

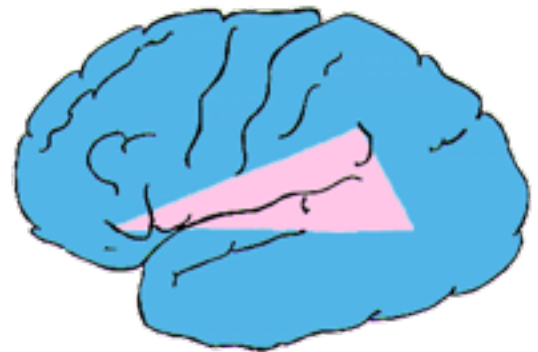
Broca's Aphasia vs. Wernicke's Aphasia

What is aphasia?

Aphasia is a disorder that results from damage to portions of the brain that are responsible for language. For most people, these are areas on the left side (hemisphere) of the brain. Aphasia usually occurs suddenly, often as the result of a stroke or head injury, but it may also develop slowly, as in the case of a brain tumor, an infection, or dementia. The disorder impairs the expression and understanding of language as well as reading and writing. Aphasia may co-occur with speech disorders such as dysarthria or apraxia of speech, which also result from brain damage.

This triangular area (area located around Sylvian fissure) is where language is located in the brain.

A stroke causing damage in this area will cause a language deficit. The deficit will be restricted to the ability to use language.



What types of aphasia are there?

There are two broad categories of aphasia: fluent and non-fluent.

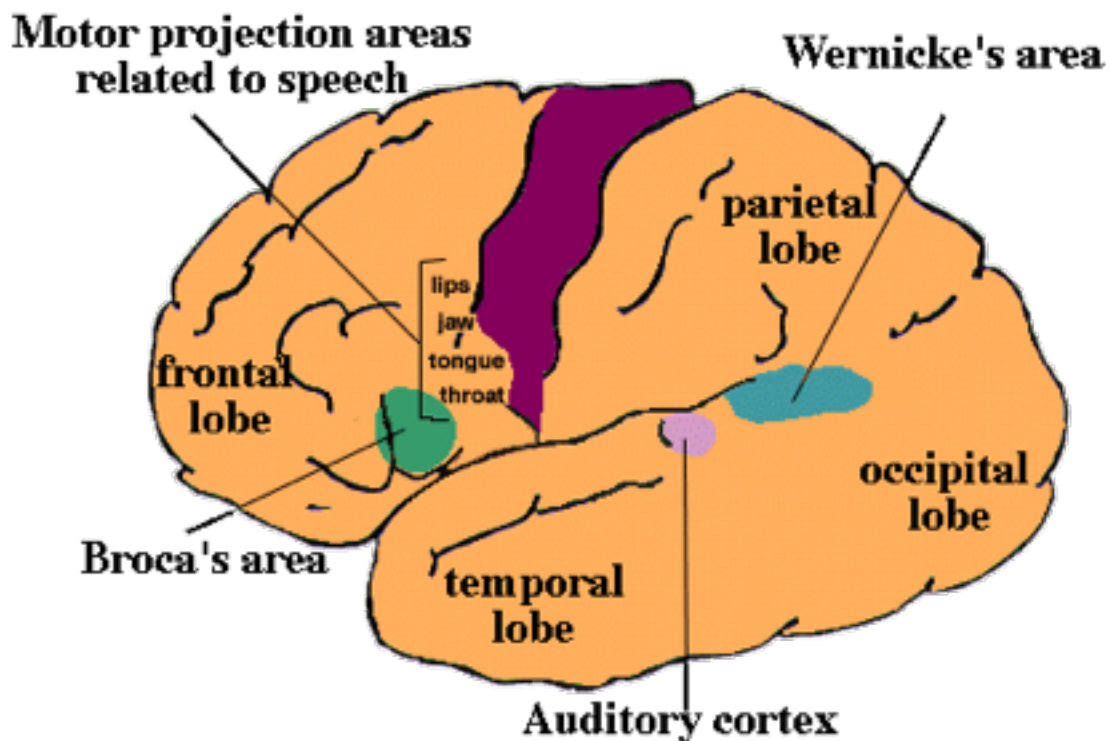
Damage to the temporal lobe (the side portion) of the brain may result in a fluent aphasia called Wernicke's aphasia (see figure). In most people, the damage occurs in the left temporal lobe, although it can result from damage to the right lobe as well. People with Wernicke's aphasia may speak in long sentences that have no meaning, add unnecessary words, and even create made-up words. For example, someone with Wernicke's aphasia may say, "You know that smoodle pinkered and that I want to get him round and take care of him like you want before." As a result, it is often difficult to follow what the person is trying to say. People with Wernicke's aphasia usually have great difficulty understanding speech, and they are often unaware of their mistakes. These individuals usually have no body weakness because their brain injury is not near the parts of the brain that control movement.

A type of non-fluent aphasia is Broca's aphasia. People with Broca's aphasia have damage to the frontal lobe of the brain. They frequently speak in short phrases that make sense but are produced with great effort. They

often omit small words such as "is," "and," and "the." For example, a person with Broca's aphasia may say, "Walk dog," meaning, "I will take the dog for a walk," or "book book two table," for "There are two books on the table." People with Broca's aphasia typically understand the speech of others fairly well. Because of this, they are often aware of their difficulties and can become easily frustrated. People with Broca's aphasia often have right-sided weakness or paralysis of the arm and leg because the frontal lobe is also important for motor movements.

Non-fluent aphasia/ Expressive aphasia (Broca's damage) : Unable to give information (through speaking, writing, etc), but can still retain some ability to receive information.

Fluent aphasia/ Receptive aphasia (Wernicke's damage) : Unable to receive information (through speaking, writing, etc), but can still retain some ability to give information.



So basically, you could be able to understand language but not be able to communicate (Broca's), or you could be able to communicate but not understand anything (Wernicke's)?