

Communication Disorders in Context: What Do We Know About Aphasia?

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Description

Communication disorders is an umbrella term for impairments in the ability to receive, send, process, and comprehend concepts or verbal, nonverbal and graphic symbol systems. Symptoms range in severity and thus can be less evident in some cases-- in fact, though nearly one in 12 children ages 3-17 in the US has had a disorder related to voice, speech, language, or swallowing in the past 12 months according to a research conducted by National Institute on Deafness and Other Communication Disorders, public awareness of communication disorders is still low.

This seminar will focus on the study and treatments of speech sciences in a wider social context, including both clinical and non-clinical elements. It offers a comprehensive overview of basic aphasiology and other related topics including but not limited to classification of aphasia and its current issues, apraxia, language processing, bilingualism, aphasia/apraxia treatments and art education. We will also look into the influence of visual art in aphasia treatment, such as the role of art therapy and artistic expressions of people with disabilities.

Proposal of this seminar is inspired by work conducted by multiple student organizations and the Access and Disability Services board with a goal of raising more public awareness on communication disorders and other related impairments in the Haverford community. While at present the College does not offer classes with a communication disorders/speech impairments focus, this seminar aims to provide students with an opportunity to learn about disorders that are less addressed and to develop academic interests in not only speech sciences but also disability studies, art therapies, linguistics, educational studies and cognitive science. By fostering knowledge about these relevant topics, the seminar helps promote this less studied field in our community and provides an ideal archetype of classes with communication sciences and disorders emphasis that should be added to the Bi-College curriculum in the future.

This course should appeal most immediately to students who study psychology, linguistics, neuroscience, biology, health studies, education, and visual studies/fine arts; but given the interdisciplinary nature of its theme, students of different academic backgrounds (such as sociology, philosophy, anthropology, and language studies, etc.)

can also benefit from discussions on different approaches to disability studies from a social science and humanities perspective and the non-clinical side of communication disorders. For example, topics such as consciousness and philosophy of mind will also be included in our discussion.

Seminar Outline

- First meeting: **Introduction + Historical Perspectives**
 - History of brain-language relationships and aphasia study
 - Brain and language
 - Basic brain anatomy (<https://youtu.be/D1zkVBHPh5c>)
 - A history of speech language pathology (http://www.acsu.buffalo.edu/~duchan/new_history/overview.html)

- Second meeting: **"Neurophilosophy" + Classification of Aphasia**
 - Consciousness and the brain (view before the seminar)
 - "David Chalmers: How do you explain consciousness?" (2014) *21 min video* (https://www.ted.com/talks/david_chalmers_how_do_you_explain_consciousness?utm_campaign=tedsread&utm_medium=referral&utm_source=tedcomshare)
 - "Consciousness and the Brain: John Searle" (2013) *15 min video* (https://youtu.be/j_OPQgPIIdKg)
 - Philosophy of mind (read before the seminar)
 - Churchland, P.M (1988). Matter and Consciousness, Chap. 2
 - Searle, P. (1984). Minds, Brains, and Science, Chap. 1
 - Classification of aphasia
 - Classification based on characteristics of verbal expression from ASHA (<https://www.asha.org/siteassets/practice-portal/aphasia/common-classifications-of-aphasia.pdf>)
 - Boston Classification System (<https://www.aamu.edu/academics/colleges/education-humanities-behavioral-sciences/departments/health-sciences-human-performance-communicative-disorders/communicative-sciences-disorders/documents/classification-of-aphasia.pdf>)
 - Current issues

- Kasselimis, D. S., Simos, P. G., Peppas, C., Evdokimidis, I., & Potagas, C. (2017). The unbridged gap between clinical diagnosis and contemporary research on aphasia: A short discussion on the validity and clinical utility of taxonomic categories. *Brain and language*, 164, 63-67.
- Third meeting: **Word Recognition, Sentence Processing, and Apraxia of Speech**
 - Word recognition
 - G. Albyn Davis. (2014). *Aphasia and Related Cognitive Communicative Disorders*. Pearson, Chap. 3
 - Swinney, D. (1979). Lexical access during sentence comprehension: (Re)Consideration of context effects. *Journal of Verbal Learning and Verbal Behavior*, 18, 645-659.
 - Sentence processing
 - G. Albyn Davis. (2014). *Aphasia and Related Cognitive Communicative Disorders*. Pearson, Chap. 3
 - Swinney, D., Zurif, E., and Nicol, J. (1989). The effects of focal brain damage on sentence processing: an examination of the neurological organization of a mental module. *Journal of Cognitive Neuroscience*, 1, 25-37.
 - Yee, E., Blumstein, S.E., Sedivy, J.C. (2008). Lexical-semantic activation in Broca's and Wernicke's aphasia: evidence from eye movements. *J. Cogn. Neurosci.*, 20, 592-612.
 - Apraxia
 - McNeil, M.R., & Robin, D. "Apraxia of speech: Definition and differential diagnosis." Chapter in: McNeil, M.R. (Ed.), *Clinical Management of Sensorimotor Speech Disorders*. 2nd Ed., New York: Thieme Medical Publishers (2008).
 - "Definitions and Descriptions of Childhood Apraxia of Speech (AOS)" by Mayo Clinic (2015) *4 min video*
(<https://youtu.be/KMkgSwHPDt0>)
 - Wambaugh, J., Nessler, C., Cameron, R., & Mauszycki (2012). Acquired apraxia of speech: The effects of repeated practice and rate/rhythm control treatments on sound production accuracy, *American Journal of Speech-Language Pathology*, 21, S5-S27.
- Fourth meeting: **Aphasia and Bilingualism**
 - BACKGROUND

- Lorenzen, B. & Murray, L. (2008). Bilingual Aphasia: A Theoretical and Clinical Review. *American Journal of Speech-Language Pathology*, 17, 299–317.
- Hope et al. (2015). Comparing language outcomes in monolingual and bilingual stroke patients. *Brain* 138, pp. 1070-1083. *(a short video included)*
- Documentary
 - "I Speak Identity" (2016) *26 min video*
(<https://youtu.be/qq72l-t204c>)
- Fifth meeting: **Visual Art and Aphasia**
 - Art Therapy
 - Edwards, D., & Wilkins, P. (2014). *Art therapy*. SAGE Publications, Ltd, <https://www.doi.org/10.4135/9781526401533>
 - Disability and art education
 - Disability Arts Online (*website*)
(<https://disabilityarts.online/>)
 - Penketh, C. (2014), Putting Disability Studies to Work in Art Education. *International Journal of Art & Design Education*, 33: 291-300. <https://doi.org/10.1111/jade.12052>
 - Keifer-Boyd, K., Bastos, F., Richardson, J. (., & Wexler, A. (2018). Disability justice: Rethinking "inclusion" in arts education research. *Studies in Art Education*, 59(3), 267-271.
[doi:http://dx.doi.org/10.1080/00393541.2018.1476954](http://dx.doi.org/10.1080/00393541.2018.1476954)

Other Literature

- Cummings, L. (2014). *The Communication Disorders Workbook*. Cambridge: Cambridge University Press. doi:10.1017/CBO9781107295117
- G. Albyn Davis. (2014). *Aphasia and Related Cognitive Communicative Disorders*. Pearson.
- Pačalska, Maria, and Jolanta Góral-Półrola. "VISUAL ART IN APHASIA THERAPY: THE LOST AND FOUND SELF." *Acta neuropsychologica (Warszawa)* 18.2 (2020): 149–181.

Websites

- Bilingualism (Linguistic Society of America)
<https://www.linguisticsociety.org/resource/faq-what-bilingualism>
- American Art Therapy Association
<https://arttherapy.org/>
- American Speech-Language-Hearing Association
<https://www.asha.org/>
- UT-Dallas Communication Technology Center
<https://ctech.utdallas.edu/projects-overview/real-time-visual-feedback-for-retraining-tongue-movements-for-speech/>

Films

- **Documentaries**
 - *My Beautiful Broken Brain* (2014)
 - *Aphasia Or (It Fell Upon My Mind)* (2018)
 - *I Speak Identity* (2016)
- **Drama**
 - *Persona* (1966)