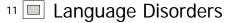


- Translating: producing language conforming in meaning to that retrieved in the planning stage
- · Reviewing: editing what is written

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# <sup>12</sup> Types of Disorders

- Aphasia: acquired disorder of language due to brain damage
- · Dysarthria: disorder of motor apparatus of speech
- Developmental language disturbances
- Associated disorders
  - Alexia
  - ApraxiaAgraphia

# <sup>13</sup> Major Historical Landmarks

- Broca (1861): Leborgne: loss of speech fluency with good comprehension
- Wernicke (1874): Patient with fluent speech but poor comprehension
- Lichtheim (1885): classic description of aphasic syndromes
- 14 🔲
- 15
- 16 🔲

## 17 🔲 Additional Aphasia Syndromes

- 18 🔲 Broca's Aphasia
  - Telegraphic, effortful speech
  - Agrammatism
  - · Some degree of comprehension deficit
  - · Writing and reading deficits
  - · Repetition abnormal drops function words
  - · Buccofacial apraxia, right hemiparesis

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## <sup>20</sup> Wernicke's Aphasia

- Fluent, nonsensical speech
- Impaired comprehension
- Grammar better preserved than in BA
- · Reading impairment often present
- · May be aware or unaware of deficit

- · Finger agnosia, acalculia, alexia without agraphia
- 21

# <sup>22</sup> Conduction Aphasia

- Fluent language
- Naming and repetition impaired
- · May be able to correct speech off-line
- · Hesitations and word-finding pauses
- · May have good reading skills

# <sup>23</sup> Global Aphasia

- · Deficits in repetition, naming, fluency and comprehension
- · Gradations of severity exist
- May communicate prosodically
- Involve (typically) large lesions
- Outcome poorest; anomic

# <sup>24</sup> Transcortical Aphasias

- **Transcortical Motor**
- Good repetition
- · Impairment in producing spontaneous speech
- Good comprehension
- Poor naming

#### 2 Transcortical Sensory

- Good repetition
- · Fluent speech
- Impaired comprehension
- Poor naming
- · Semantic associations poor

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# <sup>27</sup> Associated Deficits

- Alexia without Agraphia
  - Impairment in reading with spared writing
- Apraxia
  - Loss of skilled movement not due to weakness or paralysis
- 28

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30	Fundamental Lessons     • Language processors are localized
	<ul> <li>Different language symptoms can be due to an underlying deficit in a single language processor</li> </ul>
	<ul> <li>Language processors are regionally associated with different parts of the brain in proximity to sensory or motor functions</li> </ul>
31 🔲	What Language Disorders Reveal
	about Underlying Processes
	<ul> <li>Pure Word Deafness: selective processing of speech sounds implies a specific speech-relevant phonological processor</li> <li>Transcortical Sensory Aphasia: repetition is spared relative to comprehension; selective loss</li> </ul>
	of word meaning; some cases suggest disproportionate loss of one or more categories
32	What Language Disorders Reveal
	about Underlying Processes
	Aphasic errors in word production: reveal complex nature of lexical access
	<ul> <li>Phonological vs. semantic errors: independent vs. interactive relationship?</li> <li>Grammatical class: nouns vs. verbs (category specificity)</li> </ul>
	Broca's aphasia: syntax comprehension and production     Central syntactic deficit; loss of grammatic knowledge
	<ul> <li>Problems in "closed-class" vocabulary (preposition, tense markers)</li> <li>Limited capacity account</li> </ul>
	<ul> <li>Mapping account (inability to map from parsing to thematic roles)</li> <li>Jargon Aphasia: can construct gramatically "better" sentences than agrammatics, but can't find words, producing neologisms; reinforces distinction between content and grammatical struture</li> </ul>
33 🔲	Prosody
	Linguistic vs. nonlinguistic prosody
	Evidence for hemispheric differences
	Clinical syndromes
	<ul> <li>Disturbances of comprehension</li> <li>Auditory affective agnosia</li> </ul>
	Phonagnosia
	<ul> <li>Disturbances of prosodic output</li> <li>Aprosodias</li> </ul>
34	
35	
36 🔲	Aphasia and the Semantic System
	Meaning stored separately from form
	Models of representation in semantics
	<ul> <li>Feature-based models (see categorization)</li> <li>Nondecompositional meaning</li> </ul>
	Modality-specific semantic deficits: optic aphasia as an example
37	

38 🔲