**Language**

**Language**is defined as the combination of gestured, spoken, and/or written words to communicate meaning. The building blocks of any language are the following:

1. **Phoneme:**the smallest *sound*unit. For example, in the word "fish" there are 3 phonemes: f, i, sh
2. **Morpheme:**the smallest *meaningful*unit (this includes prefixes and suffixes). For example, I, a, dog, -ed, un-, me are all morphemes.
3. **Grammar:**therules in a language that allow us to properly understand it. Two types of grammatical rules are semantics and syntax.

**a. *Semantics:***grammatical rules that we use to derive*meaning*from morphemes, words, and sentences. For example, when you add an "ed" to the end of a verb it becomes an action of the past.

**b**. *Syntax****:***grammaticalrules that enable us to properly *combine words* into meaningful sentences. An example would be the placement of an adjective before the noun in the English language.

***Stages of Language Development***

**1.  Babbling Stage:**(3-4 months after birth) the stage in speech development where the infant utters a variety of spontaneous sounds. This is not an imitation of adult speech and babbling sounds are the same in any culture.

**2. One-word stage:**(1-2 years old) the stage in speech development where the infant speaks only single words to communicate an idea. For instance, "milk!" may mean, "I would like a glass of milk!"

**3. Two-word stage:**(2 years old) Infants speak in two-word phrases that resemble Telegraphic speech speech like a "telegram". For example: want ball, me play, etc.

When explaining language development two theorists views are helpful. Behaviorist **B.F. Skinner** explains that language is *learned* through associations and imitation while **Noam Chomsky**, a linguist, suggests that we are all born with the *capacity for language* and that a childs brain is pre-wired for to look for grammatical rules. Research shows that we are born with a readiness to learn grammatical rules and that a childs experiences cause a gradual change in the brains neural network connections.

***Research Notes:***

-A child can learn any language and will spontaneously invent meaningful words to communicate their wishes. However, after age 7, the ability to master a new language greatly declines.

-For both deaf and hearing children, later than usual exposure to sign language or another language will result in lack of fluency in that language.

-Brain scans reveal that the brain records the learning of a second language in very different brain areas dependant on the age of the learner.

***Thinking and Language***

**Benjamin Lee Whorfs**Linguistic Relativity theory states that language determines how we think. This is most evident in people who speak two or more languages. For instance, a person who speaks English and Japanese will feel differently depending on which language they are using. English has many words describing personal emotions and Japanese has many words describing inter-personal emotions. The Hopi people do not have a past tense and therefore possibly only live in the present and plan for the future. It may be more correct to say that language *influences*how we think. For instance native people of the North have many different words for "snow". This influences a childs perception of snow and forces them to look at the snow in a little more detail than would someone of another culture.

**Thinking does occur without language.**This is evident in pianists and artists where mental images nourish the mind. Ultimately, thinking and language affect each other in an enduring cycle where as the text suggests, *"thinking affects our language, which then affects our thoughts"*.

**Note the following research findings on animal communication:**

-Animals also communicate, whether by means of sound or behavior just as bees dictate the location of nectar with an elaborate dance.

-Allen Gardner and Beatrice Gardner, researchers of University of Nevada, successfully taught a chimpanzee to perform sign language as a means of communication. They do not however have the same facility for language as humans.

- The research of Sue Savage-Rumbaugh showed that chimps were capable of understanding the semantic differences of spoken English and that chimps also had a "critical period" in which such language must be learned if they are to gain language competency and fluency.