

Agnosias, aphasias and other disorders of association cortex.

(It is assumed that the language areas are in the left cerebral hemisphere.)

Disorder	Site of lesion
Agnosias	
Tactile agnosia: (including astereognosis)	Left or right Anterior parietal lobe, posterior to primary somesthetic area
Cortical neglect:	Right (usually) superior parietal lobe; may extend to occipital lobe
Apperceptive visual agnosia:	
Acquired achromatopsia	Left & right inferior occipital cortex
Prosopagnosia	Right (usually also left) inferior occipital and posterolateral temporal cortex
Associative visual agnosia:	Occipitotemporal cortex, bilaterally
Balint syndrome. Combination of:	
Visual disorientation	Left & right superior occipital cortex
Ocular apraxia	Posterior parietal cortex
Optic ataxia	Posterior parietal cortex
Auditory agnosia:	Posterior, superior temporal cortex, bilaterally
Amusia:	Right posterior, superior temporal cortex
Disordered control of movement	
Akinetic mutism:	Left and right supplementary and cingulate motor areas
Apraxia:	Left or right premotor area (positioning of limb) or anterior, inferior parietal cortex (due to astereognosis)
Agraphia (without aphasia):	Left angular gyrus

Behavioral and affective changes

Acquired sociopathy:	Ventromedial prefrontal cortex, usually bilaterally
Anosognosia (and anosodiaphoria):	Either right inferior parietal cortex, or right inferior medial prefrontal cortex
Depression:	Left prefrontal cortex more often than other localized lesions

Speech and language disorders

Receptive (Wernicke's) aphasia:	Left posterior, superior temporal cortex (Wernicke's area)
Anomic aphasia:	Left parietal lobe, posterior to Wernicke's area
Transcortical aphasia: Receptive type:	Left middle temporal gyrus, inferior to Wernicke's area
Expressive type:	Left frontal lobe, anterior to Broca's area
Alexia with agraphia	Wernicke's area and left angular gyrus
Pure alexia (without agraphia):	Left occipital lobe and associated commissural fibers either in the underlying white matter or in the splenium of the corpus callosum
Expressive (Broca's) aphasia:	Left frontal operculum (Broca's area)
Global aphasia:	Whole left perisylvian area (frontal, parietal & temporal opercula)
Conduction aphasia:	Left inferior parietal lobe (supramarginal gyrus) and underlying arcuate fasciculus
Subcortical aphasia:	Head of left caudate nucleus
Aprosodia:	Right perisylvian area (frontal, parietal & temporal opercula)