthesize across the readings for the day, although that is not an absolute requirement. Reaction papers should be turned submitted online by the Sunday night 6 PM immediately before the date that the readings will be discussed.
- 4. Experiment proposal (45%):** You will write an experiment proposal in which you identify a particular phenomenon related to both language acquisition and poverty and describe a) what is known about it, b) what is not known about it, and c) how you would investigate the

open questions. An ideal paper will include a specific aims (1 page, see template), a literature review, and a detailed proposal (including Methods, Analysis, and hypothetical Results) for investigating that phenomenon. To help you along, there will be several due dates along the way.

**Week 7, Oct. 16. Phenomenon chosen.** Submit a brief description of the phenomenon you propose to investigate and motivate why this relates to both language acquisition and poverty.

**Week 9, Oct. 30. Flash presentation, specific aims, and annotated bibliography.** The flash presentation should be a 5-10 minute presentation that describes the phenomenon, why it is interesting, and how it relates to both language acquisition and poverty. The annotated bibliography should be a list of 6-12 papers that you believe are relevant to your question, with some notes about the main findings/claims of the papers. We will provide a template for your specific aims.

**Weeks 13-15, Nov. 27, Dec. 4, and Dec. 11. Class presentations.** Your presentation should be about 20-30 minutes. It should articulate the problem you are addressing and the work you are proposing to do. Please prepare a presentation that will be interesting and stimulate class discussion.

**Week 16, Dec. 15. Final papers due**

### **Policies**

*Accommodations for students with disabilities or special needs:* If you have special needs with regards to this class, please contact me as soon as possible so that appropriate accommodations can be arranged.

*Academic Honesty:* All students are expected to adhere to campus policy on academic integrity. Cheating on academic work will not be tolerated in any form, and will be subject to strong penalties in this class and the university system. If you cheat on a paper or assignment, you risk failing the class, as well as suspension or expulsion from the University as a whole.

Academic dishonesty includes, but is not limited to, misrepresenting someone else's work as your own, falsifying any information in a citation or academic exercise, using unauthorized materials in any academic exercise, or helping (or attempting to help) another to commit an act of academic dishonesty. You are expected to work independently on your papers.

**Articles:** All articles for the class are available as links in the syllabus or else on the course ELMS/BLACKBOARD website

### **(1) Aug. 28: How to think about the acquisition of syntax, cognitive consequences of poverty, and the interaction between language acquisition and poverty**

Lidz, J., & Gagliardi, A. (2015). How nature meets nurture: Universal Grammar and statistical learning. *Annual Review of Linguistics, 1*, 333-353.

Omaki, A. and J. Lidz. (2015) "Linking parser development to the acquisition of linguistic knowledge." Language Acquisition.

Johnson, S.B., Riis, L.L., & Noble, K. (2016). State of the art review: Poverty and the developing brain, *Pediatrics, 137*, 1-16.

**Optional:**

Lidz, J. (2006) The abstract nature of syntactic representations: Consequences for a theory of learning, in E. Hoff and M. Shatz (eds.) *Handbook of Language Development*. Blackwell: Cambridge.

**(2) Sept. 11: More thinking about poverty and its consequences of poverty in early childhood.**

Noble, K.G., McCandliss, B.D, & Farrah, M.J. (2007). Socioeconomic gradients predict individual differences in neurocognitive abilities. *Developmental Science*, 10, 464–480.

Huston, A., & Bentley, A.C. (2010). Human development in societal context, *Annual Review of Psychology*, 61, 411-437.

Lamont, M. & Small, M. (2008). How culture matters for the understanding of poverty: Enriching our understanding. In A. Lin and D. Harris (Eds.), *The colors of poverty: why racial and ethnic disparities persist*, pp 76-102. New York: Russell Sage Foundation.

Roosa, M. W., Deng, S., Nair, R. L. and Lockhart Burrell, G. (2005), Measures for studying poverty in family and child research. *Journal of Marriage and Family*, 67, 971–988.

**Optional:** NICHD Research Network, (2005). Duration and developmental timing of poverty and children’s cognitive and social development from birth through third grade. *Child Development*, 76, 795-810.

**Optional:** Masten, A.S., Herbers, J.E., Desjardins, C.D., Cutuli, J.J., McCormick, C.M., Sapienza, J.K., ...Zelazo, P.D. (2012). Executive function skills and school success in young children experiencing homelessness. *Educational Researcher*, 41, 375-384.

**(3) Sept. 18: Mainstream/standard vs. non-mainstream/non-standard dialects and other issues. How do we measure dialect density? How do we differentiate non-mainstream dialect use from language disorder?**

Oetting, J. B. & McDonald, J. L. (2002). Methods for characterizing participants’ nonmainstream dialect use in child language research. *Journal of Speech, Language, and Hearing Research*, 45, 505-518.

Oetting, J.B., Lee, R., Porter, K. (2013). Evaluating the grammars of children who speak nonmainstream dialects of English. *Topics in Language Disorders*, 33, 140-151.

Seymour, H. N. (2004). The challenge of language assessment for African American English-speaking children: A historical perspective. *Seminars in Speech and Language*, 25,1-12.

Hoff, E. (2013). Interpreting the early language trajectories of children from low-SES and language minority homes: implications for closing achievement gaps. *Developmental Psychology*, 49, 4-14.

**(background reading on non-mainstream dialect)**

Wolfram, W., and Schilling, N. (2005). *American English, 2nd ed.* Malden, MA: Blackwell, chapter 1 and chapter 3

**(background reading on African American English)**

Green, L. (2004). African American English. In E. Finegan, C.A. Ferguson, S.B. Heath & J.R. Rickford (Eds.) *Language in the USA: Themes for the Twenty-first Century*, Cambridge: Cambridge University Press.

**(4) Sept 25: The relations among cognitive control, language acquisition, and poverty**

- Masten, A.S., Herbers, J.E., Desjardins, C.D., Cutuli, J.J., McCormick, C.M., Sapienza, J.K., ...Zelazo, P.D. (2012). Executive function skills and school success in young children experiencing homelessness. *Educational Researcher*, 41, 375-384.
- Mazuka R, Jincho N, and Oishi H (2009). Development of Executive Control and Language Processing. *Language and Linguistic Compass*, 3, 59-89.
- Minai, U., Jincho, N., Yamane, N., & Mazuka, R. (2012). What hinders child semantic computation: Children's universal quantification and the development of cognitive control. *Journal of Child Language*, 39, 919-956.
- Höhle, B., Fritzsche, T., & Müller, A. (2016). Children's comprehension of sentences with focus particles and the role of cognitive control: An eye tracking study with German-learning 4-year-olds. *PLoS ONE*, 11(3), e0149870. doi:10.1371/journal.pone.0149870

#### **(4) Oct. 2: Parsing and Learning**

- Weisleder & Fernald (2013) Talking to Children Matters: Early Language Experience Strengthens Processing and Builds Vocabulary *Psychological Science* 24 (11), 2143-2152
- Lidz, White & Baier (2017) The role of incremental parsing in syntactically conditioned word learning. *Cognitive Psychology*, in press.
- Pozzan, L., & Trueswell, J. C. (2015). Revise and Resubmit: Processing Effects on Grammar Acquisition. *Cognitive Psychology*, 80, 73-108.
- Huang, Y., Leech, K. & Rowe, M.R. (2017). Exploring socioeconomic differences in syntactic development through the lens of real-time processing. *Cognition*, 159, 61-75.

#### **Optional:**

- Ferguson, B., Graf, E., & Waxman, S.R. (2017). When veps cry: Two-year-olds efficiently learn novel words from linguistic contexts alone. *Language Learning and Development*.

#### **(5) Oct. 9: Quantity and quality in learning sounds and words**

- Smith, L., & Yu, C. (2008). Infants rapidly learn word-referent mappings via cross-situational statistics. *Cognition*, 106, 1558–1568.
- Medina, T.N., Snedeker, J., Trueswell, J.C., & Gleitman, L.R. (2011). How words can and cannot be learned by observation. *Proceedings of the National Academy of Sciences*, 108: 9014- 9019.
- Cartmill, E. A., Armstrong, B. F., Gleitman, L. R., Goldin-Meadow, S., Medina, T. N., & Trueswell, J. C. (2013). Quality of early parent input predicts child vocabulary 3 years later. *PNAS*
- Melvin, S. A., Brito, N. H., Mack, L. J., Engelhardt, L. E., Fifer, W. P., Elliott, A. J., & Noble, K. G. (2016). Home environment, but not socioeconomic status, is linked to differences in early phonetic perception ability. *Infancy*, 1-14.

#### **Optional:**

- Yurovsky, D., & Frank, M. C. (2015). An integrative account of constraints on cross-situational learning. *Cognition*, 145, 53–62.
- Woodard, T., Gleitman, L., & Trueswell, J.C. (2016). Two- and three-year-olds track a single meaning during word learning: Evidence for Propose-but-verify. *Language Learning & Development*

#### **(6) Oct. 16: Effects of Child directed speech on the acquisition of syntax**

- Valian, V. & Casey, L. (2003). Young children's acquisition of wh-questions: The role of

structured input. *Journal of Child Language*, 30, 117-144.

Huttenlocher, J., Vasilyeva, M., Cymerman, E. & Levine, S. (2002). Language input and child syntax. *Cognitive Psychology* 45, 337.

Huttenlocher, J., Waterfall, H., Vasilyeva, M., Vevea, J., & Hedges, L.V. (2010). Sources of variability in children's language growth. *Cognitive Psychology*, 61, 343-365.

### **Optional**

Newport, E.L., Gleitman, H., & Gleitman, L. R. (1977). Mother, I'd rather do it myself: Some effects and non-effects of maternal speech style. In C. Snow & C. Ferguson (Eds.). *Talking to children: Language input and interaction*. Cambridge University Press: Cambridge, 109-149

### **(7) Oct. 23: How input matters in morphosyntax**

Legate, J., & Yang, C. (2007). Morphosyntactic learning and the development of tense. *Language Acquisition*, 14, 315-344.

Rispoli, M. (2016). Cross-morpheme facilitation: The systematic emergence of agreement in 2-year-olds. *Language Acquisition*, 23, 293-306.

Hadley, Rispoli & Holt (2017) Input Subject Diversity Accelerates the Growth of Tense and Agreement. *Journal of Speech Language and Hearing Research*, in press.

Miller, K. & Schmitt, C. (2012) Variable Input and the Acquisition of Plural Morphology. *Language Acquisition*, 19 (3), 223-261.

Miller, K. (2013) Acquisition of variable rules: /s/-lenition in the speech of Chilean Spanish-speaking children and their caregivers. *Language Variation and Change* 25, 3, 311-340.

### **(8) Oct. 23: Non-mainstream dialect and language development: Morphosyntactic acquisition**

Washington, J. A., & Craig, H. K. (2002). Morphosyntactic forms of African American English used by young children and their caregivers. *Applied Psycholinguistics*, 23, 209-231.

Roy, J., Oetting, J.B., & Moland, C. (2013). Linguistic constraints on children's overt marking of BE by dialect and age. *Journal of Speech, Language, and Hearing Research*, 56, 933-944.

Green, L. (2017). All Zeros Are Not Equal, Plenary presentation at the 2017 Georgetown University Round Table in Linguistics, 10-12 March, Washington DC.

De Villiers, J. & Johnson, V. (2007). The information in third-person /s/: acquisition across dialects of American English. *Journal of Child Language*, 34, 133-158

**Optional:** Green, L. & T. Roeper. 2007. The acquisition path for tense-aspect: Remote past and habitual in child African-American English. *Language Acquisition*, 14, 269-313.

**Optional:** Soderstrom, M. (2008). Early perception-late comprehension of grammar? The case of verbal-s: a response to de Villiers & Johnson (2007). *Journal of Child Language*, 35, 671-676.

### **(9) Oct. 30: Flash presentations of research topic**

### **(10) Nov. 6: Non-mainstream dialect and language development: Morphosyntactic acquisition**

Washington, J. A., & Craig, H. K. (2002). Morphosyntactic forms of African American English used by young children and their caregivers. *Applied Psycholinguistics*, 23, 209-231.

- Roy, J., Oetting, J.B., & Moland, C. (2013). Linguistic constraints on children's overt marking of BE by dialect and age. *Journal of Speech, Language, and Hearing Research*, 56, 933-944.
- Green, L. (2017). All Zeros Are Not Equal, Plenary presentation at the 2017 Georgetown University Round Table in Linguistics, 10-12 March, Washington DC.
- De Villiers, J. & Johnson, V. (2007). The information in third-person /s/: acquisition across dialects of American English. *Journal of Child Language*, 34, 133-158
- Optional:** Green, L. & T. Roeper. 2007. The acquisition path for tense-aspect: Remote past and habitual in child African-American English. *Language Acquisition*, 14, 269-313.
- Optional:** Soderstrom, M. (2008). Early perception-late comprehension of grammar? The case of verbal-s: a response to de Villiers & Johnson (2007). *Journal of Child Language*, 35, 671-676.

**(11) Nov. 13: Non-mainstream dialect and language development: Phonological acquisition**

- Craig, H. K., Thompson, C. A., Washington, J. A., & Potter, S. L. (2003). Phonological features of child African American English. *Journal of Speech, Language, and Hearing Research*, 46, 623-635.
- Velleman, S. L., & Pearson, B. Z. (2010). Differentiating speech sound disorders from phonological dialect differences: Implications for assessment and intervention. *Topics in Language Disorders*, 30, 176-188.
- Pearson, B.Z., Velleman, S.L. Bryant, T.J. & Charko, T. (2009). Phonological milestones for African American English-speaking children learning Mainstream American English as a second dialect, *Language, Speech, and Hearing Services in Schools*, 40, 229-244.
- Terry (2014). Dialect variation and phonological knowledge: Phonological representations and metalinguistic awareness among beginning readers who speak nonmainstream American English. *Applied Psycholinguistics*, 35, 155-176.

**(12) Nov. 20: Dialect mismatch and the acquisition of literacy**

- Washington, J. A., Terry, N. P., & Seidenberg, M. S. (2013). Language variation and literacy learning: The case of African American English. In C. A. Stone, E. R. Silliman, and B. J. Ehren, K. Apel (Eds.), *Handbook of Language and Literacy: Development and Disorders*, 2nd edition. NY: The Guilford Press.
- Hoff, E. (2013). Interpreting the early language trajectories of children from low-SES and language minority homes: implications for closing achievement gaps. *Developmental Psychology*, 49, 4-14.
- Brown, M., Sibley, D., Washington, J.A., Rogers, T.T., Edwards, J., MacDonald, M.C., & Seidenberg, M.M. (2015). Impact of dialect knowledge on a basic component of learning to read. *Frontiers in Psychology: Developmental Psychology*, 6:196, 1-17.
- Gatlin, B. & Wanzek, J. (2015). Relations among children's use of dialect and literacy skills. *Journal of Speech, Language, and Hearing Science*, 58, 1306-1318.
- Terry, N. P., Connor, C.M., Petscher, Y., & Conlin, C,R, (2012). Dialect variation and reading: Is change in nonmainstream American English use related to reading achievement in first and second grades? *Journal of Speech, Language, and Hearing Research*, 55, 55-69.

**Optional:**

- Craig, H. K., Kolenic, G. E. & Hensel, S. L. (2014). African American English speaking

students: A longitudinal examination of style shifting from kindergarten through second grade. *Journal of Speech, Language, and Hearing Research*, 57, 143-157.

Terry, N. P. & Connor, C.M. (2012). Changing nonmainstream American English use and early reading achievement from kindergarten to first grade. *American Journal of Speech-Language Pathology*, 21, 78-86.

**(13) Nov. 27: Bilingual language development: Cognitive advantage? Linguistic disadvantage? Different trajectories of development**

Barac, R., Bialystok, E., Castro, D.C., & Sanchez, M. (2014). The cognitive development of young dual language learners: A critical review. *Early Childhood Research Quarterly*, 29, 699-714.

Papp, K.R. & Greenberg, Z.I. (2013) There is no coherent evidence for a bilingual advantage in executive processing. *Cognitive Psychology*, 66, 232-258.

Bialystok, E., Luk, G., Peets, K. F. & Yang, S. (2010). Receptive vocabulary differences in monolingual and bilingual children. *Bilingualism: Language and Cognition*, 13, 525-531.

Byers-Heinlen, K. & Werker, J. (2009). Monolingual, bilingual, trilingual language experience influences the development of a word-learning heuristic. *Developmental Science*, 12, 815-823.

Byers-Heinlein, K., Morin-Lessard, E., & Lew-Williams, C. (2017). Bilingual infants control their languages as they listen. *Proceedings of the National Academy of Sciences*, 114, 9032-9037.

Fabiano-Smith, L., Oglivie, T. , Maiefski, O., & Schertz, J. (2015). Acquisition of the stop spirant alternation in bilingual Mexican Spanish-English speaking children: Theoretical and clinical implications. *Clinical Linguistics and Phonetics*, 29, 1-26.

**Optional:** MacLeod, A. & Fabiano-Smith, L. (2014). The acquisition of allophones among bilingual Spanish-English and French-English 3-year-old children. *Clinical Linguistics and Phonetics*, 29, 167-184.

**(13 – 15) Dec. 4, and Dec. 11: Student research presentations**