

Aphasia and Apraxia at a Glance

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	Broca's	Transcortical Motor	Anomia	Conduction	Global	Transcortical Sensory	Wernicke's	Verbal Apraxia
Site of Lesion	3rd frontal convolution of left frontal lobe	Smaller than Broca's Aphasia, severs links to premotor and supplementary motor; basal ganglia and thalamus; Broca's and limbic system	Not easily localized, temporal and parietal areas, sometimes affecting the angular gyrus	Arcuate fasciculus, may include superior temporal gyrus, insula primary auditory cortex; auditory association areas and supramarginal gyrus	Anterior and posterior lesions	Vascular insufficiency to watershed areas, angular gyrus is undamaged, but cut off from Broca's and Wernicke's	First gyrus of the left temporal lobe, often extends to parietal lobe affecting angular gyrus; i.e., reading and writing	Broca's area, Island of Reil
Anomia	Yes, nouns and verbs are easiest	Yes, but responds well to cues	Hallmark, differentiate as noted below	Common	Yes	NA	Pervasive	
Articulation and Language	Simplified consonant clusters, distorted, substitutions not common	Fair to excellent, normal in repetition	Normal in repetition, in general -- fair to good	Good but phoneme sequencing affected, repeated approximations	With stereotypical utterances	Normal, but only in repetition, automatic or memorized speech	Normal	Substitution, consonantal, errors predominate, varies with word length and linguistic weight
Apraxia	Common, differentiate as listed below	Differentiate as listed for Broca's		Differentiate as listed for Broca's	Differentiate as listed for Broca's		Impaired	May also include oral, limb or gait apraxia (Also Aphasia)
Auditory Comprehension	Not normal	Fair to excellent	Relatively intact	Typically normal, but breaks down in morphology		Non-existent	Severe, even at one word level, moderate cases may have some, relative to expression	Better than speech production
Deficit Awareness or Emotional Concomitants	Yes, catastrophic reactions			Error awareness		Intact cognition, but inability to connect language to meaning	Unaware, not concerned, occasionally frustrated	Patients recognize and struggle to avoid errors
Circumlocution			Frequent					
Confrontational Naming		Well preserved					Impaired, semantically inappropriate or paraphasic	Difficulty initiating
Fluency and Production	Nonfluent	Both fluent and nonfluent, fragmented	Fluent	Nonfluent	Fluent and empty, press of speech	Fluent and empty	Fluent and empty	Hallmark -- inconsistent errors, groping, visible searching, false starts, pauses
Hemiparesis or Hemiplegia	Right face or arm common						Rare	Possible concomitant
Melodic Line	Flat			Normal		Unaffected	Unaffected	Prosodic alterations, equalization of stress may occur
Morphology	Omitted		Unaffected					
Grammar	Affected	Only in repetition	Unaffected				NA, does not contain real syntax	Increased error on nouns, verbs and adjectives
Paraphasias and Types	A few, literal	Little or no	Rare	Frequent literal, paraphasias may result in Wernicke's diagnosis			May be 50% or more, literal and verbal	Sound and syllable transpositions, literal paraphasias
Sentences	Short							
Spontaneous Speech	Telegraphic, short, slow, labored	Difficulty initiating and organizing, sometimes fluent, sometimes fragmentary		Usually fluent	Nonfluent, empty	None	Nonfluent, empty, tends to be equal to comprehension	Automatic, reactive or emotional better than structured; instances of error free fluent speech; better in meaningful, unstructured speech
Syntax	Affected, only basic forms preserved			Variety is present				

Aphasia and Apraxia at a Glance (continued)

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Reading			Range from normal to very poor	Variable with severity, good but not aloud		Severely affected	If angular gyrus is impaired	Better than speech production
Repetition	Often impaired to the degree of spontaneous speech	Good, better than spontaneous	Good	Very poor -- a hallmark, intrusive additions	Poor	Hallmark, well preserved, echolalic	Poor, augmentation may occur, press of speech	Affected, better with repeated trials
BDAE Score	1 or 2, may improve to 3,4,5		Rare to have low scores	When clear cut 2 or 4, 1 or 2 difficult to separate from Broca's		1 or 2		NA
Writing			May be preserved, but range from normal to very poor	Spelling errors, transpositions		Severely affected	Form normal, content equal to expression	
Notes	Token Test to differentiate from Apraxia, good prognosis	Neither fluent nor nonfluent, limbic system, changes may alter memory	It is often the first language symptom of Aphasia, distinguished from Wernicke's by comprehension-expression level	Rare Ñ less than 10% of aphasias, better than Broca's articulation, tone and syntax, worse with a model, conduit d'approche	3rd most common Aphasia other than Broca's and Wernicke's, neither fluent nor nonfluent	Extremely rare, repetition score used to differentiate from Wernicke's	Lack of awareness gives poor prognosis, cocktail hour speech, model helps therapy	Some have impaired oral and sensory perception