Aphasia: Theories

Connectionist Model
- Based on localizationist position
- Emphasizes importance of region surrounding Sylvian fissure
- Specifies distinct components of language process

Functional Implications
- Dictates how language is mediated
- Permits selective deficits
- Proposes different types of aphasia

Classification Schemes
- Weisenberg and McBride
  - Symptomatology based: Expressive/Receptive
- Jakobson: Head: Wepm and and Jones
  - Linguistically based: Semantic, Syntactic
- Goodglass and Kaplan: Boston
  - Neuroanatomically based

Neuroanatomical Classification
- Anterior/posterior
- Fluent/nonfluent
- Neuroanatomical cites

Broca’s aphasia
- Lesion: posterior inferior frontal lobe
- Broca’s area: third frontal convolution
- Motor, expressive aphasia

Core Features
- Abnormal prosody/nonfluent
- Phonetic disintegration
- Agrammatism
- Verbal deficit greater than auditory
- Reading II’s auditory: writing II’s verbal

Broca’s associated Sx’s
- Awareness
- Contralateral hemiparesis
- Apraxia - oral and limb
- Dysarthria
- Dysphagia
- Depression
9  Transcortical Motor Aphasia
   - lesion: watershed: distal blood vessels
   - disconnection: anterior

10  TMA Core Features
   - preserved repetition
   - mild/mod aud comp
   - initial mutism: akinesia
   - nonfluent: severely impaired spontaneous speech
   - severely impaired writing
   - associated sx’s = Broca’s

11  Anomic Aphasia
   - lesions: wide range
   - left temporo-parietal lesion
   - angular gyrus

12  Anomic Aphasia: Core features
   - outstanding symptom: anomia
   - mild aud. Comp
   - repetition relatively normal
   - fluent, grammatically degraded by anomia
   - reading: good; writing ll speaking

13  Wernicke’s Aphasia
   - sensory, receptive, central
   - common
   - posterior lesion: Wernicke’s area
   - posterior third, superior temporal gyrus

14  Wernicke’s Core Features
   - auditory comprehension deficit
   - fluent, paraphasic speech
   - anomia
   - impaired repetition
   - reading, writing deficits

15  Wernicke’s Associated Sx’s
   - Visual Field defect
   - normal motor function
   - affective mood disorder: indifference/paranoia
Conduction Aphasia

- Lesion: disconnection between Broca’s and Wernickes area
- Arcuate fasciculus

Conduction Aphasia Sx’s

- Near normal auditory comprehension
- Fluent paraphasia
- Anomia
- Impaired repetition
- Reading comp--good
- Writing impaired
- Few, often no assoc. sx’s