

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

10 🔲



¹² 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

¹³ 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

19 🔲

²⁰ 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

²² 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

²³ Global Aphasia

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

²⁴ 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

25

1

26

²⁷ Associated Deficits

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

29 🔲

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

38 🔲