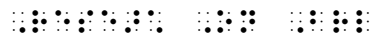


Linguistics 409: Special Topics in Linguistics
Research On Braille



Rice University
Spring 2009

Syllabus

Instructor: Dr. Robert Englebretson

Office: Herring 206

Office Hours: Tues. 4:00-5:00, Thurs. 11:00-Noon, and By Appointment.

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Course Meetings: Tuesdays/Thursdays 9:25-10:40, Herring 125

Course Description

January 2009 marks the 200th anniversary of the birth of Louis Braille, the inventor of the tactile writing system that bears his name. Braille has provided a means of literacy, education, and opportunity for countless blind individuals over the past two centuries. I am offering this 'special topics' course to introduce students to the structural, cognitive, and social aspects of braille, to explore the relevance of braille research for linguistics and cognitive science, and, vice versa, to highlight the relevance of linguistics and cognitive science for ongoing research on braille. In this course, students will gain a basic understanding and appreciation of English Braille, and a thorough grounding in the braille research literature.

The first two weeks of the course provide a general overview of the social history of the blind and the central importance of braille. The subsequent three weeks address the origin and development of braille, and the variety of genres for which braille codes have been created. The following eight weeks make up the core of the course, focusing in-depth on braille research from the allied fields of neuroscience, psychology, and linguistics. The final two weeks of the course address current controversies and topics for potential future research.

Because this is a 400-level course, I assume students already have an intermediate- to advanced-level familiarity with linguistics, and at least a minimal familiarity with cognitive psychology and/or research methods. The course will be conducted as a seminar, focusing on discussion and analysis of source readings, and hands-on experience with braille.

What This Course Is Not

This is not a course designed to teach braille for professional use or competence. While students will indeed gain a basic familiarity with English Literary Braille, and an in-depth background in the braille research literature, this course is not suitable for students wishing to fulfill a certification requirement to become a professional braille transcriber, proofreader, or a teacher of the blind /visually impaired. If you do wish to pursue learning braille professionally, please come talk with me and I can point you to appropriate programs and resources.

Readings

Millar, Susanna. 1997. *Reading by Touch*. New York: Routledge.

This text is available from the Rice Bookstore, and on limited 2-hour loan from the reserves desk at Fondren Library.

NLS. 2000. *Braille into the Next Millennium*. Washington, DC: Library of Congress, National Library Service for the Blind and Physically Handicapped.

This text will be distributed for free to all students enrolled in the class, thanks to the generosity of NLS in making print copies available to individuals for no cost. In addition, it is available on limited two-hour loan at the reserves desk of Fondren Library.

Other published articles, as listed in the bibliography of this syllabus.

Additional Course Materials

I will leave a Perkins Braille and a stack of braille paper for student use in the Linguistics Grad Lounge (Herring 202). Additionally, you will need a slate and stylus and braille paper (I've ordered several which you can purchase from me at cost), and you need to install the Perky Duck (Perkins Braille emulator) program on your computer, which may be downloaded at no cost from <http://www.duxburysystems.com> (follow the link to Products, then Perky Duck, then Purchase—which takes you to the free download page for this program).

Course Requirements

- | | |
|---|-----|
| <input type="checkbox"/> Attendance and active participation in class | 10% |
| <input type="checkbox"/> Précis and discussion points (weeks 6-13 readings) | 35% |
| <input type="checkbox"/> Five short homework assignments | 30% |
| <input type="checkbox"/> Research Proposal | 25% |

*Note: This course has no midterm and no final exam.

Participation: Because this is a small, seminar-style class, your involvement and attention is crucial! Students are required to attend class and to actively participate in class discussion and discussion of readings. Please e-mail me if you know you will be missing class on a given day.

Précis and Discussion Points: For each of the readings on the braille research section of the syllabus (weeks 6-13), each student is required to submit a précis (brief summary) of the reading, no more than one paragraph in length. This précis should be followed by three discussion points (questions, quibbles, observations, or suggestions for follow-up research). E-mail this to me at reng@rice.edu by 8am on the day we will be discussing the reading.

Homework Assignments: There will be five short homework assignments due throughout the semester, as shown on the course schedule (Jan. 20, Feb. 5, Feb. 19, Mar. 17, and Mar. 31). These are designed to give you practice in reading and writing the basics of English Braille (no more than one braille page each), or give you the opportunity to write a short opinion piece related to issues discussed in class (no more than one single-spaced print page). More information about each assignment will be distributed in class, a week before the due-date.

Research Proposal: Each student is expected to submit a short paper (4-6 print pages), in the form of a preliminary research proposal. You do not need to carry out the study, but your paper should do the following: (1) Identify a research question, review prior literature, and explain why your question is an interesting/worthwhile topic to pursue; (2) propose precisely how you would conduct the study (subjects, materials, methods, etc.); (3) explain why the results of your question would be of significance to linguistics and cognitive science, and, conversely, why the results of your study would matter to the teaching or reading or development of braille. You will present a quick oral summary of your proposal in class on April 14. The final written version of the paper is due via e-mail to reng@rice.edu by 5pm on April 16. More information will be handed out in class later in the semester.

* If you require this material in another format or need special accommodations due to a disability, please contact the instructor and the Disability Support Services Office (Ley Student Center room 122).

Course Outline

Please do the readings before the lecture for which they are assigned.

* Readings preceded by an asterisk are found in *Braille Into the Next Millennium*, which was distributed on the first day of class.

DATE	TOPIC	READING
WEEK 1		
1/6	Course Introduction & Overview	None
1/8	Social History of the (Western) Blind	Ferguson (Ch. 2)
WEEK 2		
1/13	Contemporary Issues / Social Construction/Resistance	Ferguson (Ch. 6)
1/15	Why Braille Matters	*Ryles; *Schroeder
WEEK 3		
1/20	Louis Braille; Origins of Braille Homework #1 Due	*Lorimer
1/22	Other Raised-Dot Writing Systems; Methods of Braille Writing and Production	Irwin; *Tobe
WEEK 4		
1/27	English Literary Braille	*Bogart; Hamp & Caton
1/29	Math; Music; Computers; IPA	*Nemeth; *Miller; *Cranmer; Englebretson
WEEK 5		
2/3	Code Switching; Braille in Other Languages	Boyer; UNESCO (skim)
2/5	Tactile Graphics Homework #2 Due	*Corcoran
WEEK 6		
2/10	Neuroscience Research on Braille Reading	Hannan; Sadato
2/12	Cognition and Processing	Bertelson; Millar Ch. 1
WEEK 7		
2/17	Tactual Perception	Millar Ch. 2
2/19	Hand Movements; Reading Speed Homework #3 Due	Millar Ch. 3; Wetzel & Knowlton
WEEK 8		
2/24	Sound and Touch	Millar Ch. 4
2/26	Phonological Awareness; Spelling	Monson & Bowen; Clark & Stoner
WEEK 9		
3/3	No Class (Spring Break)	
3/5	No Class (Spring Break)	
WEEK 10		
3/10	Meaning and Perception	Millar Ch. 5
3/12	Language Acquisition; Development of Reading	Perez-Pereira (skim) Steinman et al.

WEEK 11		
3/17	Contractions	Millar Ch. 6
	Homework #4 Due	
3/19	Error Analysis; Morpheme and Syllable Bridging	Wells-Jensen et al.
WEEK 12		
3/24	Individual Differences; Braille and Dyslexia	Millar Ch. 7
3/26	Atypical Learners	Wormsley (skim)
WEEK 13		
3/31	Implications & conclusions	Millar Ch. 8-9
	Homework #5 Due	
4/2	No Class (Midterm Recess)	
WEEK 14		
4/7	Perspectives on Literacy	*Spungin & D'Andrea; Mack; Hatlen & Spungin
4/9	Unified English Braille	*Bogart et al.; Others TBA
WEEK 15		
4/14	Student Presentations	None
4/16	Miscellaneous / Course Wrap-Up	None
	Research Proposal Due by 5pm	

List of Readings

Readings are listed in the order in which they are assigned. Full references for Millar and NLS have already been given, above, and are thus abbreviated here.

Ferguson, Ronald J. 2001. *We Know Who We Are: A History of the Blind in Challenging Educational and Socially Constructed Policies: A Study in Policy Archeology*. San Francisco: Caddo Gap Press. (Ch. 2 & 6, Pp. 37-64 & 159-176.)

Ryles, Ruby. 2000. "Braille as a predictor of success." In NLS, 462-491.

Schroeder, Fredric. 2000. "Braille in the workplace". In NLS, 296-313.

Lorimer, Pamela. 2000. "Origins of braille". In NLS, 18-39.

Irwin, Robert B. 1955. "The War of the Dots". In *As I Saw It*. New York: American Foundation for the Blind. [Available online at <http://www.nyise.org/blind/irwin2.htm>]

Tobe, Carol B. 2000. "Embossed printing in the United States". In NLS, 40-71.

Bogart, Darleen E. 2000. "The literary code". In NLS, 106-119.

- Hamp, Eric P. and Hilda Caton. 1984. "A fresh look at the sign system of the braille code". *Journal of Visual Impairment and Blindness* 78: 210-214.
- Nemeth, Abraham. 2000. "The Nemeth Code". In NLS, 120-127.
- Miller, Harvey Horatio. 2000. "The braille music code". in NLS, 128-151.
- Cranmer, Tim V. 2000. "Code for computer braille notation". In NLS, 152-159.
- Englebretson, Robert. 2009. "An overview of IPA Braille: An updated tactile representation of the International Phonetic Alphabet". *Journal of the International Phonetic Association* 39: 67-86.
- Boyer, Alison S. 1997. "Identification of characters with shared representations: Decoding musical and literary braille". *Journal of Visual Impairment and Blindness* 91: 77-86.
- UNESCO (United Nations Educational, Scientific, and Cultural Organization). 1990. *World Braille Usage*, Rev. edn. Washington, DC: Library of Congress, National Library Service for the Blind and Physically Handicapped. [Skim! Available in PDF online at <http://unesdoc.unesco.org/images/0008/000872/087242eb.pdf>]
- Corcoran, Jane M. 2000. "Tactile graphics". In NLS, 374-399.
- Hannan, Cheryl Kamei. 2006. "Review of research: Neuroscience and the impact of brain plasticity on braille reading". *Journal of Visual Impairment and Blindness* 100: 397-413.
- Sadato, Norihiro. 2005. "How the blind 'see' braille: Lessons from Functional Magnetic Resonance Imaging". *Neuroscientist* 11: 577-582.
- Bertelson, Paul. 1995. "Language by touch: The case of braille reading". In Beatrice de Gelder and Jose Morais (eds). *Speech and Reading: A Comparative Approach*, 91-108. Hove: Erlbaum.
- Millar Ch. 1-3.
- Wetzel, Robin and Marie Knowlton. 2000. "A comparison of print and braille reading rates on three reading tasks". *Journal of Visual Impairment and Blindness* 94: 146-154.
- Millar Ch. 4.
- Monson, Martin R. and Sandy K. Bowen. 2008. "The development of phonological awareness by braille users: A review of the research". *Journal of Visual Impairment and Blindness* 102: 210-220.
- Clark, Christine and Julia B. Stoner. 2008. "An investigation of the spelling skills of braille readers.". *Journal of Visual Impairment and Blindness* 102: 553-563.
- Millar Ch. 5.
- Pérez-Pereira, Miguel and Gina Conti-Ramsden. 1999. *Language Development and Social Interaction in Blind Children*. Hove: Psychology Press. [Skim! Available in hardcopy at the Fondren Library reserves desk.]

Steinman, Bernard A., B. J. LeJeune, and B. T. Kimbrough. 2006. "Developmental stages of reading processes in children who are blind and sighted". *Journal of Visual Impairment and Blindness* 100: 36-46.

Millar Ch. 6.

Wells-Jensen, Sheri, Aaron Schwartz, and Bradley Gosche. 2007. "A cognitive approach to braille errors". *Journal of Visual Impairment and Blindness* 101: 416-428.

Millar Ch. 7

Wormsley, Diane P. 2003. *Braille Literacy: A Functional Approach*. New York: American Foundation for the Blind. [Skim! Available in hardcopy at the Fondren Library reserves desk.]

Millar Ch. 8-9.

Spungin, Susan Jay and Frances Mary D'Andrea. 2000. "Braille literacy". In NLS, 434-461.

Mack, Catherine. 1984. "How useful is braille? Reports of blind adults". *Journal of Visual Impairment and Blindness* 78: 311-313. [Available online at <http://www.braille.org/papers/visualim/vib8407.html>]

Hatlen, Phil and Susan Jay Spungin. 2008. "The nature and future of literacy: Point and counterpoint". *Journal of Visual Impairment and Blindness* 102: 389-396. [Available online at <http://www.afb.org/afbpress/pubjvib.asp?DocID=jvib020702>]

Bogart, Darleen, Tim V. Cranmer, and Joseph E. Sullivan. 2000. "Unifying the braille codes". In NLS, 160-181.