## The Language Lab: Cerebral Palsy

### **Cerebral Palsy (CP)**

An umbrella term for a group of non-progressive conditions dating from birth or the first three years of life, which disrupts the brain's ability to control muscle movement, coordination, and posture. (The term "cerebral" refers to the brain, and "palsy" refers to impaired control of body movement and posture). These conditions are caused by impaired development or injury to the brain (not the muscles or nerves), before during or after birth.

### **Classifications According to Movement:**

### **Spastic**

This form of cerebral palsy is marked by muscle stiffness and rigidity, which causes difficulty with movement in one or more limbs, and possibly all four. Movements are "jerky", tense and uncoordinated, due to abnormally tight muscle tone. Individuals may have trouble moving from one position to another, or releasing an object they are holding. Spasticity is caused by damage to the motor cortex of the brain, and frequently causes the development of joint contractures. About 50% of all individuals with cerebral palsy have this type.

### Athetoid

This form of cerebral palsy is marked by involuntary, uncontrolled movements in one or more limbs and possibly all over. Individuals may have trouble holding themselves in a steady position, and may experience writhing movements of the arms, upper body, and legs. A combination called choreoathetoid also includes involuntary fidgety movements. The individual may need a lot of concentration to get his hand to a certain spot, to hold an object, etc. It is thought that damage to the basal ganglia causes the athetosis. About 20% of individuals with cerebral palsy have this type.

### Ataxic

This form of cerebral palsy is marked by poor coordination of posture and balance and unsteadiness of gait. Damage to the cerebellum causes ataxia. Individuals may appear very shaky when trying to perform an activity such as writing or turning a page, and may look unsteady when they walk. About 10% of individuals with cerebral palsy have this type.

### Mixed

An individual can have more than one type of cerebral palsy, such as spastic and athetoid. About 20% of individuals with cerebral palsy have mixed type.

# The Parts of the Body Affected by Cerebral Palsy are Determined by Which Parts of the Brain Are Damaged.

[Insert graphic illustrations here of the brain and body]

### Monoplegia

One limb, usually an arm, is affected.

### Diplegia

Legs are significantly more involved than arms, which are relatively unimpaired.

### Hemiplegia

An arm and leg on the same side of the body are affected; the arm is usually more impaired than the leg.

### Triplegia

One arm and both legs are affected.

### Quadriplegia

All four limbs are affected; some asymmetry is possible but all limbs are severely impaired; legs are more impaired than the arms.

#### Choreoathetoid

Marked by involuntary, uncontrolled and fidgety movements in one or more limbs and possibly all over.