

Psycholinguistics (Language, mind, and brain) and Teaching Methodology from Psychology and Linguistics Perspectives



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Kata pengantar penulis

In the name of Allah, most Gracious, most Merciful. The praise to Allah, the Lord of the worlds, and the sequel is for those who keep their duty unto Him, further, here will be no hostility except against wrong doers.

Blessing and solution be upon the most honorable prophet and messenger, His family all His disciples, and those who follow them in goodness till the Day of Judgment.

We offer our expression of gratitude to Allah, due to His favor and charity and we thank to our Dean of Faculty of Tarbiyah and Teachers Training, DR. Hidayat Ma'ruf, M.Pd for the guidance and advices so, we have finished making this book with the title **“Psycholinguistics (Language, mind, and brain) and Teaching Methodology from Psychology and Linguistics Perspectives.”**

Finally, the writers hope that this book will be useful not only for the writers themselves but also for the readers.

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Writers

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INTRODUCTION

Meeting 1

Objective: By the end of the meeting, students understand what the subject about and what they are expected to do during classes.

Topics: Introduction to the course: Short Explanation and Discussion about Psycholinguistics

Indicator of Achievement: Students understand what the subject about and what they are expected to do during classes

Psycholinguistics is the combination of psychology and linguistics. Psychology is the study about human behavior while linguistic is study about language. Psycholinguistic is the study about human behavior in using language influence by their range, personality, etc. The field of psycholinguistics is concerned with discovering the psychological process that makes it possible for humans to acquire and use language.

Psycholinguistics is the study of the language processing mechanisms. Psycholinguistics deals with the mental processes a person uses in producing and understanding language. It is concerned with the relationship between language and the human mind, for example, how word, sentence, and discourse meaning are represented and computed in the mind. The purpose of psycholinguistics study is to figure out what people have to know about language in order to use it; how that knowledge is used to process language.

Two Aspects of psycholinguistics

1. Language Comprehension –how we understand the meaning of words and sentences (receptive process). Is there a critical age for the first language acquisition?

2. Language Production –how we speak and use language (productive process).
Language production is a process from idea generation to language expression. It is a mental process that is heavily influenced by language users' culture.

The scope of psycholinguistics

The common aim of psycholinguists is to find out the structures and processes which underline a human's ability to speak and understand language. Psycholinguists are not necessarily interested in language interaction between

people. They are trying above all to probe into what is happening within the individual. Psycholinguistic work consists of two questions:

1. What knowledge of language is needed for us to use language?

Four broad areas of language knowledge:

- 1) **Semantics** deals with the meanings of sentences and words.
- 2) **Syntax** involves the grammatical arrangement of words within the sentence.
- 3) **Phonology** concerns the system of sounds in a language.
- 4) **Pragmatics** entails the social rules involved in language use.

It is not ordinarily productive to ask people explicitly what they know about these aspects of language. We infer linguistic knowledge from observable behavior.

2. What processes are involved in the use of language?

What cognitive processes are involved in the ordinary use of language?

1. “*Ordinary use of language*”: for example: understanding a lecture, reading a book, writing a letter, and holding a conversation, etc.
2. “*Cognitive processes*”: processes like perception, memory and thinking.

Although we do few things as often or as easily as speaking and listening, we will find that considerable cognitive processing is going on during those activities.

Two possible directions of study in psycholinguistics

1. Language as a way of explaining psycholinguistic theories and processes: language influences memory, perception, attention and learning.
2. The effects of psychological constraints on the use of language: how memory limitations affect language production and comprehension.

General issues of psycholinguistics:

1. language acquisition (how human beings learn language)
2. language production (how we create and express meaning through language)
3. language comprehension (how we perceive and understand speech and written language)
4. The relationship between language and thought.

Psychology Aspects of Second Language Acquisition

Several approaches to Second Language Acquisition have been influenced by the field of psychology. They are ordered according to their primary focus of attention.

1. Factors affecting second language learning (psychological and social situation)
2. Critical age for second language learning
3. Methods for teaching second language
4. Bilingualism (the types and the process)
5. Languages and the brain
6. How do we acquire the language
7. Learning processes
8. Differences among learners
9. Language disorder
10. Sign language as a true language

PSYCHOLINGUISTICS MATERIALS

Meeting 2

Objective: By the end of the meeting, students are expected to understand How children learn a language well (part I)

Topics: Part 1: First Language Learning (How children learn a language)

The development of speech production and comprehension

The relationship of speech production, speech comprehension and thought

Indicator of Achievement: Students can describe, explore, and discuss how children learn a language well (Part I).

CHAPTER I

First Language Learning

BACKGROUND

Speech production is an important part of the way we communicate. We indicate intonation through stress and pitch while communicating our thoughts, ideas, requests or demands, and while maintaining grammatically correct sentences. However, we rarely consider how this ability develops. We know infants often begin producing one-word utterances, such as "mama," eventually move to two-word utterances, such as "gimme toy" and finally sound like an adult. However, the process itself involves development not only of the vocal sounds (phonology), but also semantics (meaning of words), morphology and syntax (rules and structure).

How do children learn to this complex ability? Considering that an infant goes from an inability to speak to two-word utterances within 2 years, the accelerated development pattern is incredible and deserves some attention. When we ponder children's speech production development more closely, we begin to ask more questions. How does a child who says "tree" for "three" eventually learn to correct him/herself? How does a child know "nana" (banana) is the yellow, boat-shaped fruit he/she enjoys eating? Why does a child call all four-legged animals "horsie"? Why does this child say "I goed to the kitchen"? What causes a child to learn words such as "doggie" before "hand"? This chapter will address these questions and focus on the four areas of speech development mentioned: phonology, semantics, and morphology and syntax. Besides, this section will the

development of speech production and comprehension and the relationship of speech production, speech comprehension and thought.

DISCUSSION

We might understand that language form is in the written and spoken language, but have we ever thought how language produced. Through the **Psycholinguistic** we can understand how language is produced. In our minds, we have the means for producing (making) and comprehending (understanding) speech. Meanwhile butter-worth is the output of the comprehension – speech or writing – is more concrete or more easily analyzed.

First language is the language that assumed to be languages which are acquired during early childhood – normally beginning before the age of about three years- and that they are learned as part of growing up among people who interact and speak to them (Caregiver Speech).¹

Language processing is a study of how humans comprehend and produce language (sentences, words within sentences, and sequences of sentences, etc.) in real time.

Language acquisition is how human beings learn language. Language acquisition refers to the learning and development of a person's language. The learning of a native or first language is called *first language acquisition*, and the learning of a second or foreign language is called *second language acquisition*.

1. The Development of Speech Production and Speech Comprehension

A. The Development of speech Comprehension

Speech comprehension is how we understand the meaning of the words and sentences. Now we would like to focus on the child's development of speech comprehension. When, for example, does the understanding of speech begin and how does it relate to production?

1. Fetuses and Speech input

Before dealing with newborns, let us begin at the real beginning with research which concerned with stimulating language development even *before* the child is born. The mother's speech sounds were found to be able to reach the ear of the fetus above the background sounds. Infants tend to do something that

¹Troike, Muriel Saville.2010. *Introducing Second Language Acquisition*. Cambridge. Cambridge University Press

oriented to his/her mother more in order to activate the tape with their mother's voice than to hear the voice of another woman. Research showed that infants could distinguish the sound of their mother's voice and other woman. The learning of the mother's voice may actually have occurred. If a fetus could hear sounds from the outside world, those sounds would have to be through a medium of a liquid in the fetal sac. So that, speech sounds are virtually indistinguishable.

2. *Newborns (Neonates) and Speech Input*

Infants may even prefer their native language at birth. In two studies on babies' preferential listening, the neonates choose to listen to French, the language that spoken by mothers while pregnant, rather than Russian which their mothers did not speak. Thus, the fetus may have been affected by the vibrations from the mother's voice that reached its developing ears through the body tissues. Newborn could have done their learning after birth since testing was done when the infants were already 4 days old. Conclusion, newborns are so responsive to sounds within such a short time of birth. They are ready for speech sounds.²

3. *Speech Comprehension occurs without Speech Production: The Case of Mute-Hearing Children*

Persons who are mute but hearing can develop the ability to comprehend speech without their being able to produce speech, so long as their basic intelligence is intact. But how are such people able to comprehend the sentences that they do, given that such sentences reflect the essential characteristics of language. Comprehend of an unlimited number of novel grammatical sentences, recognition of synonymy of ambiguity, etc? The answer must be that these mute persons developed a grammar, a mental grammar based on speech comprehension that enables them to understand the speech to which they were exposed!

4. *In Normal Children Speech Comprehension Develops in Advance of Speech Production*

If children did not first learn to understand the meaning of words and sentences, they would not be able to use words or sentences in a meaningful way. They observe what others say and how what is said relates to objects, situations, and events.

² Steinberg, Danny D, et al.2001. *Psycholinguistics: Language, mind and world (Second Edition)*.England. Pearson Education Limited. Page 27-33

Comprehension of a language precedes production does not mean a child must understand all of the language before being able to produce something. The system of comprehension and production do not develop separately for the normal child, the child will then try to figure how to use it in production. The child attempts to coordinate production to confirm to the system that has been developed for comprehension.

5. Pre-speech normal infants

Baby can recognize words as early as 6 months of age. The comprehension and production processes develop in a parallel mode with production always trying to keep up with comprehension.

6. The Huttenlocher study

He found that children (10-13years old) were able to comprehend speech at a level beyond that to which they had progressed in production. Children were able to select familiar objects such as 'bottle' or 'diaper' which were named for them and were able to respond appropriately.

7. The Sachs and Truswell Stud

They found that children could only produce single word utterances. Nevertheless, could comprehend syntactic structures composed of more than one word. Conclusion, the children's level of speech comprehension was well in advance of their level of speech production.

8. Relative Paucity of Comprehension Studies

Most of the language acquisition studies have been concerned with the development of speech production. The reason for this is simple: Production studies are easier to do. The product of the speech production process, the child's utterance, is something that can be directly observed while the product of the comprehension process, meaning cannot. Comprehension can only be inferred on the basis of relevant behavior.

B. The Development of Speech Production

First language acquisition is remarkable for the speed with which it takes place. Long before a child starts school, he or she has become an extremely sophisticated language-user, operating a system for self-expression and communication that no other creature, or computer, comes close to matching. In

addition to the speed of acquisition, the fact that it generally occurs, without overt instruction, for all children, regardless of great differences in their circumstances, provides strong support for the idea that there is an innate predisposition in the human infant to acquire language.³

❖ Several stages in the acquisition process :

1. Cooing and babbling

The earliest use of speech-like sounds has been described as **cooing**. During the first few months of life, the child gradually becomes capable of producing sequences of vowel-like sounds, particularly high vowels similar to [i] and [u]. Speech perception studies have shown that by the time they are five months old, babies can already hear the difference between the vowels [i] and [a] and discriminate between syllables like [ba] and [ga].

Between six and eight months, a child is sitting up and producing a number of different vowels and consonants, as well as combinations such as ba-ba-ba and ga-gaga. This type of sound production is described as **babbling**. Infants will also engage in more face-to-face interactions with their caregivers, smiling and attempting to make eye contact.⁴

2. Gurgling

A child's first form of communication is crying. A piercing scream may mean she's hungry, while a whimpering, staccato cry may signal that she needs a nappy change. As she gets older, she'll develop a delightful repertoire of gurgles, sighs, and coos, becoming a mini sound factory. As for her ability to understand language, linguists say babies as young as four weeks can distinguish between similar syllables, such as "ma" and "na."⁵

3. The One Word Stage

Between twelve and eighteen months, children begin to produce a variety of recognizable single-unit utterances. This period, traditionally called the **one-word stage**, is characterized by speech in which single terms are uttered for

³Yule, George, 2006. *The Study of Language: An Introduction (Third Edition)*. Cambridge. Cambridge University Press page 149

⁴http://en.wikiversity.org/wiki/Psycholinguistics/Development_of_Speech_Production on March, 13 2014

⁵www.babycenter.com.au/a6573/developmental-milestones-talking on March, 14 2014

everyday objects such as ‘milk’, ‘cookie’, ‘cat’, ‘cup’ and ‘spoon’ (usually pronounced [pun]).

4. The Two-Word Stage

Depending on what we count as an occurrence of two distinct words used together, the **two-word stage** can begin around eighteen to twenty months, as the child’s vocabulary moves beyond fifty words. By the time the child is two years old, a variety of combinations, similar to *baby chair*, *mommy eat*, *cat bad*, will usually have appeared. The adult interpretation of such combinations is, of course, very much tied to the context of their utterance. The phrase *baby chair* may be taken as an expression of possession (= this is baby’s chair), or as a request (= put baby in chair), or as a statement (= baby is in the chair), depending on different circumstances.

5. Telegraphic Speech

Between two and two-and-a-half years old, the child begins producing a large number of utterances that could be classified as ‘multiple-word’ speech. Before we investigate this development, we should note a stage that is described as **telegraphic speech**. This is characterized by strings of words (lexical morphemes) in phrases or sentences such as *this shoe all wet*, *cat drink milk* and *daddy go bye-bye*. The child has clearly developed some sentence-building capacity by this stage and can get the word order correct. While this type of telegram-format speech is being produced, a number of grammatical inflections begin to appear in some of the word-forms and simple prepositions (*in*, *on*) are also used.⁶

The Acquisition Process

The child is acquiring the language principally through a process of imitating adult speech. Certainly, children can be heard to repeat versions of what adults say on occasion and they are clearly in the process of adopting a lot of vocabulary from the speech they hear. However, adults simply do not produce many of the expressions that turn up in children’s speech. Notice how, in the following extract (from Clark, 1993), the child creates a totally new verb (*to Woodstock*) in the context.

⁶Yule, George, 2006. *The Study of Language: An Introduction (Third Edition)*. Cambridge. Cambridge University Press page 149-159

❖ **Developing Phonology**

When a child explicitly pronounces their first word they have understood the association between sounds and their meaning. Yet, their pronunciation may be poor, they produce phonetic errors, and have yet to produce all the sound combinations in their language. Researchers have come up with many theories about the patterns and rules children and infants use while developing their language.

Patterns of Speech

Depending on their personalities and individual development, infants develop their speech production slightly differently. Although infants vary in their first words and the development of their phonology, by examining the sound patterns found in their early language, researchers have extracted many similar patterns. For example, McIntosh and Dodd examined these patterns in 2 year olds and found that they were able to produce multiple phonemes but were lacking [ʃ,θ,tʃ,dʒ,r]. They were also able to produce complex syllables. Vowel errors also occurred, although consonant errors are much more prevalent. The development of phonemes continues throughout childhood and many are not completely developed until age 8 (Vetter).

❖ **Developing Morphology**

By the time a child is two-and-a-half years old, he or she is going beyond telegraphic speech forms and incorporating some of the inflectional morphemes that indicate the grammatical function of the nouns and verbs used.

- The first to appear is usually the-ing form in expressions such as *cat sitting* and *mommy reading book*.
- Marking of regular plurals with the -s form, as in *boys* and *cats*.
- The use of the possessive inflection -'s occurs in expressions such as *girl's dog* and *Mummy's book*.
- Different forms of the verb "to be" such as *are* and *was*.
- Once the regular past tense forms (*walked*, *played*) begin to appear in the child's speech, the irregular forms may disappear for a while. For a period, the -ed inflection may be added to everything.

➤ The regular -s marker on third person singular present-tense verbs appears. It occurs first with full verbs (comes, looks) and then with auxiliaries (does, has).

❖ Developing Syntax

Similar evidence against ‘imitation’ as the basis of the child’s speech production has been found in studies of the syntactic structures used by young children. The ages at which children go through these stages can vary quite a bit, but the general pattern seems to be that stage 1 occurs between 18 and 26 months, stage 2 between 22 and 30 months, and stage 3 between 24 and 40 months. We will look at the development of two structures:

a. Forming Negatives :

1. To involve a simple strategy of putting No or Not at the beginning, E.g:

no mitten not a teddy bear no fall no sit there

2. The additional negative forms don’t and can’t appear, and with no and not, are increasingly used in front of the verb rather than at the beginning of these sentence. E.g:

He no bite you I don’t want it

That not touch You can’t dance

3. Sees the incorporation of other auxiliary forms such as didn’t and won’t.

E.g : *didn’t caught it He not taking it She won’t let go This not ice cream*

b. Forming questions, there are 3 stages :

1. Add a Wh-form

(Where, Who) to the beginning of the expression or utter the expression with a rise in intonation towards the end, as in these E.g :

Where kitty? Doggie? Where horse go? Sit chair?

2. More complex expressions can be formed, but the rising intonation strategy continues to be used. It is noticeable that more Wh-forms come into use, E.g:

What book name? You want eat?

3. The required movement of the auxiliary in English questions

(I can have ... ⇒ Can I have ...?) E.g: *Can I have a piece? Did I caught it?*

Will you help me? How that opened?

What did you do? Why kitty can’t stand up?

❖ Developing Semantics

This process is called **overextension** and the most common pattern is for the child to overextend the meaning of a word on the basis of similarities of shape, sound and size, and, to a lesser extent, movement and texture. The semantic development in a child's use of words is usually a process of overextension initially, followed by a gradual process of narrowing down the application of each term as more words are learned. Although overextension has been well documented in children's speech production, it isn't necessarily used in speech comprehension. One two-year-old used *apple*, in speaking, to refer to a number of other round objects like a tomato and a ball, but had no difficulty picking out *the apple*, when asked, from a set of round objects including a ball and a tomato. One interesting feature of the young child's semantics is the way certain lexical relations are treated.

2. The Relationship Between Speech Production, Speech Comprehension And Thought

Speech comprehension necessarily precedes speech production that produced through the thought as the basis of Speech Comprehension. In learning languages, children must be able to comprehend the meaning of the language before they themselves can produce it. Since meaning is the basis of all languages to produce speech meaningfully. Children first need to be exposed to utterances with a clear connection to physical objects, events and situations before they can begin to say such utterances. Without a sound-meaning, the utterance of the sound form is not too communicative. Meaningful context and appropriate usage of speech sounds are the basis for imputing language knowledge to the children/utterance.

Speech comprehension precedes and is the basis of speech production:

1. A learner must first hear speech sounds before the person knows what sounds to make.
2. A learner must hear the speech sounds in coordination with the environment or the mind before the person can assign a meaning to the speech sounds.

Thought as the Basis of Speech Comprehension

Thought necessarily precedes language is the contents of thought are provided by the child's experience of the environment and the child's experience

of its own feelings, emotions, desires and conceptual constructions (thoughts). Without such contents of thought, the child would have nothing to assign as meanings of words and sentences. The basic language principle is that a combination of speech sounds represents something other than itself, i.e. has a meaning which is rooted in non-language experience.

One must hear sentences in conjunction with related events in the world in order to learn that a language has an Agent-Action-Object sequence to learn the meaning of syntactic structures.

Language is a system which allows for the labeling of thoughts in terms of physical sound so that the thoughts may be communicated to others. Thought provides the basis for speech comprehension, which in turn provides the basis for speech production.⁷

Speech Comprehension Necessarily Precedes Speech Production

1. The child must first be able to comprehend the meaning of the language before they themselves can produce it.
2. The basis of all language is meaning and without that, children could not begin to produce language meaningfully.
3. Children need to be exposed to utterances with a clear connection to articles referred to before they themselves can begin to use such utterances.
4. They will not learn language if all that they are exposed to is speech sound, no matter how many times it is uttered.
5. The sound form of a word must be associated with something that gives a clue as to its meaning.
6. Without a sound meaning association, the mere utterance of the sound form is of little communicative significance.
7. They sometimes repeat words or phrases they hear, but this is not evidence for learning unless the sounds are used in a meaningful context that is suitable for those sound forms.

⁷<http://bbi3215psycholinguistics.wikifoundry.com/page/5.6+The+Relationship+of+Speech+Production,+Speech+Comprehension+and+Thought> on March, 13 2014

8. Unimaginable for a person to have the ability to produce speech without having the ability to comprehend speech.
9. This is because, a learner must first hear speech sounds before the person knows what sounds to make. A learner must hear the speech sounds in coordination with the experience of objects or the minds before the person can assign a meaning to the speech sounds.

Thought as the Basis of Speech Comprehension

1. The meanings that underlie SC are the concepts that are in a person's mind.
2. Speech does not provide such concepts.
3. The contents of thought are provided by the child's experience of the environment.
4. Without contents of thought, child would have nothing to assign as the meanings of words and sentences.
5. We cannot find cases of persons who have language but no thought.
6. Thought provides the basis for speech comprehension, which in turn provides the basis for speech production.

CONCLUSION

1. First language is the language that assumed to be languages which are acquired during early childhood – normally beginning before the age of about three years- and that they are learned as part of growing up among people who interact and speak to them (Caregiver Speech)
2. Several stages in the acquisition process : Cooing, babbling, Gurgling, The one word stage, The two-word stage and Telegraphic speech
3. For the acquisition process the child is acquiring the language principally through a process of imitating adult speech.
4. The child must first able to comprehend the meaning of the language before they themselves can produce it. The basic of all language is meaning and without that, children could not begin to produce language meaningfully.
5. At 2-3 ages, the child is got the development in many linguistics area such as Morphology, Syntax and Semantics to produce words.
6. The development of speech production through Fetuses and Speech input, Newborns (Neonates) and Speech Input, Speech Comprehension occurs

without Speech Production: The Case of Mute-Hearing Children and In Normal Children Speech Comprehension Develops in Advance of Speech Production, Relative Paucity of Comprehension Studies.

7. Speech comprehension necessarily precedes speech production that produced through the thought as the basis of Speech Comprehension.

Meeting 3

Objective: By the end of the meeting, students are expected to understand How children learn a language well (part II)

Topics: Parentese and Baby talk

- Imitation, Rule learning and Correction
- Learning abstract words
- Memory and logic in Language Learning

Indicator of Achievement: Students can describe, explore, and discuss how children learn a language well (Part II).

CHAPTER II

Parentese and Baby talk

BACKGROUND

In the process of baby's growth, sometimes we find parents or adults who talk with unusual language to babies. Most adult change their language style, when they talk to babies until, a certain point babies will try to imitate what adults usually say. However, they are some cases where children say ungrammatical words which never said by adults before. It is so hurt to correct them. How can it be happened?

In language learning, usually children begin with the concrete such as physical object, direct activities, followed with mental experiences and feeling, then, in the process also needed memory and logic. How can children do that thing, amazingly?

This chapter will address these questions and focus on several areas, include parentese, baby talk, imitation, rule learning, correction, learning abstract word, memory and logic.

DISCUSSION

A. Parentese and Baby Talk

1. Parentese

Researchers call the special way we talk to babies is ‘motherese’ or ‘parentese’ or ‘caregiver’. This sing-song speech, often accompanied by exaggerated facial expressions, seems to be used by nearly everyone who talks to a baby. We all love to do it – mothers, fathers, grandparents, friends, even preschoolers addressing younger brothers and sisters, babies seem to like it too.

Parentese (coined by the first author in Steinberg, 1993, p.22) is the sort of speech that children receive when they are young. Parentese is also referred to as ‘Motherese’, ‘caregiver speech’, ‘Adult-to-Child Language’ (ACL) (Reich, 1986), and as ‘Child-Directed Speech’ (CDS) (Pine, 1994). All of these terms take into consideration the fact that the child receives input from many sources-mother, father, siblings, relatives, friends, etc. (Nwoakh, 1987; Bavin, 1992)- and that such input has special linguistic characteristics.⁸

Parentese makes language more intelligible. Parents from all over the world naturally use parentese with their babies.

2. How to do parentese

Researchers are just beginning to look at the possible benefits of parentese. But it’s well established that most of us use it, regardless of our culture or native tongue. Various studies have documented parentese in speakers of English, German, Russian and Swedish. And one study found it among speakers of Mandarin Chinese, a tonal language in which, unlike English or German, a change in the pitch of a word alters the meaning of that word.

But no matter the language, parentese seems to share several characteristics and, scientists theorise, has several purposes:

- Parentese is **higher-pitched**, sometimes as much as an octave higher. Why do we all seem to become sopranos when we talk to babies? It might serve to get their attention. After all, if we’re getting high and squeaky, we’re probably not addressing anybody with more authority, or even more height, than we have.

⁸ Steinberg, Danny D, et al. *Psycholinguistics: Language, mind, and world (second edition)*. England. Pearson Education Limited. 2001. p. 37

- Parentese uses **short and simple sentences**, often repeated over and over again. We've all said it, probably multiple times, 'Who's a sweet baby? Are you a sweet baby? Yes, you're a sweet, sweet baby'. Repeating ourselves can help babies figure out words, and simple, repeated sentences can help them with grammar.
- Parentese features **well-formed, elongated consonants and vowels**. We tend to pronounce words precisely when we talk to babies – pulling out the vowel sounds and clearly voicing consonants – in marked contrast to the hurried way we speak to other adults. A slurred 'sweebabe' becomes a bright 'sweet baaabee' when addressed to someone who truly fits the description. Hearing the exaggerated sounds of parentese can make it easier for infants to learn the sounds of their own language.

4. Characteristics of Parentese

a. Immediacy and concreteness

Parents are talking to children about what is happening in the immediate environment and not about abstract or remote objects and events.

b. Grammaticality of input

The speech directed to children is highly grammatical and simplified.

c. Short sentences and simple structures

Speech directed to children by adults tends to consist of simple sentences with simple structures.

d. Vocabulary: simple and short

The vocabulary used by adults to children also tends to be simple, restricted,

e. Exaggerated intonation, pitch, and stress

Adults seem to over blow the intonations and use a slower tempo also frequently repeat or rephrase what they or their children say. Furthermore, adult speeches to children refer more to the context of the conversation and help to clarify the children's utterances.

f. Older children too adapt their speech

It is interesting that not only adults seem to use simplified language to children but also older children use this language to younger children.

g. Father versus Mother Speech

Father tends to employ different and more complex language while speaking to their children. Therefore, the different style acts as a bridging device between the close child-mother communication and communication with others.

5. Baby Talk

Baby Talk is known officially as parentese or child-directed speech. It used to be called motherese. Baby Talk is form of Parentese but with its own characteristics. While parentese uses vocabulary and syntax, though simpler than that addressed to other adults, Baby Talk involves the use of vocabulary and syntax that is overly simplified and reduced. Curious, though, from a psycholinguistic view, is the fact that most of the features which Baby Talk adopts are those which have their basis in the early speech of children.

Most Baby Talk involves modification in vocabulary. There are already established words like “bow-bow” (dog), and “choo-choo” (train), and “bu-bu” (car). From such examples, we can see that the main sound structure of such word tends to be dominated by a consonant + Vowel syllable unit which is often repeated (reduplicated).⁹

B. Imitation, Rule learning and Correction

1. Imitation

Imitation means that the child copies and repeats aloud the word which he or she hears. Through imitation, children learn how to pronounce sounds and words and they seem to enjoy imitating the sounds which they hear. However, it must be kept in mind that there is an obvious limitation, which is that imitation can apply only to speech production and not to speech comprehension.

Most ordinary people believe that language is learned by imitation. More recent points of view claim that children have innate language ability. There are three major arguments supporting this notion:

a. Children often say things that adults do not.

⁹ Ibid page (39)

- b. Children use language in accordance with general universal rules of language even though they have not yet developed the cognitive ability necessary to understand these rules.
- c. Patterns of children's language development are not directly determined by the input they receive¹⁰.

2. Rule Learning

The child's production of certain novel words and sentences cannot be explained by imitation. Children commonly produce ungrammatical words like:

- a. *Sheeps*, *mouses*, and *gooes*, regarding the PLURAL, and
- b. *Goed*, *comed*, *falled*, and *breaked*, regarding the PAST.

Why do they utter such word? It cannot be because of imitation because no one says such words for them to imitate. They cannot be imitating such speech because no one says these things for the child to copy.

Children have formulated rules in their minds according to which they construct novel utterances. They learn the plural morpheme and the past tense morpheme and they apply those to new cases. This works when the words are regular. However, when the new words are an exception, the child must learn that it is an exception and not apply the rule.

What are really interesting are the creations that the child makes with the PAST regular rule: *goed*, *comed*, *falled*, *breaked*. Typically before the PAST rule was learned, the child had already learned many of the PAST irregular forms, especially *go/went* and *come/came*. The power of the PAST rules is so strong that the formerly learned irregular past form of 'went' and 'came' are disregarded or confused.

The same thing happens with sentence rule learning as in 'No Heavy' and 'When we can go'. Again, these are not utterances that the child can imitate because no one says them. The child develops rules in the mind and then uses those rules to make these novel creations. These rules are so powerful that they strongly control the child's output.

¹⁰ Troike, Muriel Saville. *Introducing second language acquisition*. Cambridge. Cambridge University Press. 2010. p. 23

3. Correction.

It used to be the thought by many that the correction of children's speech is essential to improvement. Research has shown that such is not the case. When parents do attempt to correct their children's speech, the results are often fruitless and frustrating. Besides, mother and father are usually delighted that their young children are talking and consider every utterance to be a gem. The mistakes children make are cute and repeated endlessly to anyone who will listen¹¹.

Undoubtedly, there are cases where parent's correction, particularly with older children, may directly result in improvement. However, grammatical corrections are relatively rare with respect to the number of deviant utterances that a child actually produces. Eventually, the child does notice his or her own incorrect speech and then makes the necessary revision.

In order to improve, the child must:

- a. Note the difference between the child's own utterance and that of the parent
- b. Determine what the nature of the error is, and
- c. Figure out a way to permanently change his or her grammar or strategies so that it yields the parent's utterance in the future.

Most parents are not interested in the ungrammaticality of the utterances of their children. Rather, they are more interested in the truth value, social appropriateness, or cleverness of what their children say. A child who says to visiting aunt, "Mommy no like you" Conversely, the child who notices that her dog is unhappy on a hot day and they say, "Doggie want drink," will not be corrected for grammatically but will be praised for her perceptiveness¹².

C. Learning Abstract Word

In acquiring the meaning of words, children begin with the concrete then go to the abstract. They begin with physical objects (ball, table, dog) and direct activities (run, jump, play) then move to relations and states (on, sitting). Soon following will be words involving mental experiences and relations (hungry, hurt, happy, want).

¹¹ Fromkin, Rodman, et.al. *An Introduction to language*. Australia: Harcourt Brace and Company. 1990. p 359

¹² *Ibid* page(44)

Later come complex abstract ideas (I speaker), you (listener), truth, lie, honest, guess, hope, idea). But how are these learned? Especially, the complex and abstract one. The child must make inferences from what people say, and on the basis. For example, how might the word hungry and hurt be learned? The child might cry and the mother might say, “Are you hungry?” the mother says this because she guesses what the child’s internal state might be, based on the last ate or instance. If the child has a feeling like hunger, the child may then guess that ‘hungry’ refers to what he or she is feeling. Consider ‘hurt’. Perhaps the child falls and is bruised on the knee. The father might say, ‘poor girl. Does it hurt?’ The child’s feeling of pain might then associated with the word ‘hurt’.

Regarding hypothesis testing, there is an interesting personal experience. When Davy about 4 years old, he once accidentally broke one of his mother’s favorite lamps. When his mother angrily asked him, ‘did you do that by accident or on purpose?’ Davy has to make a choice. Since he knew the meaning of by accident but not on purpose, and he knew that an accident was something bad, he figured that ‘on purpose’ must be the better of the two alternatives, so he spoke up and said, ‘I did it on purpose’, a bad choice. Whack to his rear end!

Children are forever hypothesizing about the speech that they hear and seeking confirmation about their hypothesizing.¹³

D. Memory and Logic in Language Learning

Memory is a central part of the brain’s attempt to make sense of experience, and to tell coherent stories about it¹⁴. For children, memory is one crucially important psychological factor in language learning. If children did not remember many of words, phrases, and sentences they heard, they would have little basis for discovering abstract meanings and rules. Without a good memory, language learning would not be possible.

There are two basic types of memory operate in language learning;

- Associative learning, where a connection is formed between an object and the sound form name of that object.

¹³ Opcit page (10)

¹⁴ Magnussen, Svein & Tore Helstrup. (2007) *Every Day Memory*. New York: Psychology Press.

- Episodic memory, where whole events or situations are remembered along with phrases and sentences that others have spoken.

- Logic

The child use both induction and deduction in learning language.

- Children use inductive logic

Children must use inductive analysis in the early grammatical phase of learning, as an example taking plural, children must scan the sentences uttered by mature speakers and then note that a suffix is added when two or more objects are being talked.

- Young children use deductive logic

Suppose one 4-year-old child (Jane) says to another child (Adam), “You have more than me!” this is said in situation where an adult has put down a plate of cookies in front of the two children. Then, supposed that, after Jane said this, Adam, the child with the greater number of cookies, gives some to Jane, the child with the less number. Now, why did Adam give Jane some cookies? This following logical argument might applied by Jane when she says, “You have more than me!”

Premise 1 You have more cookies than me.

Premise 2 We should have an equal amount.

Conclusion You should give me some of your cookies to make it equal.

The fact that Adam responds to Jane’s declaration by giving her some cookies indicate that Adam understood her argument.

CONCLUSION

1. Parentese is the sort of speech that children receive when they are young. Parentese is also referred to as ‘Motherese’, ‘caregiver speech’, ‘Adult-to-Child Language’ (ACL) and as ‘Child-Directed Speech’ (CDS). Baby talk’ is the part of parentese but have special characteristic. The word that use in Baby Talk more short and simple than the word that use in parentese.
2. Imitation acquires the word or sentence through imitating the sounds which they hear. After that their mind will form a certain rules about grammatical sentences. However, the rules are so strong to control their mind, and it will be

useless if their parent try to correct them. Eventually, they will correct their speech without corrected.

3. In acquiring the meaning of words, children begin with the concrete then go to the abstract. They begin with physical objects and direct activities then move to relations and statives. Soon following will be words involving mental experiences and relations. The child must make inferences from what people say.
4. Memory is a central part of the brain's attempt to make sense of experience, and to tell coherent stories about it. There are two basic types of memory operate in language learning; Associative learning and episodic memory. In logic, the child use both induction and deduction in learning language.

Meeting 4

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore the deaf and language: Sign, oral, written (Part I)

Topics: The Deaf and Language: Sign, oral written

- Sign language: A true language without speech
- Speech- Based Sign Languages
- Independent Sign Languages (ISIs) such as American Sign Language (ASL)

Indicator of Achievement: Students can describe, explore, and discuss The Deaf and Language: Sign, oral and written (Part I)

CHAPTER III

The Deaf and Language: Sign, oral written

BACKGROUND

Sign languages commonly develop in deaf communities, which can include interpreters and friends and families of deaf people as well as people who are deaf or hard of hearing themselves. Sign language is a type of language that uses hand movements, facial expressions and body language to communicate. It is used predominantly by the deaf and people who can hear but cannot speak. But it is also used by some hearing people, most often families and relatives of the deaf, and interpreters who enable the deaf and wider communities to communicate with each other. A sign language is a language which, instead of acoustically conveyed sound patterns, uses visually transmitted sign patterns to convey meaning by simultaneously combining hand shapes, orientation and movement of the hands, arms or body, and facial expressions to express fluidly a speaker's thoughts.

In linguistic terms, sign languages are as rich and complex as any oral language, despite the common misconception that they are not "real languages". Professional linguists have studied many sign languages and found them to have every linguistic component required to be classed as true languages.

Sign systems are sometimes developed within a single family. For instance, when hearing parents with no sign language skills have a deaf child, an informal system of signs will naturally develop. Sign Language and American Sign Language are quite different. On occasion, where the prevalence of deaf people is

high enough, a deaf sign language has been taken up by an entire local community.

DISCUSSION

A. Sign Language : A True Language without Speech

Sign language is a language which uses manual communication and body language to convey meaning, as opposed to acoustically conveyed sound patterns. This can involve simultaneously combining hand shapes, orientation and movement of the hands, arms or body, and facial expressions to fluidly express a speaker's thoughts. Sign language is a language that employs signs made with the hands and other movements, including facial expressions and postures of the body, used primarily by people who are deaf.

Sign language is a true language because the language system allows a signer to comprehend and produce unrestricted number of grammatical sign sentences. Language of course must depend on some physical mode for its acquisition and use but that mode not be limited to sound. The mode can be visual, as a signing, or even touch as in languages used by the deaf blind. A person who could comprehend and produce communications such as this, through sign rather than speech, surely can be said to have language.

There are two general categories of language involving the use of signs: alternate sign languages and primary sign languages.

1. *Alternate sign language* is a system of hand signals developed by speakers for limited communication in a specific context where speech cannot be used. In some religious orders where there are rules of silence, restricted alternate sign languages are used (e.g. by monks in a monastery).
2. *Primary sign language* is the first language of a group of people who do not use a spoken language with each other. British Sign Language (BSL) and French Sign Language (SLF), as used for everyday communication among members of the deaf communities of Britain and France, are primary sign languages.

There is much sign language in around the world such as, American Sign Language, British Sign Language, Japanese Sign Language, French Sign

Language, Spanish Sign Language, and so on. Now we will discuss about American Sign Language (ASL).

American Sign Language is a complete, complex language that employs signs made by moving the hands combined with facial expressions and postures of the body. American Sign Language is a sign language for the deaf in which meaning is conveyed by a system of articulated hand gestures and their placement relative to the upper body. American Sign Language is a visual-gestural language used primarily by members of the North American Deaf community.

The characteristic of American Sign Language (ASL) is a complete visual-gestural language with its own grammar, vocabulary, and syntax. Like other signed languages, it uses the hands, the body, and facial expressions (including mouth movements) to express meaning and the eyes to perceive meaning.

B. Speech Based Sign Languages

Deaf people around the world communicate using sign language as distinct from spoken language in their everyday lives. A Sign Language is a visual language that uses a system of manual, facial and body movements as the means of communication. Sign language is not an universal language, wherever communities of deaf people exist, sign languages develop, because signing is not only used by people who can hear, but cannot speak physically. Different languages are used in different countries, like the many spoken languages all over the world.

Some countries such as Belgium, the UK, the USA or India may have more than one sign language. Hundreds of sign languages are in used around the world, for instance, Japanese Sign Language, (or Nihon Shuwa, JSL), British Sign Language (BSL), Spanish Sign Language (Lengua de signos o señasespañola, or LSE), Turkish Sign Language (or TürkİşaretDili, TID).

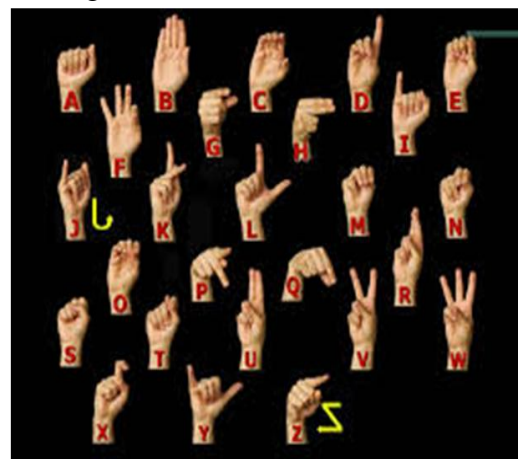
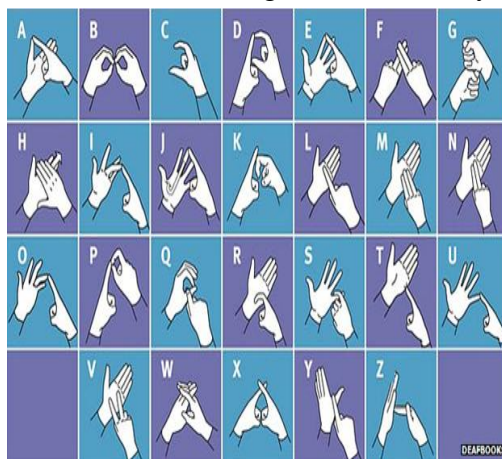
Sign Language use hand, face, or other body movements in a three dimensional spaces as the physical means or communication. Principally, there are two types of sign language: one that related to ordinary speech-based language and one that is independent of ordinary language. *Speech-Based Sign Languages* represent spoken words (or their spelling) and the order of these words or morphemes as they appear in ordinary spoken languages, such as Swedish,

English, and French. This contrasts greatly with such sign languages as American Sign Language and British Sign Language which are not speech-based and not mutually intelligible. These sign languages are independent of the ordinary spoken language, having developed their own words and grammatical systems for the production and understanding of sentences. We shall call these *Independent Sign Languages* (ISLs).

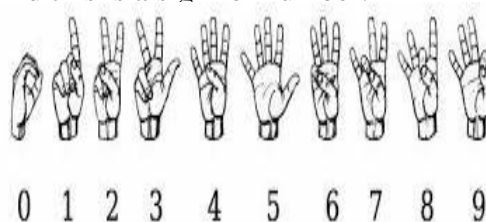
Sign Language based on the speech of ordinary language can be of two different kinds one which represents the morphemes of speech and one which represents spelling (orthography).

1. Finger Spelling : Letter by Letter

According to this system words are presented by spelling them out letter by letter in terms of individual signs, where each sign represents a letter of the alphabet. Hand and finger configuration are used to indicate letters, such as making a V with the index and middle fingers or an O with the thumb and index finger. Thus, a word such as “enough” would be signed letter by letter, e, n, o, u, g, and h. Words and entire sentences can be communicated in this letter by letter method. The order of letters is exactly the one that occurs in the writing of the ordinary language. Thus the sentence ‘The boy coughed’ is expressed as the series of individual letter signs: t, h, e, b, o, y, c, o, u, g, h, e, and d.



And this is a sign for number.



There are both one-hand and two-handed systems of finger spelling. The Americans, for example use one hand, while British use two. Users of both systems can sign relatively quickly but both processes are rather laborious. The two-handed system, however, is faster and provides more easily identifiable letters.

Finger spelling may be learned with or without the knowledge of reading that is based on a speech-based language. A person who knows how to read will be able to learn and use finger spelling quite easily. Such a person simply needs to finger spell what the person ordinarily would write. On the other hand, most profoundly or even many moderately hearing-impaired persons have not learned the prerequisite reading knowledge, which typically involves knowing the speech-based language. In any case, one must learn to recall print before one can spell.

Theoretically, finger spelling could be learned as a native language. For example, a deaf child being introduced to the finger spelling for 'banana' can learn to identify the sequence of letter-by-letter signs as a whole image. The totality of which has the meaning of banana. This can be done without the child ever knowing the origin or significance of those letter signs in the system of reading and writing of speech base language. If teaching were done in this way, the learner would have a head-start eventually learning the ordinary speech base language since the vocabulary and syntax and finger spelling would mirror that of spoken language. To our knowledge this type of teaching is not being done anywhere now.

Signers of all systems, though, must learn to use finger spelling, since many place and person name like Manila, Kensington, Sheldon, and Francine may not have their own individual signs, as do such frequent words as London, New York, Mary and John. In frequent and novel names must be finger spelled letter by letter.

2. Morpheme by Morpheme (MnM) Sign Languages

Some deaf schools advocate a sign system which uses a whole sign for each speech word or meaningful part ,i.e a morpheme. Such systems are directly based on the spoken form of the speech based language. Since these systems

represent the morphemes of true speech based languages, these systems therefore can be said to be true languages.

The learner learning such a system need not know the speech based language on which the system was created in order to learn it.

Advantages of MnM systems:

- 1) Learner simultaneously acquires the morphology syntax of both the sign and related speech based language.
- 2) Easier for an adult hearing person to learn an MnM than an ISL .

Disadvantages of MnM systems :

- 1) Children do not learn MnM easily
- 2) MnM is not preferred by the deaf community

C. Independent Sign Language (ISLs) such as American Sign Language (ASL)

American Sign Language (ASL) is a complete, complex language that employs signs made by moving the hands combined with facial expressions and postures of the body. It is the primary language of many North Americans who are deaf and is one of several communication options used by people who are deaf or hard-of-hearing.

Is sign language the same in other countries?

No one form of sign language is universal. Different sign languages are used in different countries or regions. For example, British Sign Language (BSL) is a different language from ASL, and Americans who know ASL may not understand BSL.

How does ASL compare with spoken language?

In spoken language, words are produced by using the mouth and voice to make sounds. But for people who are deaf (particularly those who are profoundly deaf), the sounds of speech are often not heard, and only a fraction of speech sounds can be seen on the lips. Sign languages are based on the idea that vision is the most useful tool a deaf person has to communicate and receive information.

ASL is a language completely separate and distinct from English. It contains all the fundamental features of language—it has its own rules for pronunciation, word order, and complex grammar. While every language has ways of signaling different functions, such as asking a question rather than

making a statement, languages differ in how this is done. For example, English speakers ask a question by raising the pitch of their voice; ASL users ask a question by raising their eyebrows, widening their eyes, and tilting their bodies forward.

1. Some characteristic of ISLs

The sign of an Independent Sign Language (ISL) can be analyzed into three basic components: (1) hand configuration; the shape that the hand forms, (2) place of articulation: where in space the hand is formed: and (3) movement: how the hand moves.

Word Structure (Morphology)

At the word level of an ordinary language, there are not only words which differ completely in meaning from one another, but also words which very much related, differing only in morphology, i.e. their component and derived morpheme forms. English derives many words from 'compare', such as 'compared', 'compares', 'comparing', and 'comparison'. Such morphological changes also have their equivalent in an ISL such as American Sign Language. Adjusting the movement of a sign by changing the speed or tension or rate of repetition gives ASL signers the ability to derive nouns from verbs, such as 'comparison' from 'compare', as well as to produce derivations which are unique to ASL.

There are uninflected forms of signs which can be defined by the features of place, configuration, and movement, with variation in movement providing the means for morphological variation and changes in aspect. ASL words and morphemes are manipulated in much the same way as are spoken words so as to provide variation in grammatical classes and meaning.

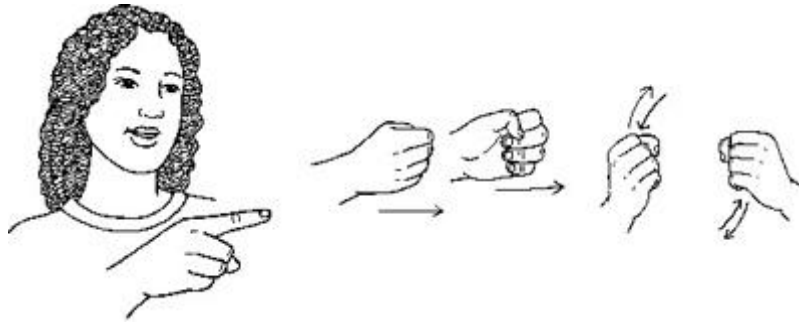
According to Elissa Newport and Ted Supalla (1980), structure in ASL is quite complex, particularly for verbs. Typically verbs are marked morphology for agreement in person and number with both subject and object, and for temporal aspect and other features. Word order in ASL is relatively free, with an unmarked Subject-Verb-Object order.

2. The syntax of a Typical ISL : American Sign Language (ASL)

In a speech-based language, individual words are structured together into sentences according to syntactic rules, the heart of the grammar of a language,

ASL, too, has rules which govern the relationship between individual signs in a sentence. But, ASL sentences are three-dimensional creations. A signing space allows for combination of meaning and the simultaneous blending of a number of meaning elements that cannot be produced linearly. As a result, signed sentences can be produced quickly and with a minimum of effort.

SHE DRIVES CAR



3. Dialects and Foreign Accent in Sign Language

There are may be strong dialects differences within a language from region to region within a country. For example, signers from Paris have difficulty in understanding signer from Lyon, and vice-versa. Also, the American Sign Language (ASL) and British Sign Language (BSL) are not mutually intelligible. ASL actually has more common with French Sign Language (FSL) early than with BSL because ASL was derived from FSL early in the nineteenth century. BSL had its beginnings before the 17th century.

One of the newer sign language is Chinese Sign Language, with Shanghai dialect as standard. Its room may lie in the deaf school established earlier by the American missionary C. R. Mills and his wife and with the sign language which they promoted.

How signs tend to be made when learning a foreign ISL can be affected by the native language. When comparing ASL to Chinese Sign Language (CSL), we find that not only are the signs are completely different but that ASL uses a slightly more pinched hand configuration, with the finger curling under, fist-like, into the palm. If CSL signer learns ASL, that Chinese may keep his/her hand configuration in the less pinched CSL style, the result would be perfectly understandable to an ASL signer.

There is no universal language, but there are some similarities among languages, but not many. Like speech-based languages, a sign language is part of a culture.

4. The Origin of ASL

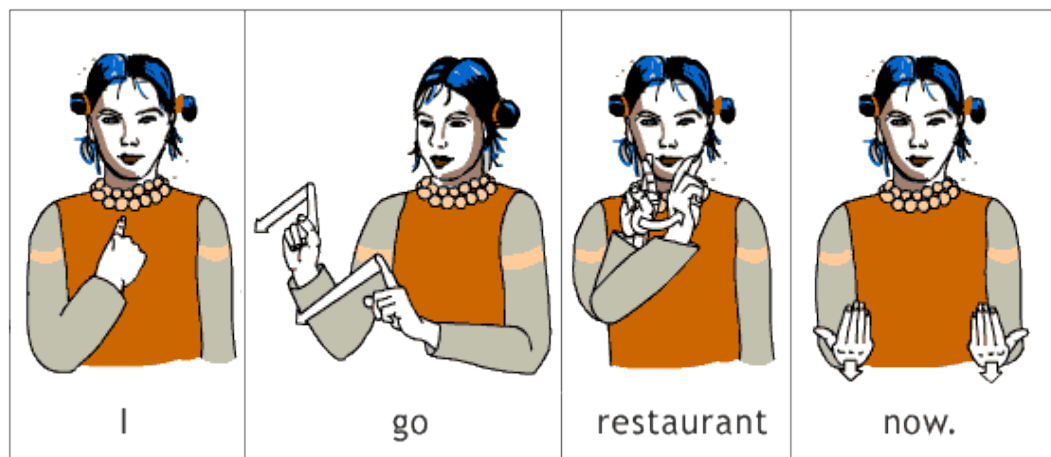
ASL began with initiative of Thomas Gallaudet (an American educator of the deaf) who wanted to bring French Sign Language (FSL) to America after the deaf education in France. He convinced a French teacher of the deaf, Laurent Clere, to return with him. Gallaudet opened his first school in Hartford, Connecticut in 1817, where he and Clere established ASL. They use FSL along with some indigenous American signs. After these many years of separate use, French and American sign languages have diverged somewhat, in much the same way that the Englishes of Americans, Australians, and Canadians have diverged over the years. There are differences but the similarities dominate.

5. Guidelines and Samples of using ASL

GUIDELINE 1: Facial expression matters. Compare the ASL sentences for

"I'm going to the restaurant" and "Are you going to the restaurant?"

Questions are accompanied by arched eyebrows and an inquisitive look.





GUIDELINE 2: ASL does not use verb tenses. Past, present and future are conveyed by introducing time frame words like "yesterday," "today" or "tomorrow" into the beginning of a sentence to establish the context of what follows. For example, to say "I saw your mother yesterday," the direct translation in sign would look like this:



GUIDELINE 3: Keep it linear. Most ASL sentence structure is based upon sequential thought. That is, if you talk about one event happening after another event, you would describe the first event and then the second. If you said in English: "I'm going to lunch after I finish this report" the direct sign translation would be:



To find out more about sign language and classes in ASL, check out the Resources page or contact your local society for the deaf.

CONCLUSION

Sign language is a true language because the language system allows a signer to comprehend and produce unrestricted number of grammatical sign sentences.

There are two general categories of language involving the use of signs

1. Alternate sign language
2. Primary sign language

There are two types of sign language

1. Speech Based Sign Languages

Sign language which is based on ordinary speech based language. Two ways of using speech based sign language:

- a. Letter by letter
- b. Morpheme by morpheme

2. Independent Sign Languages

Sign languages are independent of the ordinary spoken language, having developed their own words and grammatical systems for the production and understanding of sentences. Such as: American Sign Language, British Sign Language, Chinese Sign Language, etc.

Meeting 5

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore the deaf and language: Sign, oral, written (Part II)

Topics: The process of learning ASL

The oral approach and total communication

The sign language vs. Oral Approach Controversy

Indicator of Achievement: Students can describe, explore, and discuss The Deaf and Language: Sign, oral and written (Part II)

CHAPTER IV

The process of learning ASL

BACKGROUND

In this section tells about the oral approach and sign language where are used by deaf person, and in this paper there are some categories of deaf person who born by, they are Deaf children born to deaf parents and Deaf children born to hearing parents. It also tells about the successful and the failed of hearing-impaired, the controversy of oral approach and sign language that were controverted by Alexander Graham Bell and Edward Gallaudet which at the end of the controversy appear the new approach that is Total Communication.

DISCUSSION

A. The Process of Learning ASL

The process for learning sign language varies greatly due to factors including family background and age at the time of hearing loss.

1. Multigenerational deaf families: In these families, a deaf child learns sign language naturally from watching his parents and family members.
2. Deaf children in hearing families: these children tend to learn sign language less fluently or later than deaf children from deaf families. Hearing parents who choose to learn sign language often learn it along with their child. Surprisingly, children who are deaf can learn to sign quite fluently from their parents, even when their parents might not be perfectly fluent themselves.

3. Late deafened person: Many late-deafened people have already learned to speak, read and write, and choose to use amplification technology and lip-reading instead of learning ASL.

A highly unusual feature of signing communities is that native users relatively rare: 95 percent or more of deaf signers are taught to the language after infancy, and sometimes not until late childhood or even adulthood.

- a. **Deaf children born to deaf parents.** Deaf children born to deaf parents acquire sign language just as quickly and with as much effort as hearing children acquire spoken language.
- b. **Deaf children born to hearing parents.** More than 95% of deaf children are born to hearing parents, due to an entirely different view and experience of the world, this often leads to difficulties in parent-child communication. In recent years, the hearing parents of deaf children are encouraged to learn the sign language and to expose deaf children to sign language as early in life as possible.¹⁵

B. Definition of Degree Hearing Loss

Degree of hearing loss refers to the severity of the loss. Experts distinguish between normal, mild, moderate, severe and profound hearing loss. Most cases of hearing loss are categorized as mild or moderate. Hearing loss is measured in decibels (dB).

C. Types of Degree Hearing Loss

1. Normal
 - **Degree of Hearing Loss** is 0 – 15 dB
 - There is no **Effects on Language & Speech Understanding**
2. Mild
 - **Degree of Hearing Loss** is 16dB - 30dB
 - May have trouble hearing faint, soft or distant sounds
 - Have some difficulties keeping up with conversations, especially in noisy surroundings.
 - Depends on visual cues to understand speech in background noise
 - Needs hearing aid amplification and classroom amplification

¹⁵http://en.wikipedia.org/wiki/Language_acquisition_by_deaf_children

3. Moderate hearing loss

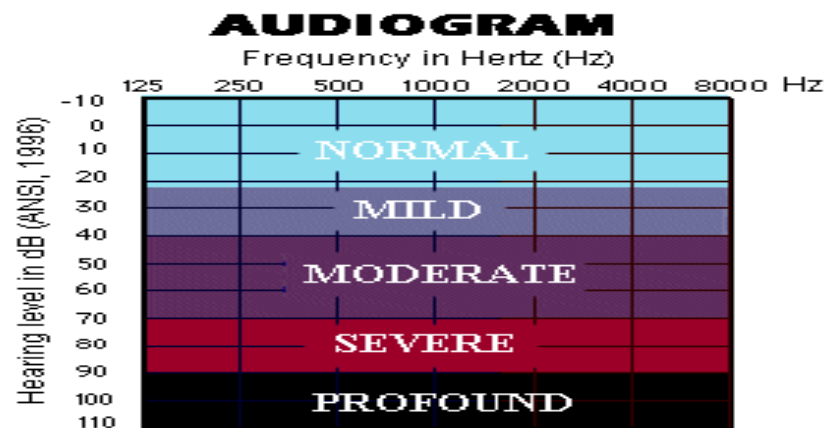
- **Degree of Hearing Loss is 31dB - 50dB**
- Speech must be loud to be understood
- A hearing device will assist if background noise low.
- Normal conversation must be on a one - to - one basis, with no background distractions
- Visual cues essential during communication

4. Severe

- **Degree of Hearing Loss is 51dB - 80dB**
- Normal conversational speech is inaudible, but will be assisted by a hearing device.
- Visual cues will assist in understanding speech.
- Rely heavily on lip-reading / sign language even when they are using hearing aids.
- Speech and language will be significantly delayed

5. Profound

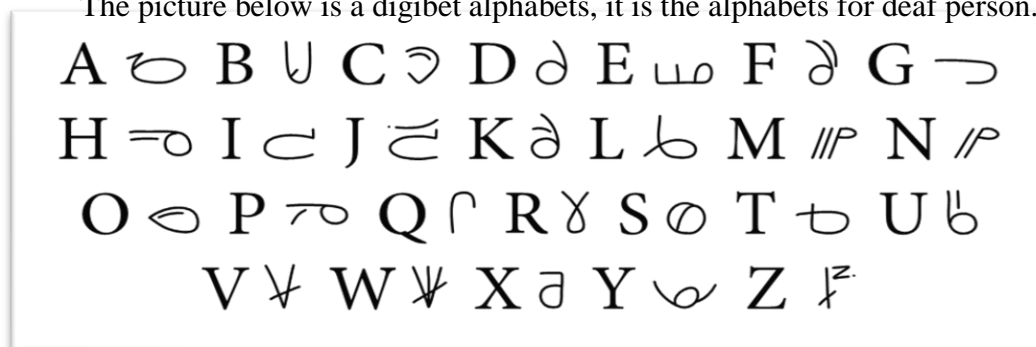
- **Degree of Hearing Loss is 81dB +**
- May be able to hear loud sounds more through vibrations than of tonal patterns
- May rely on vision rather than hearing
- With this level of hearing loss, hearing aids may or may not help; cochlear implants are often an option.
- Rely mostly on lip-reading, and/or sign language.



Meadow 1966-1980 said that among the profoundly deaf, native signers do better in speech, speech reading, and reading abilities. The most potent variable in the ability to produce speech, unsurprisingly, is the degree of hearing loss.

Degree of hearing loss	Hearing loss range (dB HL)
Normal	-10 to 15
Slight	16 to 25
Mild	26 to 40
Moderate	41 to 55
Moderately severe	56 to 70
Severe	71 to 90
Profound	91+

The picture below is a digibet alphabets, it is the alphabets for deaf person.



Bovillian, Orlansky, and Novack (1983) investigated the sign language and motor development of 11 young children born of deaf parents who were studied across 16-month period. The participant showed accelerated early language development, producing, on average, their first recognizable sign at 8,5-month, their tenth sign at 13,2-moths, and their first sign combination at 17,0-months. The structure and content of the participant's 50-sign vocabularies closely resembled those for children at the same stage in previously published studies of spoken language acquisition.

According to Newport and Supalla (1980), a number of such studies have shown that there is a substantial effect of age on the acquisition of ASL: Native and Early ASL learners show much more fluency, consistency, and complexity, in the grammatical structures of language and more extensive and

rapid processing abilities, than do those people who have acquired ASL later in life.

D. The Oral Approach And Total Communication

➤ Oral Approach

Oral approach is an approach that focuses on the teaching of deaf students through oral language by using lip reading, speech, and mimicking the mouth shapes and breathing patterns of speech.¹⁶

The oral approach was developed from the 1930s to the 1960s by British applied linguists such as Harold Palmer and A.S. Hornsby. They were familiar with the direct method as well as the work of 19th-century applied linguists such as Otto Jespersen and Daniel Jones but attempted to formally develop a more scientifically founded approach to teaching English than was evidenced by the direct method.

Oral approach is a method in which children learn to use whatever hearing they have, in combination with lip-reading and contextual cues (speech reading) to understand and use spoken language. The goal is to give the deaf individual the necessary spoken language skills to be mainstreamed educationally and to function independently in the hearing world. This approach facilitates the development of reading and writing skills because proficiency in the English language is critical to developing good reading ability, and competence in reading is critical to learning in all academic areas. Teachers in these programs are highly trained and provide spoken language instruction throughout the day in all classroom activities.

Palmer, Hornby and other British applied linguists from the 1920s onward developed an approach to methodology that involved systematic principles:

1. Selection (the procedures by which lexical and grammatical content was chosen),
2. Gradation (principles by which the organization and sequencing of content were determined),
3. Presentation (techniques used for presentation and practice of items in a course).

¹⁶<http://en.wikipedia.org/wiki/Oralism>

Then, one of the most active proponents of the oral approach, George Pittman was developing an influential set of teaching materials based on the situational approach. The main characteristics of Situational Language Teaching were as follows:

1. Language teaching begins with the spoken language. Material is taught orally before it is presented in written form.
2. The target language is the language of the classroom.
3. New language points are introduced and practiced situationally.
4. Vocabulary selection procedures are followed to ensure that an essential general service vocabulary is covered.
5. Items of grammar are graded following the principle that simple forms should be taught before complex ones.
6. Reading and writing are introduced once a sufficient lexical and grammatical basis is established.

Procedure

Classroom procedures in the Situational Language Teaching vary according to the level of the class, but procedures at any level aim to move from controlled to freer practice of structures and from oral use of sentence patterns to their automatic use in speech, reading and writing. The lesson plan of the teacher in oral approach and situational language teaching might consist of these parts:

1. Receiving the materials or knowledge
2. Revision (to prepare for new work if necessary)
3. Presentation of new structure or vocabulary
4. Oral practice (drilling)
5. Reading of material on the new structure or written exercise.

Strengths

1. Oral approach develops students' speaking skills, along with grammar control.
2. With-habit behaviorist learning theory, students will practice constantly over and over and it can be a personal skill which can be applied outside the classroom.

3. With the emphasis on grammar control, students can automatically set the basic sentence structure and patterns not only in speaking skill but also on writing skills.
4. By using a situational syllabus, the teachers will develop their creativity by looking at the situation in the classroom.
5. Oral technique drills greatly assist students in visualizing something, so they are easier to remember new word (vocabulary) in the learning process.

Weaknesses

1. It will be boring if the learning process performed repeatedly.
2. Writing was limited to the grammatical structure and reading was limited to new vocabulary.
3. It will not be a guarantee that students who exercise repeatedly could develop language skills outside the classroom when environment only using the mother tongue.
4. It takes quite a long time to learn one material because they have done repeatedly until the material is actually capable of being personal skills.
5. Students will be afraid to argue because they are required to avoid the pronunciation and grammar errors.
6. Students who are less able to use the target language will be limited in issuing his opinion.

a. Oral Approach Successful With The Less Hearing-Impaired

The oral approach focuses on the teaching of speech production. In this approach children from the age of 2 or 3 years onwards are specially trained in the skill of articulating speech sound. The success are with children who have only a moderate hearing loss. ¹⁷

b. Oral Approach Fails with the severely hearing-impaired

A great problem with the oral approach is that it tends only to work for a portion of the hearing impaired population. Research shows,

¹⁷Steinberg, Danny D, et al. 2001. *Psycholinguistics: Language, mind, and world (second edition)*. England. Pearson Education Limited. page. 65

unsurprisingly, that the less people can hear the less they will be able to produce and comprehend speech.

c. Speech Reading Is Not Easy

Speech reading is also known as lip reading, it is a technique of understanding speech by visually interpreting the movements of the lips, face and tongue when normal sound is not available.¹⁸ With speech reading, an adept person can interpret about half of what is said, which given the great amount of redundancy in ordinary speech is enough to guess most of the contents. The better the deaf person is in hearing, the better that person will be in both speaking and speech-reading.¹⁹

Many English sounds are particularly difficult to differentiate visually, such as **vowel**: /a/ last, /e/ lest, /i/ list, etc. **Consonant**: /k/ keep, /l/ lip, /s/ sip, etc. Lip and facial movement are minimal, thus making it especially difficult to visually observe and identify which articulator are being used.

➤ Total Communication

Total communication is using any means of communication- sign language, voice, finger spelling, lip reading, amplification, writing, gesture, visual imagery (pictures). We can conclude that total communication is a method that combines between oral approach and sign language. It is a worthy aim, to teach the hearing-impaired to produce and comprehend speech and sign so that they can communicate with the hearing community.

Because of the large number of failing cases as a result of the application of Oral Approach, many hearing-impaired persons were not only unable to communicate with the hearing community but were unable to communicate adequately with their hearing-impaired friends and colleagues. It was this tragic situation, one that continuous in many places today, that convinced many educators of the deaf that educational programs should include sign language in their curriculum which speech training. These programs, with generally go by the name of Total Communication.

¹⁸http://en.wikipedia.org/wiki/Lip_reading

¹⁹Op.Cit page. 66

Total Communication is an approach to Deaf education that aims to make use of a number of modes of communication such as signed, oral, auditory, and written and visual aids, depending on the particular needs and abilities of the child.

Total Communication was originally developed by David Denton at the Maryland School for the Deaf in 1967, although the term “total communication” was first used by Roy Holcomb in California and was adopted by the Maryland school as the official name for their educational philosophy. TC was supposed to find a middle ground in age-old disputes between oralism and manualism, and as an alternative to Simultaneous Communication. In practice, however, most Total Communication programs use some form of Simultaneous Communication.

Total communication is a communication philosophy - not a communication method and not at all a teaching method. Total communication is an approach to create a successful and equal communication between human beings with different language perception and or production. To use Total communication amounts to a willingness to use all available means in order to understand and be understood Hansen, B. *The Center for Total Communication, Copenhagen. Denmark. (1980)*. Total communication is a term coined by Roy Holcomb in 1967, is the title of a philosophy of communication, not a method (Scouten, 1984)

Communication model

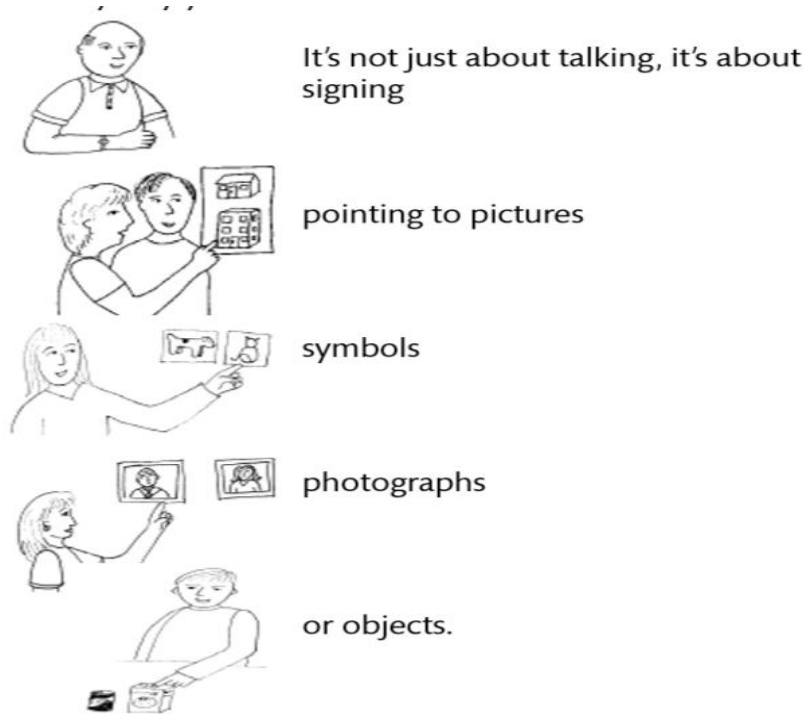
This is a two sided model, because communication is a two way process. With any message, one person expresses it, and someone else has to understand it. All people have to take both roles, at different times.

The words in the middle refer to different modes of communication. These are in a general order of complexity. However it's not a hierarchy, all forms of communication are equally valued.

Pre verbal or pre intentional communication and early gestures are the building blocks of conversation and add richness to adult communication. We get a lot of rich information from facial expression, body language and tone of voice. Pre verbal communication can be very important in working with people with

learning disabilities, either understanding tone of voice for example, or using it to express themselves. We need to be alert to picking up on non-verbal signals.

The tools of total communication are:



Advantages of Total Communication

Some parents and educators favour total communication as a catch-all that ensures that a deaf child has access to some means of communication (speaking as needed, or signing as needed). For example, a deaf child who cannot communicate well orally gets the additional support of sign language, and vice versa. Using total communication can also reduce the pressure on parents to choose one method over another.

A study compared 147 children in either oral or total communication programs who used cochlear implants. The study compared the children's expressive and receptive language, spoken or signed. The results demonstrated that the children improved no matter what program they were in -- oral or total communication.

The results also showed that the total communication students performed better on some measures. Both the oral and total communication students were able to understand when they were spoken to. However, in those children that received their cochlear implants before they were five years old, the total

communication students could understand better when spoken to than the oral communication students. In addition, the total communication students had better scores on expressive language when they were implanted earlier.

Disadvantages of Total Communication

The risks of using total communication in the classroom are that instructors may use them inconsistently. Plus, total communication may not meet the communication needs of all the deaf students in the classroom. This can have an impact on how well the educational information is received by the deaf student.

Another possible risk is that total communication may result in less developed speech skills. This was noted in a study done by researchers in an oral program. Their study compared students in total communication programs with students in oral-only programs. Their student found that the students in the oral programs developed more intelligible speech than the total.

E. The Sign Language vs. Oral Approach Controversy

It was in the 1880s that the oral approach advocates defeated sign language advocates. Subsequently, in the United States and the other countries, it was the Oral Approach with dominated with education in the schools. Such domination, which included a ban on sign language, lasted for nearly one hundred years. ASL was proscribed for communication even among deaf persons.

➤ One Formidable Advocate Of The Oral Approach

One of the foremost advocates of the oral approach was Alexander Graham Bell. It was the ill-fated (for Independent Sign Language) ‘Second International Congress on Education of the Deaf’ in Milan in 1880 and at the 1886 – “American Convention of Instructor of the Deaf” that Bell emphatically presented the view that only speech should be taught to the deaf regardless of their degree of hearing loss. Reading and written language were not included in the ban.

Bell himself had been a teacher of deaf children in London, and within a year of his arrival in North America in 1870 he was teaching, at the age of 23, deaf children in Boston. Bell was intimately involved with deaf people and their education all of his life. His mother was deaf, his hearing father was a well-known educator of the deaf who had invented a written phonetic alphabet, “visible

speech”, his wife was deaf, and the last, but not least, he was world famous as the inventor of the telephone, which he invented in Boston in 1875, just five years after landing in America. Bell and his faction were successful: sign language was banned from most school for the deaf and it was to take nearly a hundred years for such a restriction on the use of sign language to be overcome.

Bell impresses both sign language and oral approach advocates

When Bell came to New England, he was introduced to the directors and supporters of the newly-founded ‘Clarke Institution for Deaf Mute’ in Northampton, Massachusetts, a school which exclusively employed the oral method. This institution pitted itself against Gallaudet’s ‘American Asylum at Hartford for the Education and Instruction of the Deaf and Dumb’, which employed the sign method.

Soon after, Bell was invited to give a short course in oral teaching at the pro-sign Gallaudet American asylum in Hartford. *The Silent World*, a magazine for the deaf, reported that not only was Bell successful in getting the pupil to articulate sounds but that by the end of two-months Bell himself was communicating with his pupil by means of his newly acquired sign language.

The Reason Bell favored the oral approach

- He wanted the deaf to be able to speak so that they would be accepted as equals into society
- According to AGB opinion, the children who used sign language as the result is laziness. Not serious in applying it in their learning.²⁰

➤ **Bell versus Edward Gallaudet**

Bell’s anti-sign position was pitted against the leader of the pro-sign group in America. This person is the head of the Gallaudet American Asylum and well known as Edward M. Gallaudet. The background of Bell and Edward Gallaudet were similar: both had deaf mothers and hearing fathers. Who were devoted to deaf education, and both men themselves were devoted to that same cause.

Bell had another reason to attack sign language. He wanted deaf people to speak so that they would not have to marry among themselves those produce deaf offspring. In the deaf were able to speak they would have better chance of finding

²⁰ Ibid. page 69

hearing mates. In case, Bell himself courted and married a pretty woman, Mabel Hubbard.²¹

Although Mabel Hubbard became profoundly deaf due to contracting scarlet fever at 5 years of age, after her illness, her father obtained an oral teacher for her and her speech.

Interestingly, Edward Gallaudet later became sympathetic to the oral method to the degree that he advocated a ‘Combined Method’ the forerunner of the Total Communication approach where both sign and speech are taught. He no longer scoffed at speech reading as he had when he first met Bell. Since the oral method can be effective in certain categories of hearing loss, this was and still is in our opinion, a **very sensible approach** for Gallaudet to take.

Alexander Graham Bell vs. Edward Miner Gallaudet

Bell, 1916	Gallaudet, 1902
1. He is hearing man who has a deaf mother.	1. He is hearing man who has a deaf mother.
2. He is an inventor of the telephone. This made him worldwide famous as well as respected and rich.	2. He is the first president of Gallaudet College (now University).
3. He is an advocate of oral methods.	3. He is an advocate of sign language.
4. He believes deaf children should be able to speak so they can integrate into hearing world.	4. He support the oral method as a tool after the deaf child acquire the first language.
5. He is against sign language because it separates them from hearing people.	5. He is against the oral movement that want to get rid of sign language
6. With his enormous wealth, he was able to establish the Volta Bureau and the American Association to Promote	6. This made him the leader of the manual movement.

²¹ Ibid. page 70

the Teaching of Speech to the Deaf (AAPTSD).	
7. He supported day school instead of residential school for the deaf.	7. He help set up convention of American Instructor for the Deaf (CAID).

B. The Controversy

1. The reason Bell favored the oral approach:

- He wanted the deaf to be able to speak so that they would be accepted as equals into society.
- According to Alexander Graham Bell opinion, the children who used sign language as the result is laziness. Not serious in applying it in their learning.

2. Bell and Gallaudet Opinion

- Bell: belief that all deaf children should be taught auditorally without the use of sign language. Sign language was be forbidden.
- Gallaudet: belief that deaf children cannot learn to speak or read so sign language should be used as a communication and instruction.

3. The relationship between Bell and Gallaudet

Bell's relationship with Gallaudet deteriorated due to their differing viewpoints on deaf education. Bell did not like Gallaudet's idea, which was to teach deaf children sign language, send them to residential schools, and be taught by deaf teachers. He felt that this idea was isolating the deaf children from mainstream society. He wanted deaf children to learn how to be part of mainstream society.

4. The end

Interestingly, Edward Gallaudet later became sympathetic to the oral method, and appear the combined method, who believe that sign language be used to teach deaf children but speech is an integral part of communication instruction.

CONCLUSION

1. The Process of Learning ASL

In the process of learning ASL, there are two kinds of learners:

- a. Deaf children born to deaf parents
- b. Deaf children born to hearing parents

2. The Oral Approach And Total Communication

Oral approach is an approach that focuses on the teaching of deaf students through oral language by using lip reading, speech, and mimicking the mouth shapes and breathing patterns of speech.

3. There are some limits of oral approach:

- a. Oral Approach Successful With The Less Hearing-Impaired
- b. Oral Approach Fails with the severely hearing-impaired
- c. Speech Reading Is Not Easy

4. Total communication is using any means of communication- sign language, voice, finger spelling, lip reading, amplification, writing, gesture, visual imagery (pictures).

5. The Sign Language vs. Oral Approach Controversy

- a. Alexander Graham Bell was a foremost advocate in Oral Approach
- b. Edward M. Gallaudet was a foremost advocate in Sign Language
- c. Later: Edward M. Gallaudet became a sympathetic of the Oral Method.

Meeting 6

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore Wild and Isolated Children and the Critical Age Issues for Language Learning

Topics: Wild and Isolated Children and the Critical Age Issues for Language Learning

- Legends, Evil Kings, and Emperors
- A Critical Age for First Language Acquisition

Indicator of Achievement: Students can describe, explore, and discuss Wild and Isolated Children and the Critical Age Issues for Language Learning

CHAPTER V

Wild and Isolated Children and the Critical Age Issues for Language Learning

BACKGROUND

It seems that people have always wondered about whether language is instinctive, something that is as natural to humans as walking and smiling. They have also wondered whether, even without experiencing language, children would be able to produce it on their own. In the sixteenth century, we have the brilliant thinker Montaigne writing in his Essays,

I believe that a child brought up in complete solitude, far from all intercourse (which would be a difficult experiment to carry out) would have some kind of speech to express his ideas, for it is not likely that nature would deprive us of this recourse when she has given it to many other animals. (Emphasis ours)

Some have even thought that children who had not been exposed to speech would speak in original language of humankind. Montaigne believed this too, and he also believed that many animals have language. Then, people are still very much interested in these and in other hand related questions as well, such as whether there is an age beyond which person would be unable to learn a first or a second language.

DISCUSSION

A. Legends, Evil Kings and Emperor (The Forbidden Experiments)

There so many experiment that did to dig the truth behind the origin of language, but among them exist some experiment which can called *the forbidden experiment*, because those experiment exceed human right. In other side, those experiments also give us some important knowledge that can we use now.

First experiment done by Pharaoh Psamtik I, during the fifth century B.C , when Herodotus was in Egypt he heard a story about this experiment, pharaoh Psamtik I took a random two newly infants from an ordinary family and gave them to shepherd to be brought up amongst his flocks, under strict orders that no one should utter a word in their presence. They were to be kept in a lonely cottage, and the shepherd was to bring in goats from time to time to see the babies. These are Psamtik plan to find out what word the children would first utter, once they had grown out of their meaningless baby-talk. Two years later, he opened the door of cottage and heard the children pronounced the word 'becos'. After this experiment, Psamtik I concluded that Phrygians (an ancient language of people that lived in what is now turkey) were more ancient than the Egyptians because 'becos' was Phrygians language that had meaning 'bread'. But in fact, that word maybe came from the shepherd that accidentally used the word 'becos' when feeding them.

Second, the experiment carried out by holy roman emperor Frederick II. He made linguistic experiment to a hapless infant in early 1200 A.D, he isolated them with foster-mothers and nurses to suckle and bathe and wash the children, but without speak with them. The purpose of his experiment is to know what language will the children speak first, but his experiment failed because the children died, as they were not shown the proper loving attentions from their caregivers.

Third is when James decided he wanted to find out what the "original" language of human beings was, he came up with an interesting experiment. He took two babies, and a woman who was deaf and mute, and marooned them all on Inchkeith Island. His idea was that the woman would raise the children in silence until they were old enough to start talking, at which point people would find out what language they spoke. In doing this, he was probably consciously copying an experiment said to have been done by the Holy Roman Emperor Frederick II. The

result of his experiments as it was said that the babies that Frederick II had raised in silence all died. Some say that the children on Inchkeith died as well. Certainly, we have no trustworthy records of the outcome of the experiment. Sir Walter Scott believed that the kids probably imitated the sounds they heard, either coming from the woman or the local animals. Robert Lindsay of Pitscottie (who was born about forty years after the experiment happened) said that people told him that the kids spoke perfect Hebrew.

The fourth is the experiment from mughal emperro akbar in early 1500 A.D . like others experiment above he isolated some children. The children were taking from their parents when they were still unable to talk, and then broughtup for the first 12 years of their life in a fortified castle that no one was able to enter or leave, onpain of death. Their caregivers were deaf and mute so that they could not pass on any languageto the children that they were raising, and the contact with the children was kept to a minimum.This account comes from a translation of the Persian “Book of Akbar”, written by Abu Fazl. When these children appeared in front of the emperor, they were found incapable of expressing themselves in any language, or even of uttering any articulate sounds. They used only certain gestures to express theirthoughts.

From all those experiment can concloded that children can’t speak any language if they are receive nothing before. They just mimic their caregivers like in those experiments or from their environment like copy animal sound.

➤ **Children Raised by Animals**

Over the past few centuries there have been a number of reported cases of chikdren raised by wolves, pigs, sheep and other animals. Then, too, there are children who have apparently survived on their own for years in the wild, growing up even without the aid of animals. Linnaeus, the famous Swedish scientist who gave us our system of clasifying animals into genus and species, discovered nine reports of children found in tyhe wild or raised by animals: ‘a wolf – boy from Hesse (1344),a Lithuanian bear-boy (1661), said to have suckled at the teats of bears, an Irish sheep boy (1672), then Peter [a German boy who, despite instruction, did not learn language], and two girls, one from Cranenburg (1717) and one from Campagne (1731)’. These children are known as wild or feral children. There are even more recent stories about children being raised by animals, such as the account of two girls raised by wolves in India (Singh and Zingg, 1942).

➤ **Children Raised in Isolation from Language**

On a different level, there are cases of children who have been kept in confinement or isolation by their parents or other and consequently were not exposed to language. But there are also a great number of children who have been cared for by loving parents, but who, because of a physical disability such as deafness and blindness, have nonetheless been isolated from language. Studying such cases might provide us with insight into certain psycholinguistic question in much the same way as does the study of children who have grown up in the wild or in isolation.²²

B. Victor

Victor is estimated to have been born around 1788. It is not known when or how he came to live in the woods near Saint-Sernin-sur-Rance, though he was reportedly seen there around 1794. In 1797 he was spotted by three hunters. he ran from them but they were able to catch him when he tried to climb a tree. They brought him to a nearby town where he was cared for by a widow. However, he soon escaped and returned to the woods; he was periodically spotted in 1798 and 1799. On January 8, 1800, he emerged from the forests on his own. His age was unknown, but citizens of the village estimated his age to be that of around twelve. His lack of speech, as well as his food preferences and the numerous scars on his body, suggested to some that he had been in the wild for most of his life. He was clearly accustomed to exposure and cold.²³

1. Sicard

Sicard is the director of the institute for deaf-mutes in Paris, he tries to educate the wild boy with the method that developed when he educating the deaf. But the boy fails to learn any language and then they regarded him as being unteachable and gave up on him.

²² Danny D. Steinbeg, Hisroshi Nagata and David P. Aline, 2001, *Psycholinguistics: Language, Mind and World*, (London: Pearson Education Limited), pg. 126

²³ http://en.wikipedia.org/wiki/Victor_of_Aveyron

2. Jean Marc Gaspard Itard

Jean Marc Gaspard Itard, a young medical student, effectively adopted Victor into his home and published reports on his progress. Itard believed two things separated humans from animals: empathy and language. He wanted to civilize Victor with the objectives of teaching him to speak and to communicate human emotion. Itard is the man who gives name to the wild boy “victor “. His education began with intense work that involves a variety of games and activities. Victor’s speech training first resulted in his being able to repeat the sound “ lait “ (milk) and “ oh dieu !! ” (oh god !) .Victor showed significant early progress in understanding language and reading simple words, but failed to progress beyond a rudimentary level. Itard wrote, "Under these circumstances his ear was not an organ for the appreciation of sounds, their articulations and their combinations; it was nothing but a simple means of self-preservation which warned of the approach of a dangerous animal or the fall of wild fruit."

Itard then give up and he arranged for victor to live in a house with madam Guerin, his assistant. Victor lived there for 18 years, continuing to be mute until his death in 1828 at the age about 38.

C. Genie

Genie is discovered at 13 Years of Age, Brutally Treated

There are cases of children being isolated from even the outside environment and mistreated to an extent that is difficult to talk about dispassionately. One such well-documented case is that of a girl whom researchers called Genie.

Genie (born 1957) is the pseudonym of a feral child who was the victim of extraordinarily severe abuse, neglect and social isolation. Her circumstances are recorded prominently in the annals of abnormal child psychology. Born in Arcadia, California, United States, Genie's father kept her locked alone in a room from the age of 20 months to 13 years, 7 months, almost always strapped to a child's toilet or bound in a crib with her arms and legs completely immobilized. During this time she was never exposed to any significant amount of speech, and

as a result she did not acquire a first language during childhood. Her abuse came to the attention of Los Angeles child welfare authorities on November 4, 1970.²⁴

She heard no human voice, according to her mother, because her father could not tolerate noise, and her only contact with another human was when being fed and beaten. Other than a couple of plastic raincoats, empty thread spools, an occasional magazine and some empty containers that she was given to play with, she had nothing to look at (the small windows in her room were covered by curtains), nothing to touch, nothing to do. Genie's mother eventually escaped, taking the child with her. It was in this that the case was discovered by the authorities. The father committed suicide on the day he was to be put on trial for mistreating the child. The mother also was charged but the charges against her were dropped.

At the time of her discovery, Genie was in pitiful physical condition. She had been beaten into virtual silence and appeared to have no language. Based on the information later provided by her mother, the girl had already begun to acquire language just prior to her confinement, which was when she was 20 month of age, which is about the same age that Helen Keller lost her hearing and vision. If she were normal, she would have learned to comprehend basic elements of speech.²⁵

Genie's Language Progress

Despite scoring at the level of a one-year-old upon her initial assessment, Genie quickly began adding new words to her vocabulary. She started by learning single words and eventually began putting two words together much the way young children do. Curtiss began to feel that Genie would be fully capable of acquiring language.

After a year of treatment, she even started putting three words together occasionally. In children going through normal language development, this stage is followed by what is known as a language explosion. Children rapidly acquire new words and begin putting them together in novel ways. Unfortunately, this never happened for Genie. Her language abilities remained stuck at this stage and she appeared unable to apply grammatical rules and use language in a meaningful

²⁴ [http://en.wikipedia.org/wiki/Genie_\(feral_child\)](http://en.wikipedia.org/wiki/Genie_(feral_child))

²⁵ Danny D. Steinberg, Hisroshi Nagata and David P. Aline, *Psycholinguistics: Language, Mind and World*, pg. 131-132

way. At this point, her progress leveled off and her acquisition of new language halted.

While Genie was able to learn some language after puberty, her inability to use grammar (which Chomsky suggests is what separates human language from animal communication) offers evidence for the critical period hypothesis.

Of course, Genie's case is not so simple. Not only did she miss the critical period for learning language, she was also horrifically abused. She was malnourished and deprived of cognitive stimulation for most of her childhood. Researchers were also never able to fully determine if Genie suffered from pre-existing cognitive deficits. As an infant, a pediatrician had identified her as having some type of mental delay. So researchers were left to wonder whether Genie had suffered from cognitive deficits caused by her years of abuse or if she had been born with some degree of mental retardation.²⁶

D. Isabelle

Isabelle's Background

Marie Mason (1942) reported a case that concerned a child, Isabelle (a pseudonym), who because of her confinement with a mute mother, did not begin to learn language until she gained her freedom at six and a half years of age.

The mother of Isabelle had sustained a brain injury at the age of 2, and as a result never developed speech. According to Mason, 'She was wholly uneducated. She could neither talk, nor read, nor write, but communicated with her family with her family by means of crude gestures of her own origination'. When she was 22, the woman had a child, Isabelle. 'During the period of her pregnancy, and for six and a half years after the child's birth, the mother and child had apparently been locked in a room behind drawn shades'. The mother finally escaped, taking Isabelle

Isabelle's Progress

When Isabelle was discovered, her behavior toward other people, especially men, was "almost that of a wild animal." At first it was thought that she was deaf, for she did not appear to hear the sounds around her, and her speech

²⁶ <http://psychology.about.com/od/historyofpsychology/a/genie.htm>

was a strange croaking sound. The specialists who worked with her pronounced Isabelle feeble-minded and did not expect that she could ever be taught to speak.

After overcoming an initial shyness, the child displayed curiosity about her environment, pointing and gesturing to object which interested her. It was determined that although Isabelle had no speech production ability, nonetheless, 'through gesture, she distinctly indicated a comprehension of their meaning.

Although the child displayed normal hearing, initial psychological tests were discouraging about the prognosis for her linguistic development. 'Gesture was her only mode of expression'. The report of the first psychological test revealed the performance of a 3 year old child with competence failure on any test involving linguistic skill.

Isabelle's first attempt at vocalization came just one week after Mason's first visit with her. The child's first spoken sounds were approximations of 'ball' and 'car' in response to being shown a ball and a toy car and being prompted by Mason through gesture to try and say the words.

Subsequently, Isabelle's acquisition of speech seemed to pass through successive developmental changes. While it is true that her earliest vocal utterances, at the age of 6 and a half, were like those of a child of a year and a half or two years, it is also true that she passed through each successive stage more rapidly than the normal child whose speech maturation typically begins at 2 and extends over a longer period of time.

In less than three months after her entrance to the hospital, Isabelle was producing sentence utterances. After just one year, 'Isabelle listens attentively while a story is read to her. She retells the story in her own limited vocabulary, bringing out the main points'. After a year and a half, the report of a student teacher working with Isabelle noted that the child's questions now included complex structures such as, "Why does the paste come out if one upset the jar?" and 'What did Miss Mason say when you told her I cleaned my classroom?'. Thus, after only 20 months, Isabelle has progressed from her first spoken word to full length sentences and intelligent questioning'.

E. Chelsea

Misdiagnosis as Retarded, Not Deaf

Another case in an entirely different context is that of a girl, Chelsea, who only began to learn language at the age of 32. When she was born, Chelsea's family thought that she was deaf. Initially misdiagnosed as retarded, and because she lived in a rural area in the north of California, she did not receive any language training or instruction of any kind. Unlike Victor and Genie, Chelsea grew up in a loving family environment.

When at the age of 32, her hearing was properly tested, it was discovered that she was not totally deaf but only partially hearing impaired. Hearing aids were fitted to correct for the impairment and with them she was able to hear speech relatively normally.

Language Development

Through language instruction, Chelsea has developed an extensive vocabulary. Unlike Genie, though, her syntactic profile appears to lack any word order. Though Chelsea has developed rapidly in vocabulary and the use of language in a wide range of speech acts (complaints, requests) and social rituals (greetings), she is unable to form grammatically correct utterances and to remain on topic. The inability to contribute to the progression of topic may be due to difficulties she still experiences with comprehension. And yet, when one considers the age at which she began to learn language, her achievements indicate a significant amount of language learning.²⁷

F. Helen Keller

Helen Adams Keller was born on June 27, 1880, in Tuscumbia, Alabama. Her family lived on a homestead, Ivy Green, that Helen's grandfather had built decades earlier.

Helen Keller was born with the ability to see and hear. At 19 months old, she contracted an illness described by doctors as "an acute congestion of the stomach and the brain", which might have been scarlet fever or meningitis. The illness left her both deaf and blind. At that time, she was able to communicate somewhat with Martha Washington, the six-year-old daughter of the family cook,

²⁷ Danny D. Steinberg, Hisroshi Nagata and David P. Aline, *Psycholinguistics: Language, Mind and World*, pg. 135-138

who understood her signs; by the age of seven, Keller had more than 60 home signs to communicate with her family.²⁸

When she was 7, Anne Sullivan Macy came to teach her language. Macy, herself partly blind and only 21 years old was engaged by Keller's parents on the recommendation of Alexander Graham Bell. Helen's case was more complex, though, since she was blind as well.

Helen Learns Language:

In spite of Keller's seemingly overwhelming sensory handicaps, Sullivan Macy's efforts to teach Helen language through the sense of touch were successful. Sullivan Macy was trained at the Perkins' Institute for the Blind in Boston and it was there that she learned communication techniques in teaching blind-deaf persons. Thus, Helen learned language through touch and later even learned to speak. This was accomplished by her directly touching the speech articulators around the face (mouth, lips, vocal cords, throat, etc) of Sullivan Macy and others.²⁹

A magical transformation began as soon as Helen's quick, young mind made the connection between objects and the strange movements of her teacher's fingers traced out in the child's palm. Helen began a lifelong, insatiable quest for knowledge. She demanded to know the names of every object around her. She soon mastered Braille, and began to read, expanding her horizons even further. She learned to write and began developing a talent that would serve her all her life.³⁰

Keller's (1903/1972) autobiography, *The Story of My Life*, is fascinating to read. That dramatic moment when she learned her first word is movingly described:

One day, while I was playing with my new doll, Miss Sullivan put my big rag doll into my lap, also spelled d-o-l-l and tried to make me understand that d-o-l-l applied to both earlier in the day we had had a tussle over the words m-u-g and w-a-t-e-r. Miss Sullivan had tried to impress it upon me that m-u-g is mug and w-a-t-e-r is water, but persisted in confounding the two. In despair she had dropped the subject for the time, only to renew it at the first opportunity. I became impatient

²⁸ http://en.wikipedia.org/wiki/Helen_Keller

²⁹ Danny D. Steinberg, Hisroshi Nagata and David P. Aline, *Psycholinguistics: Language, Mind and World*, pg. 138

³⁰ <http://www.aidb.org/reference-desk/helen-keller>

at her repeated attempts, and, seizing the new doll, I dashed it upon the floor. I was keenly delighted when I felt the fragments of the broken doll at my feet. Neither sorrow nor regret followed my passionate outburst. I had not loved the doll. In the still dark world in which I lived there was no strong sentiment of tenderness.

I felt my teacher sweep the fragments to one side of the hearth, and I had a sense of satisfaction that the cause of my discomfort was removed. She brought me my hat, and I knew I was going out into the warm sunshine. This thought, if a wordless sensation may be called a thought., made me hop and skip with pleasure. We walked down the path to the well-house attracted by the fragrance of the honeysuckle with which it was covered. Someone was drawing water and my teacher placed my hand under the spout. As the cool water stream gushed over one hand she spelled into the other the word w-a-t-e-r, first slowly, then rapidly. I stood still, my whole attention fixed upon the motions of her fingers. Suddenly I felt a misty consciousness as of something forgotten, a thrill of returning thought, and somehow the mystery of language was revealed to me. I knew that w-a-t-e-r meant the wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free! (1972, pp. 11-12).³¹

Even though Helen was unable to hear, she nevertheless was able to develop speech even though she could not receive any auditory feedback. By the age of ten, Helen Keller was proficient in reading Braille and in manual sign language and she now wished to learn how to speak. Anne took Helen to the Horace Mann School for the Deaf in Boston. The principal, Sarah Fuller, gave Helen eleven lessons. Then Anne took over and Helen learned how to speak. But she was never truly satisfied with her speech, which was often hard to understand. She struggled to vocalize her words throughout much of her life.³²

When she was 20, she entered Radcliffe College, with Miss Sullivan at her side to spell textbooks – letter by letter – into her hand. Four years later, Radcliffe awarded Helen Keller a Bachelor's degree magna cum laude. After graduation, Helen Keller began her life's work of helping blind and deaf-blind people. During her lifetime, she was consistently ranked near the top of "most admired" lists. She died in 1968, leaving a legacy that Helen Keller International is proud to carry on in her name and memory.³³

G. A Critical Age for First-Language Acquisition

³¹ Danny D. Steinberg, Hisroshi Nagata and David P. Aline, *Psycholinguistics: Language, Mind and World*, pg.. 139

³² <http://www.afb.org/asm/asmgallery.asp?FrameID=101>

³³ <http://www.hki.org/about-helen-keller/helen-kellers-life/>

The Critical Period Hypothesis states that the first few years of life constitute the time during which language develops readily and after which (sometime between age 5 and puberty) language acquisition is much more difficult and ultimately less successful. The critical period hypothesis was proposed by linguist Eric Lenneberg in 1967.

Penfield and Roberts (1959) and Lenneberg (1967) were the first to propose a critical period for first language acquisition. This hypothesis was based on evidence from (1) feral children and victims of child abuse who were reared without exposure to human language and thus were unable to fully acquire the ability to produce it; (2) deaf children who were unable to develop spoken language after puberty; (3) evidence that children with aphasia have a better chance at recovery than aphasiac adults. The critical hypothesis, Lenneberg (1967) states that the early-to-mid childhood (age 5 to puberty) constitutes the time during which language develops readily and after which language acquisition is much more difficult and ultimately less successful.³⁴

One thing is certain, and that is without exposure to language, children will not acquire any language. Children need some form exposure, be it in the form of speech, signs, writing, or touch, before language learning can occur and that exposure should be offered as early as possible in the child's life.

In reviewing the details of the cases of Victor, Genie, Isabelle, Chelsea, and Helen, it can be identified that there are two major factors which could have operated to influence their varying success in language acquisition. These relate to exposure to language and the extent of non-linguistics trauma:

(1) The age at which exposure to language began

(2) The extent of any physical, psychological, and social trauma.³⁵

The most famous cases of children who did not acquire language normally are Genie and Victor of Aveyron. However, it is also possible that these children were retarded from infancy and abandoned because of this, or that

³⁴ http://en.wikipedia.org/wiki/Critical_period

³⁵ Danny D. Steinberg, Hisroshi Nagata and David P. Aline, *Psycholinguistics: Language, Mind and World*, pg.. 140

inability to develop language came from the bizarre and inhuman treatment they suffered.³⁶

First Language (also *native language*, *mother tongue*, *arterial language*, or *L1*) is the language(s) a person has learned from birth or within the critical period, or that a person speaks the best and so is often the basis for sociolinguistic identity.

Language acquisition is the process whereby children acquire their first languages. All humans (without exceptional physical or mental disabilities) have an innate capability to acquire language. Children may acquire one or more first languages. First language refers to the first language which is heard by infant. In this case, children try to express their mother tongue into ungrammatical rules because they still hear from people say and imitate them. For example, people who born in Java. First language, Javanese, which they heard is first language and Indonesian as second language.

The Critical Period Hypothesis states that the first few years of life constitute the time during which language develops readily and after which (sometime between age 5 and puberty) language acquisition is much more difficult and ultimately less successful. The critical period hypothesis was proposed by linguist Eric Lenneberg in 1967.

In the case of Victor, Genie, Chelsea, Isabelle and Helen, they receive their first language at age Helen's age was 7 years and Isabelle's age 6.5 years. And then Victor's age was 11 or 12 years, Genie's age was 13 years and Chelsea's age was about 11-13 years. Helen is more easily taught languages. While, another ones Victor, Genie, and Chelsea is more difficult to speak, not only due to their age but also their experience. It can be concluded, that the critical age of first language acquisition, maximum age at the time the child has reached the age of 7 years, like Helen and Isabelle.

In reviewing the details of the cases of Victor, Genie, Isabelle, Chelsea, and Helen, it can be identified that there are two major factors which could have operated to influence their varying success in language acquisition. These relate to exposure to language and the extent of non-linguistics trauma:

³⁶ http://en.wikipedia.org/wiki/Critical_period

- (1) The age at which exposure to language began
- (2) The extent of any physical, psychological, and social trauma

The most famous cases of children who did not acquire language normally are Genie and Victor of Aveyron. However, it is also possible that these children were retarded from infancy and abandoned because of this, or that inability to develop language came from the bizarre and inhuman treatment they suffered.

In any case, to rely only on the cases of Victor, Genie and Chelsea to make a case for critical age is surely not warranted. There are too many unknown factors and the data, particularly for Genie and Chelsea, are not clear. Certainly, the critical age, if there is one, could not be much younger than 6 or 7 years since that would exclude Isabelle and Helen, who in fact did learn language after that age. Clearly, the ideal experimental situation for studying the problem of a critical age for first language learning has not yet presented itself. Let us hope for humanity's sake that it never does.

CONCLUSION

Most significant for the Critical Age hypothesis is the fact that Isabelle and Helen started to learn language at an early age following a relatively short period of deprivation: language exposure and teaching began for Isabelle at 6 years old and for Helen at 7 years. On the other hand, Victor and Genie, who were almost twice as old as these girls, did not learn as much language as Helen and Isabelle did, nor did Chelsea. This could be, as some theorists, such as Lenneberg (1967), have suggested, due to the biological maturation of the brain.

In any case, to rely only on the cases of Victor, Genie, and Chelsea to make a case for critical age is surely not warranted. There are too many unknown factors and the data, particularly for Genie and Chelsea, are not clear. Certainly, the Critical Age, if there is one, could not be much younger than 6 or 7 years since that would exclude Isabelle and Helen, who in fact did learn after that age. Clearly, the ideal experimental situation for studying the problem of a Critical Age for first-language learning has not yet presented itself. Let us hope for humanity's sake that it never does.³⁷

³⁷Danny D. Steinberg, Hisroshi Nagata and David P. Aline, *Psycholinguistics: Language, Mind and World*, pg.143

Meeting 7

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore Children and Adults in Second –Language Learning (Part I)

Topics: Part 2: Second Language Learning

Children and Adults in Second –Language Learning

- Children are better: a common belief
- Basic psychological factors affecting Second - Language Learning
- Social Situation Affecting Second - Language Learning

Conclusion: Who is better? Adult or children

Indicator of Achievement: Students can describe, explore, and discuss Children and Adults in Second –Language Learning (Part I)

CHAPTER VI

Second Language Learning

BACKGROUND

Language is the method of expressing ideas and emotions in the form of signs and symbols. These signs and symbols are used to encode and decode the information. There are many languages spoken in the world. The first language learned by a baby is his or her mother tongue. It is the language, which he or she listens to from his or her birth. Any other language learned or acquired is known as the second language.

A person's **second language** is a language that is not the mother tongue of, but that is used in the area of, that person. In contrast, a foreign language is a language that is learned in an area where that language is not generally spoken. Some languages, often called auxiliary languages, are used primarily as second languages or lingua franca.

More informally, a second language or **L2** can be said to be any language learned in addition to one's mother tongues, especially in context of second language acquisition (that is, learning a new foreign language).³⁸

The definition of second language acquisition and learning is learning and acquisition of a second language once the mother tongue or first language

³⁸ http://en.wikipedia.org/wiki/Second_language

acquisition is established. Second language acquisition or SLA is the process of learning other languages in addition to the native language. For instance, a child who speaks Hindi as the mother tongue starts learning English when he starts going to school. English is learned by the process of second language acquisition.

In fact, a young child can learn a second language faster than an adult can learn the same language.³⁹ So, in this chapter we will discuss about : Children are better: a common belief, Basic psychological factors affecting Second - Language Learning, Social Situation Affecting Second - Language Learning, Conclusion: Who is better? Adult or children.

DISCUSSION

A. Children are better : a common belief

Most people believe that children are better than adults when attempting to learn a second language. That seems to be backed up by the common observation that young second-language learners seems to pick up another language quickly, just by exposure and without teaching. Whether this belief is justified is the focus of this chapter. As we shall see, all of our psycholinguistics knowledge (and then some) will be needed in order to provide a reasonable answer to this question. The overall theory is one that was first formulated by Steinberg (1982) and Steinberg (1993).

Factors involved in second language acquisition can be divided into three categories: 1). Psychological, 2). Social situation, and 3). other psychological variables.

1). Psychological.

In this section, we shall consider: *intellectual processing*, which is involved in an individual's analytical determination of grammatical structures and rules; *memory*, which is essential if language learning is to occur and remain; and *motor skills*, which concern the pronunciation of the sounds involved in the second language, i.e. the use of the articulators of speech (tongue, lips, mouth, vocal cords, etc.).

³⁹ <http://www.brighthubeducation.com/language-learning-tips/70729-defining-second-language-acquisition/>

2). Social situation.

The types of situations, setting, and interactions which an individual experiences can affect the learning of a second language. Thus, we will be concerned with where and with whom exposure to the second language occurs. In particular, the *natural* situation (family, play, and workplace) in contrast to the *classroom* situation will be focused on.

3). other psychological variables.

Here we shall see the effect of other individual factors such as what the person's first language is, and how motivation, attitude, and other individual factors may affect learning.⁴⁰

B. Basic Psychological Factors Affecting Second-Language Learning

A. Intellectual Processing

Essentially, there are two ways to learn the syntax of a second language, someone can explain to you, "explication" or you can figure them out by yourself, "induction".

1. Explication

Explication is the process whereby the rules and structure of a second language are explained to a learner. This explanation is given in the first language of the learner. The learner is then expected to understand, learn and apply the rule in the second language. The explanation is usually for given in the target (second) language because the learner may not know enough of that language. Only with learners who are very well advanced could an explanation be attempted in the target language. While parts of a second language can be learned by explication, it is impossible for it to be learned entirely by explication. This is because not all of the rules of any one language have been discovered and written down.

Explaining is rarely done by parents or others when the children acquire a native language, yet children by the age of 4 or 5 can understand and speak most of their native language quite well. They have learned language be self-analysis. Parents do not even attempt to explain a relatively simple morpheme rule, like that of the plural. You do not hear a parent saying (Now, Mary, to make the plural of

⁴⁰ Steinberg, Danny D, et al. 2001. *Psycholinguistics: Language, mind, and world (second edition)*. England.

“dog” you add a “z” sound to the end of the word, while with “duck” you add an “s” sound. You do this, Mary because the last sound of “dog” has a voiced consonant and the last sound of “duck” has an unvoiced one). Even if parent were able to formulate the explanation, which most cannot, they know that their children would not be able to understand it.

2. Induction

Learning rules by self-discovery is the essence of the process of induction. The child who exposed to second-language speech and remembers what he or she has heard will be able to analyze and discover the generalization or rule that underlies that speech. Actually, not only must the learner devise the rule based on the speech that has been heard, but he or she must also figure out how those rules are to be applied in other cases. For example, given the sentences (“John danced then John sang” and John danced and then he sang” spoken in relevant situations, the learner can determine that the two sentences are related, with he being a replacement for ‘John’. The learner must also figure out that while ‘he’ can replace ‘John’ in the second of the conjoined sentences, it cannot do so in the first sentence (as in He danced then John sang) since in that case pronoun ‘he’ must refer to someone other than John. With such a rule, the learner is on the way to being able to use and understand increasingly complicated structures involving pro nominalization. Such phenomena as pro nominalization, negation, and the plural are learned by induction and become part of young native language knowledge quite early, long before the child enters school.

B. Memory

Memory is crucial to learning. It is conceivable that a person with severe memory impairment could ever learn his or her native language, much less a second language. The learning of the simplest word requires memory. Memory is similarly crucial for the learning of grammatical structures and rules. It is only through memory that a child can accumulate the vast amount of speech and relevant situational data which serve as a basis for analyzing structures and formulating rules, processes which constitutes induction.

The kind of simple memorization where words, phrases and sentences are remembered just as they are is called ‘rote’ memorization by psycholinguist.

While children at age 5 or 6 still display a phenomenal ability at rote memorization, it seems that older children do not, with some decline beginning around 8 years of age and with more of a decline from about 12 years of age. It seems that children's age can be divided into two categories under 7 years and 7 to 12 years. By 50, for example there appears to be decrease of about 20 per cent in the number of the brain cells in the cortex; by 75 years of age that loss will have reached approximately 40 per cent. In the normally aging brain, long term memories seem relatively unaffected; with one's knowledge of the world, built up over decades, remaining intact. On the other hand the ability to deal successfully with material such as list of new names and words is affected.

C. Motor Skills

Good pronunciation, which is related to the ability to control the organs of speech, is clearly essential part of learning a foreign language. Jaws, lips, tongue; vocal chords are controlled by muscles, all of which are under the general control the brain. The particular motor skill of speech pronunciation is best developed at a younger age. Somewhere around the age of 10 and 12 years the ability to acquire new motor skills begins to decline. Children learning a second language typically learn to speak it with a pronunciation that is indistinguishable from that of native speaker. Children under the age of 7 years are rated 'high' on all psychological factors except 'explicative' processing, while, adults are rated 'high' on 'inductive' and 'explicative' processing but 'low' on 'memory' and 'motor skills'.⁴¹

"Psychological factors and social factors affecting second-language learning for children and adults"

Psychological factors					Social factors	
Intellectual					Situation	
	Inductive	Explicative	Memory	Motor Skills	Natural	Classroom
Children under 7	High	Low	High	High	High	Low
Children 7-12	High	Medium	Med/High	Med/High	Medium	Medium
Adults	High	High	Medium	Low	Low	High

⁴¹ Ibid, hal. 170 - 175

over 12						
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C. Social Situations Affecting Second-Language Learning

The types of situations, setting, and interactions which an individual experiences can affect the learning of a second language. Thus, we will be concerned with where and with whom exposure to the second language occurs. In particular, the *natural* situation (family, play, and workplace) in contrast to the *classroom* situation will be focused on.

There are many social situations in which a second language is learned. Basically, we can cover the most important of them according to two categories, the natural and the classroom.

1. The Natural Situation

a. Characteristics of the natural situation

A natural situation for second-language learning is one where the second language is experienced in a situation that is similar to that in which the native language is learned. That is, language is experienced in conjunction with the objects, situations, and events of everyday life. For example, an English-speaking 5-year-old girl from New York goes to Tokyo with her parents, through playing with Japanese children, she soon learns Japanese. In fact, she learns the language in less than a year, which is not uncommon for children this age, and her speech is indistinguishable from that of native speakers. She is soon translating for her parents when they go shopping or speaking for them on the telephone.

But what is truly amazing here is that the child has learned her second language faster than she learned her first language! Could an adult do the same if given the same opportunity and exposure to the language, even if there was a comparable natural situation - let us say, where a 17-year-old American girl finds a Japanese boyfriend and some girlfriends and 'plays' with them? We doubt it because of the declining memory and motor skills factors. However, given more time, a young adult in such a situation would be able to acquire the language, although probably without true native-speaker pronunciation.

b. Decline of beneficial social interaction with age

Generally speaking, as one gets older there is a decline in the kind of social interaction which promotes language learning. Adult second-language learners will typically have significantly fewer good language-learning opportunities in a new language community than will children. Of course, if the adults stay at home, they will not be able to meet and talk much to native speakers. If they work, then, because of their lack of second-language ability, they will not be hired to do work that requires native speakers to linguistically interact with them. Whether their work allows them to use their native language (as business people, language teachers, etc.), or whether their work involves a minimal amount of second language (construction work, dishwashing), in either case learners will have but a limited opportunity to experience appropriate second-language data in the natural situation. Except for situations involving love or money, it is almost impossible to imagine a situation in which adults would be continually exposed to the same good quality and quantity of language that a child receives.

c. With age, language is more essential for social interaction

For adults, social interaction mainly occurs through the medium of language. Few native-speaker adults are willing to devote time to interacting with someone who does not speak the language. The adult foreigner, therefore, will have little opportunity to engage in meaningful language exchange except for picking up bits of language that are experienced in the workplace or in shopping. In contrast, the young child is often readily accepted by other children, and even adults. For young children, language is not essential to social interaction. So-called ‘parallel play’, for example, is common among children. They can be content just to sit in each other’s company and just speak occasionally. Adults rarely find themselves in similar situations.

d. Older children can have problems

The older the child, however, the greater the role that language plays in social interaction and the more the person will experience difficulty in being accepted. Peer group acceptance becomes a problem, especially around the age of puberty. Even children who speak the same language but come from a different school or town have difficulty in gaining acceptance. Without such acceptance, second-language learning in a natural situation can hardly begin.

e. Cultural adaptation can affect language learning

Because language is essential for social interaction and because people generally crave such interaction, foreign adults often tend to stick together in a new environment. Friendships for the adult are easier to form in the old language and even business can often be conducted at least partially in the old language. Then, too, many large cities with sizable foreign populations have radio, television and newspapers in the foreign languages. All of these things tend to reduce the amount of second-language exposure for adults in a way that does not occur for children.

In his Acculturation Model of language learning, Schumann (1978) argues that the degree to which a person adapts to a new culture will determine his or her level of attainment in the foreign language. As one becomes more acculturated to the new community, one will have greater contact with the speakers of that community, thus increasing the opportunities for acquisition. Additionally, not only the quantity of interaction but also its quality is affected (Schumann, 1986). With their greater facility for acculturation, children are more likely than adults to interact with the speakers of their new community, with the result that children will receive more opportunities to hear and use the language.

f. Foreigner talk: simplified speech

The nature of the language input that adults and children receive may affect their acquisition of a second language. Adults and older children simplify the speech they use with children learning their first language. Such simplified speech may well aid the child. In a second language situation, adults may hear speech directed to them which is similarly simplified. (This is usually done after loud talk fails. The speaker seems to think that the addressee is defective in hearing.) This simplified speech, or 'foreigner talk', shares many of the characteristics of Parentese in that it consists of well-formed utterances with fewer subordinate clauses and more ordinary vocabulary. Undoubtedly such simplification aids the learner. Although foreigner talk is used by native speakers with both children and adults, children tend to receive more simplification. In a study involving foreigner talk addressed to children between the ages of 8 and 10 as compared with talk addressed to adults, Scarcella and Biga (1981) found that more simplification

occur red with the children than the adults . Perhaps this is because it is not as easy to talk to an adult as one would with a child. Such simplified talk may be considered disrespectful and therefore not used. In any case this greater simplification may give children a further advantage in the natural language learning context.

2. The Classroom Situation

a. The classroom isolated from other social life

The classroom for second-language learning is a planned. As we all know, physically, there is a room which is arranged so that it is isolated from the rest of life. In the room there is a teacher and a number of students. The teacher is the one who knows the language and the students are there to learn the language. In the enclosed space of the classroom, nothing happens unless the teacher makes it happen. Students do not act on their own but follow the directions of the teacher. All other aspects of life are suspended or subordinated to language learning. This, of course, is very different from the home or street where the learner eats at a table, walks around doing things, bathes, plays outdoor games, etc., all while hearing and using language in conjunction with these activities.

b. Everything is planned, little is spontaneous

In the natural situation, language is but one aspect of life, an aspect which accompanies other life events. In the classroom, however, language itself becomes the prime aspect of life around which all else revolves. The language that is to be experienced by the students is planned. While there are degrees of planning with more or less emphasis on speech, literacy, spontaneity, etc., nonetheless, the course of events is planned and the teacher is the planner. In a physically isolated room, where only one person, the teacher, is the prime source of the new language, planning is unavoidable. This is true even for methods which attempt to simulate the natural situation by attempting to reproduce in the classroom some of the natural language experiences which occur outside the classroom. Exposure to good native speech, role playing and games are some of the devices employed to allow for the natural self-discovery of language and its use. Still, it is the teacher who plans and controls such activities.

c. Learning language as part of a group and not as an individual

There are other characteristics of the planned classroom situation which distinguish it from the natural situation. These include social adjustment to group process (individuals must subordinate their behaviour and follow classroom procedures for the benefit of all), the need to attend class in order to learn, the need for long periods of concentration, and, when required, having to do home study. As far as language is concerned, the explicit teaching of grammatical structures and rules may be involved, depending on the method used. Using books and taking notes are often expected of the student. Students have to get used to learning language as an academic subject. Thus, when considering overall the demands of the classroom situation, it is clear that the older one is, the better one is able to adjust and function within that situation. Young children often will not do as well as older children and adults.

It is possible, however, for the drawbacks of the classroom situation for children to be overcome to a great extent. The classroom should be made to look cheerful and welcoming and the second language can be learned through play. So long as the focus is on fun and games and not on language, the classroom can become a place where significant second-language learning occurs. By presenting second-language data in this way, the child learns by induction. (See Chapter 7 for methods which rely on induction for second language learning.)

D. Who is Better? Children or Adults?

Although there is some complexity in determining whether children or adults are better in second-language learning, we can give an answer. The common belief that children are better than adults has been substantiated, although with some qualification regarding the classroom situation. Put another way, adults do not do best in any situation.

Most people believe that children are better than adults when attempting to learn a second language. That seems to be backed up by the common observation that young second-language learners seem to pick up another language quickly, just by exposure and without teaching.

Factors involved in second language acquisition can be divided into three categories: 1). Psychological, 2). Social situation, and 3). other psychological variables.

1). Psychological.

In this section, we shall consider: *intellectual processing* (Explication is the process whereby the rules and structure of a second language are explained to a learner. *and* Induction: Learning rules by self-discovery is the essence of the process of induction), which is involved in an individual's analytical determination of grammatical structures and rules; *memory*, which is essential if language learning is to occur and remain; and *motor skills*, which concern the pronunciation of the sounds involved in the second language, i.e. the use of the articulators of speech (tongue, lips, mouth, vocal cords, etc.).

2). Social situation.

The types of situations, setting, and interactions which an individual experiences can affect the learning of a second language. Thus, we will be concerned with where and with whom exposure to the second language occurs. In particular, the *natural* situation (family, play, and workplace) in contrast to the *classroom* situation will be focused on.

In the natural situation of language learning, we have determined that young children will do better than adults, and so will older children. It is not even uncommon for young children to learn a second language in a year or less. Thus, children do better than adults.

In the classroom situation, older children will do better than adults. However, young adults will do better than young children to the extent that the young children's classroom is not a simulation of the natural situation, in the simulation case, young children will do better.

3). other psychological variables.

Here we shall see the effect of other individual factors such as what the person's first language is, and how motivation, attitude, and other individual factors may affect learning.

“Psychological factors and social factors affecting second-language learning for children and adults”

Even though other potent learning variables may affect the outcome in second- language learning by any individual, so long as any particular variable is

held constant for the different age groups, we believe that the conclusions cited above will be upheld.

CONCLUSION

Children under the age of 7 years are rated 'high' on all psychological factors except 'explicative' processing, while, adults are rated 'high' on 'inductive' and 'explicative' processing but 'low' on 'memory' and 'motor skills'.⁴²The benefits of the natural situation decline with age, where young children are assigned a High value but adults are assigned a Low value, so young children will do better than adult, with older children doing better than adult. Generally, the ability to learn in a classroom setting improves with age because older children and adults can adapt better to the classroom regimen and are more receptive to materials taught through explication, thus, a High is assigned to adults though, is assigned to young children. To the extent that the children's second language experience in the classroom can benefit for learning through play, this value can be raised even to High, in the proper setting with the right teacher.

⁴² Ibid, hal. 170 - 175

Meeting 8

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore Children and Adults in Second –Language Learning (Part II)

Topics: Some other influences: ESL or EFL community, context, Motivation, and Attitude Is there a critical period for Second - Language Learning

Indicator of Achievement: Students can describe, explore, and discuss Children and Adults in Second –Language Learning (Part II)

CHAPTER VII

Some other influences: ESL or EFL community, context, Motivation, and Attitude Is there a critical period for Second - Language Learning

BACKGROUND

Age has been considered as an important factor in the ways in which language learners differ, and a vast amount of research has been conducted regarding age effects on second language acquisition. It is generally believed that children enjoy an advantage over adults in learning languages because of their ‘plasticity’. According to Chomsky (1957) , humans are equipped with a ‘language acquisition device’, which enables them to acquire the language in a way that goes beyond simple habitual formation. The ‘universal grammar’ proposed by Chomsky later on is thought to be an innate system of language acquisition, the scaled language acquisition device. Although Chomsky has not mentioned the possibility of applying this theoretical device in the brain to the acquisition of second languages, ‘grammaticality judgment tests’, the purpose of which is to measure learners’ universal grammar, have been widely used for second language acquisition research. These ‘grammaticality judgment tests’ consist of morph syntactic items, implying that the ‘universal grammar’ is really about how learners organize the target language’s morph syntactic system.

The sensitive period hypothesis, which is used by Patkowski (1980), has been sometimes used as an alternative term to refer to the critical period hypothesis in second language acquisition, and has been often freely substituted in second language research literature. However, the critical period hypothesis has

been predominantly used in first language acquisition, whilst the sensitive period hypothesis has been generally restricted to second language acquisition.

Therefore, in this section, the writers are going to explain about some other influences in learning second language and the critical age for learning second language. Some problems that will be explained are:

1. How do other factors (ESL or EFL community context, intelligence, aptitude, personality, motivation, attitude, learner preferences, and learner beliefs) influence in learning second language?
2. What are the stages of acquiring second language?
3. Is there a critical age for second language learning?

DISCUSSION

A. ESL or EFL in Community Context

English as a second language (ESL) is the use or study of English by speakers with different native languages. The countries that use English as Second language are India, Nigeria, Philippines, Germany, France, Pakistan, Italy, Japan, Netherlands, and South Africa.

MacMillan Dictionary defines English as a Foreign Language (EFL) as a situation in which English is ‘taught to people who need to learn it for their studies or their career, and who do not live in an English-speaking country.’ On the other hand, according to Collins dictionary EFL is ‘the practice and theory of learning and teaching English for use in countries where it is not an official medium. ‘English as a Foreign Language (EFL) is teaching English in countries where English is not a language of majority. Current hot spots for EFL include South Korea, Japan, Taiwan, China and Thailand.

ESL and EFL instructional approaches differ in significant ways. ESL is based on the premise that English is the language of the community and the school and those students have access to English models. EFL is usually learned in environments where the language of the community and the school is not English. EFL teachers have the difficult task of finding access to and providing English models for their students. . . . As the number of ESL students has increased in schools across North America, more classrooms and school have become more like EFL than ESL environments (Lee Gunderson, 2009).

B. Language Community Context: English as a Second Language (ESL) or English as a Foreign Language (EFL)

Whether the classroom is in a school that is in a community where the second language is spoken is a matter of some importance, for this will determine whether students will have access to a natural situation outside of the class and thereby supplement their classroom learning. Thus, for example, Pakistanis learning English in a classroom in London will have beneficial language experiences outside of the classroom which Pakistanis learning English in a classroom in Karachi will not. The former (learning English in London) is an English as a Second Language (ESL) context while the latter (learning English in Karachi) is an English as a Foreign Language (EFL) context. Because the ESL context provides more language-learning opportunities for the second-language learner through exposure to natural situations outside the classroom, such learners, unsurprisingly, will generally progress more rapidly than learners living in an EFL context (Fathman, 1978).

Furthermore, in comparing children and adult, we may say that, given that the natural situation benefits children more than adults, the ESL context will benefit children more than it will adults. Of course, the ESL context will benefit adults too, but to a lesser degree. Conversely, adults can do better in the EFL context where they can apply their superior cognitive skills for learning in the classroom situation.

C. Factors Affecting on Second Language Learning

1. Intelligence

A link between intelligence and second language learning has been reported by several researchers. Over the years, many studies using a variety found that intelligence level were a good means of predicting how successful a learner would be at language learning. Furthermore, some recent studies have shown that intelligence may be more strongly related to certain kinds of second language abilities than others. For example, in a study with French immersion children in Canada, it was found that while intelligence was related to the

development of French second language reading, grammar and vocabulary, it was unrelated to oral productive skills (Genesee 1976).⁴³

Similar findings have been reported in other studies where intelligence was highly related to performance on reading, dictation, and writing tasks, but not on listening comprehension and free oral production tasks. These findings suggest that intelligence is more related to those second language skills which are used in the formal study of a language (i.e. Reading, language analysis, writing, and vocabulary study), but that intelligence is much less likely to influence the way in which oral communication skills are developed. Therefore' intelligence seems to be a strong factor when it comes to learning second languages in classrooms, particularly if the instruction is formal. When the classroom instruction is less formal, however (i.e more communicative), so-called 'intelligence' (as measure by IQ tests) may play a less important role.⁴⁴

2. Aptitude

The 'aptitude' factor has been investigated most intensively by researchers who are interested in developing tests which can predict how successful a language learner will be. The most widely used aptitude tests are the Modern Language Aptitude Test (MLAT) and the Pimsleur Language Aptitude Battery. Both tests measure characteristics such as : (1) the ability to identify and memorize new sounds; (2) the ability to understand how words function grammatically in sentence; (3) the ability to figure out grammatical rules from language samples; and (4) memory for new words. It is thought that learners will be more successful if they have these abilities.

Students can have a good aptitude for learning. This can infer various things, such as:

- The understanding of the function of words in sentences.
- The ability to understand and use grammatical rules.
- Memory of key words, what they mean and how to use them.
- Learning quickly is the distinguishing feature of aptitude.
- Ability to identify and memorize new sounds.

⁴³ Patsy M Lightbown, and Nina Spada, 2001, *How Language are Learned* (Oxford: Oxford University Press), pg 36-37

⁴⁴ *ibid*, pg 37

- Ability to understand the function of particular words in sentences.
- Memory for new words.

An important point regarding aptitude and second language learning is that successful learners may not be strong in all the components of aptitude and can still succeed at learning a second language. For example, some individuals may have strong memories but only average abilities in the other components of aptitude (Spada 1999).⁴⁵

3. Personality

Learners' emotional states have a powerful influence on their behavior and performance in the classroom and other learning situations. There are various theories that claim that personality factors are important predictors of success in second language learning. Personality traits such as extroversion, introversion, risk-taking, independence, inhibition, self-esteem, dominance, talkativeness, and responsiveness and empathy have been the basis of discussions and disputes relating to this topic (Ellis 1986).

A number of personality characteristics have been proposed as likely to affect second language learning, but it has not been easy to demonstrate their effects in empirical studies. As with other research investigating the effects of individual characteristics on second language learning, different studies measuring a similar personality trait produce different results. For example, it is often argued that an extroverted person is well-suited to language learning. However, research does not always support this conclusion. Although some studies have found that success in language learning is highly related to learners' scores on some characteristics often associated with extroversion such as assertiveness and adventurousness, others have found that successful language learners do not get high scores on measures of extroversion.⁴⁶

4. Motivation

The question of motivation for learning a second language, for instance, is not likely to arise in a natural type of setting such as with a young child. A 1- or 2-year-old needs no motivation to learn a second language; given language input, the young child will automatically learn – with learning even occurring in

⁴⁵ *Ibid*, pg 38

⁴⁶ *Ibid*, pg.38-39

negative circumstances. An older child of 4 or 5 years, however, may need motivation in order to learn a second language since by that age the child may be aware of whether a language is positively or negatively regarded by others.⁴⁷

Motivation in second language learning is a complex phenomenon which can be defined in terms of two factors: learners' communicative needs, and their attitudes towards the second language community. If learners need to speak the second language in a wide range of social situations or to fulfill professional ambitions, they will perceive the communicative value of the second language, and will therefore be motivated to acquire proficiency in it. Likewise, if learners have favorable attitudes towards the speakers of the language, they will desire more contact with them. On the other hand, we should keep in mind that an individual's identity is closely linked with the way he or she speaks. It follows that when speaking a new language, one is adopting some of the identity markers of another cultural group.⁴⁸

One factor which often affects motivation is the social dynamic or power relationship between the languages. That is, members of a minority group may have different attitudes and motivation when learning the language of a majority group than those majority group members learning a minority language. Even though it is impossible to predict the exact effect of such societal factors on second language learning, the fact that languages exist in social contexts cannot be overlooked when we seek to understand the variables which affect success in learning. Even children are sensitive to social dynamics and power relationships.⁴⁹

5. Attitudes

Attitude is another important affective factor in learning a second language. The successful acquisition of a second language seems to some extent, contingent upon learners' views of the language learning environment, the learning situation, and how they view the target language and its speakers. This together with other variable factors such as the desire to learn, and past experience

⁴⁷ Danny D. Stenberg, Hisroshi Nagata and David P. Aline, 2001, *Psycholinguistics: Language, Mind and World*, (London: Pearson Education Limited), pg. 185

⁴⁸ Patsy M Lightbown, and Nina Spada, *op.cit.* pg. 39-40

⁴⁹ *Ibid.*

with learning a new skill, may affect or significantly contribute to language learning outcomes.

Pramanik (1988) states the role of attitudes in second language learning is very complex because they consist of a cluster of factors:

1. The attitude of the learner,
2. His/her attitude to second language learning,
3. Attitude to second language teachers,
4. Peer attitude and the attitude of the parents.

All these factors appear to be playing different roles in different situations of second language learning inside and outside the class.

6. Learning Styles

Learner preferences perceptually-based learning styles. There are three kinds of learning styles of the students: Visual, Auditory, Kinaesthetic. Of course, all of us learn in all these ways. We can all benefit from a variety of learning experience. However, there is clearly some truth to the intuition that certain ways of approaching a task are more successful for one person than for another, and that when learners are given some freedom to choose their preferred way of learning, they will do better than those who find themselves forced to learn in environments where a learning style which does not suit them is imposed as the only way to learn.⁵⁰

7. Learner Beliefs

It means beliefs and opinions about how their instruction should be delivered. Teacher should help learners expand their repertoire of learning strategies and thus develop greater flexibility in their ways of approaching language learning.

D. The Stages in Acquiring Second Language

Researchers define language acquisition into two categories: first-language acquisition and second-language acquisition. First-language acquisition is a universal process regardless of home language. Babies listen to the sounds around them, begin to imitate them, and eventually start producing words. Second-language acquisition assumes knowledge in a first language and encompasses the

⁵⁰ *Ibid*, pg. 41

process an individual goes through as he or she learns the elements of a new language, such as vocabulary, phonological components, grammatical structures, and writing systems.⁵¹

1. Stage I: Pre-Production

This is the silent period. English language learners may have up to 500 words in their receptive vocabulary but they are not yet speaking. Some students will, however, repeat everything you say. They are not really producing language but are parroting.

These new learners of English will listen attentively and they may even be able to copy words from the board. They will be able to respond to pictures and other visuals. They can understand and duplicate gestures and movements to show comprehension. Total Physical Response methods will work well with them. Teachers should focus attention on listening comprehension activities and on building a receptive vocabulary. English language learners at this stage will need much repetition of English. They will benefit from a “buddy” who speaks their language. Remember that the school day is exhausting for these newcomers as they are overwhelmed with listening to English language all day long.

2. Stage II: Early Production

This stage may last up to six months and students will develop a receptive and active vocabulary of about 1000 words. During this stage, students can usually speak in one- or two-word phrases. They can use short language chunks that have been memorized although these chunks may not always be used correctly.

Here are some suggestions for working with students in this stage of English language learning: Ask yes/no and either/or questions, Accept one or two word responses, Give students the opportunity to participate in some of the whole class activities, Use pictures and reality to support questions, Modify content information to the language level of ELLs, Build vocabulary using pictures, Provide listening activities, Simplify the content materials to be used. Focus on key vocabulary and concepts, when teaching elementary age ELLs, use simple books with predictable text, Support learning with graphic organizers, charts and

⁵¹ <http://www.colorincolorado.org/article/26751/>

graphs. Begin to foster writing in English through labeling and short sentences. Use a frame to scaffold writing.

3. Stage III: Speech Emergence

Students have developed a vocabulary of about 3,000 words and can communicate with simple phrases and sentences. They will ask simple questions that may or may not be grammatically correct, such as “May I go to bathroom?” ELLs will also initiate short conversations with classmates. They will understand easy stories read in class with the support of pictures.

They will also be able to do some content work with teacher support. Here are some simple tasks they can complete: Sound out stories phonetically, Read short, modified texts in content area subjects, complete graphic organizers with word banks, Understand and answer questions about charts and graphs, Match vocabulary words to definitions, Study flashcards with content area vocabulary, Participate in duet, pair and choral reading activities, Write and illustrate riddles, Understand teacher explanations and two-step directions, Compose brief stories based on personal experience, Write in dialogue journals.

Dialogue journals are a conversation between the teacher and the student. They are especially helpful with English language learners. Students can write about topics that interest them and proceed at their own level and pace. They have a place to express their thoughts and ideas.

4. Stage IV: Intermediate Fluency

English language learners at the intermediate fluency stage have a vocabulary of 6000 active words. They are beginning to use more complex sentences when speaking and writing and are willing to express opinions and share their thoughts. They will ask questions to clarify what they are learning in class. These English language learners will be able to work in grade level math and science classes with some teacher support. Comprehension of English literature and social studies content is increasing. At this stage, students will use strategies from their native language to learn content in English.

Students’ writing at this stage will have many errors as ELLs try to master the complexity of English grammar and sentence structure. Many students may be translating written assignments from native language. They should be expected to

synthesize what they have learned and to make inferences from that learning. This is the time for teachers to focus on learning strategies. Students in this stage will also be able to understand more complex concepts.

5. Stage V: Advanced Fluency

It takes students from 4-10 years to achieve cognitive academic language proficiency in a second language. Student at this stage will be near-native in their ability to perform in content area learning. Most ELLs at this stage have been exited from ESL and other support programs. At the beginning of this stage, however, they will need continued support from classroom teachers especially in content areas such as history/social studies and in writing.⁵²

E. Strategies for Second Language Production and Communication

In the course of learning a second language, learners will frequently encounter communication problems caused by a lack of linguistic resources. Because errors are easy to observe and are good indicators of a person's level of a second-language knowledge, there have been many good studies done on errors (see Corder, 1981 for a review). There is some confusion, though, when it comes to interpreting just what the cause of errors might be. In our opinion, only a minority of errors can be attributed to interference, where the first language intrudes on the second. Rather, most errors are systematic, being the result of the application of what we shall call "The First-Language Strategy" and the "Second-Language Strategy". These strategies are applied when relevant second-language knowledge is not yet available or incomplete.

The term communication strategy was introduced by Masoud in 1972, and the first systematic analysis of communication strategies was made by Varadi in 1973. There were various other studies in the studies in the 1970s, but the real boom in communication strategy scholarship came in the 1980s. This decade saw a flurry of papers describing and analyzing communication strategies, and saw Ellen Bialystok link communication strategies to her general theory of second-language acquisition. There was more activity in the 1990s with the collection of papers by Kasper and Kellerman and a review article by Dornyei and Scott, but there has been relatively little research on the subject then.

⁵² http://www.everythingsl.net/in-services/language_stages.php

There are many definitions about the meaning of communication, but most of them have the same core of meaning. It is a strategy used by second language learners to solve communication problems that have been emerged by applying some kinds of techniques.

There are many strategies that have been observed by the researchers to the second language learners, but most of the strategies they are used are:

Avoidance Strategies

1. Syntactic or Lexical Avoidance within a semantic category

Example:

L2 learner	: I lost my road
Native Speaker	: You lost your road?
L2 learner	: I lost – I lost . . . I got lost

2. Topic avoidance: avoiding topic areas or concept that poses language difficulties. For Example: pretending not to understand, changing the topic, not responding.

3. Phonological Avoidance: difficulty in producing the sounds or correct pronunciation. For Example: Instead of saying “breeze” because you might pronounce it “breast”, you settle with saying “wind”

Compensatory Strategies

4. Circumlocution: describing or exemplifying the target object. For Example: Saying “the thing we use for sleep” when you mean bed.

5. Approximation: using an alternative term which expresses the meaning of the target lexical item as closely as possible. For Example: saying ship when you mean sailboat.

6. Word coinage: creating new word in order to communicate the concept. For Example: airball for balloon, ice cabinet for freezer

7. Prefabricated patterns: using memorized stock phrases. For Example: What’s your name? , “I don’t speak English”, etc.

8. Nonverbal signals: mime, gesture, facial expression, or sound imitation.

9. Literal Translation: translating literally a lexical item, idiom, compound word, or structure from L1 to L2. For Example: “Kambing Hitam” to be “Black Goat” (it should be Scape Goat)

10. Foreignizing: using native word by adjusting it to the second language phonology (i.e., with the L2 pronunciation) and/or morphology (e.g., adding it a L2 suffix). For Example: “Shiros” used by some Japanese – Americans to refer to “whites” because it means white in Japanese.

11. Code-switching or language switching: using the native language term in L2. For Example: My puppy is so *kawaii* (cute)”

12. Stalling for Time Gaining Strategies: using fillers or hesitation devices to fill pauses and to gain time to think. For Example: Uh, errrr....., well....., etc.

C. Critical Age for Second-Language Learning

The belief that children are better at language acquisition than adults is supported by both scientific and anecdotal evidence. Children acquiring second language in natural environments are more likely to eventually sound like native speakers than adults are. Adults may appear to make greater progress initially, but children nearly always surpass them. The turning point in language acquisition ability seems to occur at about puberty. Children under ten who experience enough natural communication in the target language nearly always succeed in attaining native-like proficiency, while those over fifteen rarely do, although they often come very close.⁵³

1. Adults can learn a second language

As far as adult second-language learning is concerned, we have the common observation that a very great number of adults do, in fact, learn the syntax of other languages perfectly. There are those who speak second languages so well that, on the basis of the grammar alone (not the pronunciation, which we shall deal with shortly), they would be judged native speakers. There is no evidence, for example, that a speaker of a Subject + Verb + Object language such as English cannot learn a different word ordering of sentence constituents, such the Subject + Object + Verb ordering that occurs in Japanese. Or that negating a sentence by changing a word internally, as is done in Turkish, presents insuperable problems to speakers who negate sentences in their native language with unattached negative markers, such as ‘not’. Complicated systems of grammatical cases, such as occur in Russian and Finnish, can be learned by a

⁵³ Heidi Dulay, Marina Burt, and Stephen Krashen, 1982, *Language Two*, (Oxford: Oxford University Press), pg. 78

normal adult Chinese (whose language, like English, has no cases) who is willing to devote the time to learning them.⁵⁴

2. No demonstrated critical age for learning syntax

There are, however, studies which demonstrate a differential effect for the age at which acquisition of syntax began. Patkowski (1980) had native speakers of English rate the syntax of transcripts of spontaneous speech from immigrants to the USA who had entered before or after the age of 15. Transcripts were used to remove any possible influence of accent on the raters. The scores showed two very distinguishable groups: those who arrived before 15 years of age scored very high, while those arriving after scored lower.⁵⁵

Patkowski (1980) also found evidence that age of arrival is related to syntactic proficiency. Patkowski tested sixty-seven immigrants who had come to the United States before age fifteen, and who had lived in the United States for at least five years. Interviews between these subjects and native speakers were tape recorded and transcribed. The written transcripts were then rated by two trained judges, who rated them on a zero to five scale, where 0 = unable to function in the language, and 5 = native control of grammar. Patkowski found that the younger the students were when they arrived, the higher the judges' rating.⁵⁶ The earlier the age of arrival, the better the subjects were at determining the ungrammaticalness of English sentences.⁵⁷

3. Critical age for pronunciation

This brings us to pronunciation. Is it possible to learn a second language so well that one truly sounds like a native speaker? One psycholinguist, Thomas Scovel, has claimed that no adult can ever be successful in that regard. 'The critical period for accentless speech simply means that adults will never learn to pass themselves off as native speakers phonologically...(Scovel, 1988, p. 65). He has also been said that "Almost everyone learns the sound patterns of a language perfectly as a child, and yet, almost no one can learn the sound patterns of a

⁵⁴ Danny D. Stenbeg, Hisroshi Nagata and David P. Aline, 2001, *Psycholinguistics: Language, Mind and World*, (London: Pearson Education Limited), pg. 187

⁵⁵ *Ibid.*, pg. 187-188

⁵⁶ Heidi Dulay, Marina Burt, and Stephen Krashen, *op. cit.*, pg. 83-84

⁵⁷ Danny D. Stenbeg, Hisroshi Nagata and David P. Aline, *op. cit.*, pg. 188

language perfectly as an adult” (Scovel, 1969, p. 245).⁵⁸ While some adults do achieve very high levels of proficiency in pronouncing a second language, they seem to be the exception rather than a rule.⁵⁹

Oyama (1976), for example, studied a group of Italian-born male immigrants who had lived in the United States from five to eighteen years and who had learned English as a second language. In general, they were well educated; nearly all reported that they had had “some college.” Each subject was asked to read a paragraph and tell a story in English’ the latter task was to describe a situation in which you felt you were in danger of losing your life. The speech samples were recorded and played to a panel of native speaker judges (graduate students in linguistics), who rated them on a five point scale (1 = no accent, and 5 = heavy accent). The results for the paragraph are given in Table 4-1.⁶⁰

TABLE 4-1 Mean Accent Scores on Paragraph Reading as a Function of Immigrants’ Age of Arrival and Number of Years in the United States (Scale ranged from 1 (no foreign accent) to 5 (heavy foreign accent))

Number of Years in the United States	Age of Arrival		
	6-10	11-15	16-20
12-18	1.27	2.27	3.72
5-11	1.37	2.58	3.50

As the table indicates, she found the subjects’ age of arrival had the most effect on the degree of accent. Youngest arrivals had the least accent, but the amount of time the subjects spent in the United States did not influence the accent. The results for the storytelling task were quite similar.

A next study examining this question was conducted by Asher and Garcia (1969). They investigated age of arrival in the United States and second language accent in seventy-one Cuban immigrants, aged nine to seventeen. Their subjects were asked to read four sentences in English and were allowed to rehearse the material in advance. Judges were a group of American junior high school students

⁵⁸ *Ibid.*

⁵⁹ Heidi Dulay, Marina Burt, and Stephen Krashen, *op. cit.*, pg. 79

⁶⁰ *Ibid.*

who rated the samples on a four point scale (A = native speaker of English, B = near-native, C = slight accent, D = a definite accent). Asher and Garcia reported that their judges agreed with each other perfectly 70% of the time. Table 4-3 shows their results.⁶¹

TABLE 4-3 Percentage of Cuban Immigrants Judged on English Pronunciation, by Age of Arrival in the United States

<i>Degree of Pronunciation</i>	<i>Age of Arrival</i>	<i>Percent of Subjects</i>
<i>Near Native</i>	1-6	68%
	7-12	41%
	13-19	7%
<i>Slight Accent</i>	1-6	32%
	7-12	43%
	13-19	27%
<i>Definite Accent</i>	1-6	0%
	7-12	16%
	13-19	66%

These two studies concluded that age of arrival is a powerful determinant of ultimate success in accent acquisition, and all confirm that puberty is an important turning point with respect to this aspect of language learning.⁶²

Studies which support the idea of a critical period for pronunciation find that the earlier the age at which one arrives in a foreign country the greater the chance that one will speak the language without a foreign accent. Oyama (1976) places the arrival age before which one will eventually speak without an accent at about 12 years. Asher and Garcia (1969) place it at 6 years (an extremely low figure), while Thompson (1991) puts it at 10 years. Thompson even had two subjects who had arrived in the USA before the age of 10 but who still spoke with an accent. Clearly, there is a wide range of individual differences. However, no research indicates that children 6 years and younger have any difficulty. Adults will certainly have a tougher time of it than older children, which is not to say that no adult will be successful; it is just that the odds are against them.⁶³

⁶¹ *Ibid.*, pg. 80

⁶² Danny D. Stenbeg, Hisroshi Nagata and David P. Aline, *op. cit.*, pg. 188-189

⁶³ *Ibid.*, pg. 189

Thus, while we would agree with Scovel that in second-language acquisition there is no critical age for syntax, we cannot agree that there is an absolute critical age for pronunciation. Native-speaker pronunciation may well be achieved by some adults.⁶⁴

CONCLUSION

There are some factors affecting on second language learning, such as:

1. Intelligence
2. Aptitude
3. Personality
4. Motivation
5. Attitude
6. Learner preferences/ style
7. Learner beliefs.

These factors may affect in acquiring or learning a second language.

In acquiring a second language, there are some stages :

1. Stage I: Pre-Production, learners may have up to 500 words in their receptive vocabulary but they are not yet speaking
2. Stage II: Early Production, students can usually speak in one- or two-word phrases
3. Stage III: Speech Emergence, students have developed a vocabulary of about 3,000 words and can communicate with simple phrases and sentences
4. Stage IV: Intermediate Fluency, They are beginning to use more complex sentences when speaking and writing
5. Stage V: Advanced Fluency, student at this stage will be near-native in their ability to perform in content area learning

In learning and acquiring a second language, there is no specific age for the critical age for learning a second language. But, in most cases, children below fifteen years old are more successful to produce and acquire the second language than the adults over 15 years old.

⁶⁴ *Ibid.*

Meeting 9: Middle Test (Making Video in Group about Psycholinguistics materials that have been learned from meeting 1 – meeting 8)

1. This is video project about psycholinguistics materials.
2. Students can make the video in the form of:
 - a. Observation (teaching sign language)
 - b. Interview (first language second language development)
 - c. Documentary (both observation and interview)
 - d. Teaching in school / peer teaching (for example: teaching sign language)
 - e. Making quizzes (for example: Indonesia Pintar, Rangking 1. Versus, Who wants to be a Millionaire, etc)
 - f. Making reality show (for example: Tahu ga siiihhh / Do you Know, Slide Show, Indonesia Lawak Club, etc)
3. Video duration, minimal 15 minutes, maximal 60 minutes
4. Due date: 3 weeks after the announcement.
5. Assessment is from the friends in the classroom (peer assessment).

**Meeting 10: Watching the videos that made by the students and giving score.
(Additional meeting will be needed for video watching time)**

Meeting 11

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore Second Language Teaching Methods

Topics: Second Language Teaching Methods

- Characterizing the essentials of Method
- Traditional Methods
- The Chomskyan revolution (ALM Method)
- Contemporary methods (TPR, CLT)
- Natural Approach
- Krashen's Theory

Indicator of Achievement: Students can describe, explore, and discuss Second Language Teaching Methods

CHAPTER VIII

Second Language Teaching Methods

BACKGROUND

Increasing globalization has created a large need for people in the workforce who can communicate in multiple languages. The uses of common languages are in areas such as trade, tourism, international relations, technology, media, and science. Many countries such as Korea (Kim Yeong-seo, 2009), Japan (Kubota, 1998) and China (Kirkpatrick & Zhichang, 2002) frame education policies to teach at least one foreign language at the primary and secondary school levels. However, some countries such as India, Singapore, Malaysia, Pakistan, and the Philippines use a second official language in their governments. According to GAO (2010), China has recently been putting enormous importance on foreign language learning, especially the English Language.

Language education may take place as a general school subject or in a specialized language school. There are many methods of teaching languages. Some have fallen into relative obscurity and others are widely used; still others have a small following, but offer useful insights. While sometimes confused, the terms "approach", "method" and "technique" are hierarchical concepts.

An approach is a set of assumptions about the nature of language and language learning, but does not involve procedure or provide any details about

how such assumptions should be implemented into the classroom setting. Such can be related to second language acquisition theory.

There are three principal "approaches":

1. The structural view treats language as a system of structurally related elements to code meaning (e.g. grammar).
2. The functional view sees language as a vehicle to express or accomplish a certain function, such as requesting something.
3. The interactive view sees language as a vehicle for the creation and maintenance of social relations, focusing on patterns of moves, acts, negotiation and interaction found in conversational exchanges. This approach has been fairly dominant since the 1980s.

A method is a plan for presenting the language material to be learned, and should be based upon a selected approach. In order for an approach to be translated into a method, an instructional system must be designed considering the objectives of the teaching/learning, how the content is to be selected and organized, the types of tasks to be performed, the roles of students, and the roles of teachers.

1. Examples of structural methods are grammar translation and the audio-lingual method.
2. Examples of functional methods include the oral approach / situational language teaching.
3. Examples of interactive methods include the direct method, the series method, communicative language teaching, language immersion, the Silent Way, Suggestopedia, the Natural Approach, Total Physical Response, Teaching Proficiency through Reading and Storytelling and Dogme language teaching.

A technique (or strategy) is a very specific, concrete stratagem or trick designed to accomplish an immediate objective. Such are derived from the controlling method, and less directly, from the approach.

DISCUSSION

1. Characterizing The Essentials of Methods

Second-language teaching is a field which provides an excellent meeting ground for many of the theoretical and practical aspect of psycholinguistics to come together. It is here that we have a chance to see how ideas of human language and human learning interconnect.

Language-teaching methods may be conveniently characterizes according to five principal dimensions (Steinberg, 1993):

1. Language focus: Speech Communication vs. Literacy
2. Meaning Learning: Direct Experience vs. Translation
3. Grammar Learning: Induction vs. Explication
4. Psychological Orientation: Mentalist vs. Behaviourist
5. Linguistic Orientation: Mentalist vs. Structuralist.

These dimensions involve theories which have been realized in principal second-language teaching method.

1. Language Focus: Speech Communication vs. Literacy

Methods can be divided into two categories of focus, teach language through the speech of target language and the target language through reading and writing. Except for Grammar-Translation, focuses on reading, writing and the translation of written words. Most methods focus on speech and use speech communication.

The principal aim of Grammar-Translation is typically to get students to be able to read, and, ultimately, to read literary works. Other proponents of the method see literacy as a foundation and a means for approaching speech communication. The problem with starting out with literacy when the goal is speech is that students may never get to speech stage unless they go to university where they may come into contact with fluent instructors.

The proponents of speech-based methods regard grammar-translation as their ultimate enemy, since they consider speech-communication to be primary in the learning of language. Speech-based methods attempt to provide a speech environment in which students may learn the target language.

2. Meaning Learning: Direct Experience vs. Translation

In providing the meaning of target language items, translation may be used, this is commonly the case with the Grammar-Translation method. For example, English speaking students studying Italian may be told that 'libro' mean 'book' and that 'come sta?' means 'how are you?' Thus the native language (in this case, English) is used to provide the meaning for the target language (Italian). The meanings of single vocabulary items and entire phrases and sentences may be learned in this way.

3. Grammar Learning: Induction vs. Explication

Application involves explanation, in the native language, of the grammatical rules and structures of the second language. For example, a teacher can explain to Japanese language that English has a Subject + object + verb ordering).

4. Psychological Orientation: Mentalism vs. Behaviourism

The psychological presumption of a method can have a great effect on how that method is formulated and used. A behaviourist would prefer, for example, to mechanically drill students on sentences while a mentalist would prefer to have students think about sentences and their structure and learn about them in this way. For the behaviourist, there is nothing for a learner to think about; thinking is irrelevant for language learning, only habit formation is important.

On other hand, in a mentalist approach to language, students may be given more time to puzzle over speech and less time for drill. For the mentalist, a sentence is more than a sequence of over words, for underlying those words is an abstract mental structure that involves a lot of abstract operations in its formation.

5. Linguistic Orientation: Mentalist vs. Structure

The linguistic structuralist is the counterpart of the psychological behaviourist. According to the structuralist (bloomfield, fries, pike), a sentence like 'The dog jumped' would analysed as a simple order of word classes (Article + Noun + Verb or at best a sequence of phrases (Noun Phrase (The Dog) + Verb Phrase (jumped)).

A mentalist grammarian would explain these sentences by discussing the syntactic or semantic relations that underlie those sentences. Thus, a mentalist could say that in 'John is easy to please'. 'John' is the underlying object of 'please', while in 'John is eager to please', 'John' is the underlying subject of please, in practical terms; a teacher would have quite different conceptions to offer students with respect to such sentence.

2. Traditional Methods: Grammar-Translation, Natural, direct, Audio lingual.

A. The Grammar-Translation Method

Classes are taught in the students' mother tongue, with little active use of the target language. Vocabulary is taught in the form of isolated word lists. Elaborate explanations of grammar are always provided. Grammar instruction provides the rules for putting words together; instruction often focuses on the form and inflection of words. Reading of difficult texts is begun early in the course of study. Little attention is paid to the content of texts, which are treated as exercises in grammatical analysis. Often the only drills are exercises in translating disconnected sentences from the target language into the mother tongue, and vice versa. Little or no attention is given to pronunciation.

The grammar translation method is a method of teaching foreign languages derived from the classical (sometimes called traditional) method of teaching Greek and Latin. In grammar-translation classes, students learn grammatical rules and then apply those rules by translating sentences between the target language and the native language. Advanced students may be required to translate whole texts word-for-word. The method has two main goals: to enable students to read and translate literature written in the target language, and to further students' general intellectual development.

Principles and goals

There are two main goals to grammar-translation classes. One is to develop students' reading ability to a level where they can read literature in the target language. The other is to develop students' general mental discipline. The users of foreign language wanted simply to note things of their interest in the literature of foreign languages. Therefore, this method focuses on reading and

writing and has developed techniques which facilitate more or less the learning of reading and writing only. As a result, speaking and listening are overlooked.

Method

Grammar-translation classes are usually conducted in the students' native language. Grammar rules are learned deductively; students learn grammar rules by rote, and then practice the rules by doing grammar drills and translating sentences to and from the target language. More attention is paid to the form of the sentences being translated than to their content. When students reach more advanced levels of achievement, they may translate entire texts from the target language. Tests often consist of the translation of classical texts. There is not usually any listening or speaking practice, and very little attention is placed on pronunciation or any communicative aspects of the language. The skill exercised is reading, and then only in the context of translation.

The Advantages (Merits)

- a. The target language is quickly explained in GTM.

Translation is the easiest way of explaining meanings or words and phrases from one language into another. Any other method of explaining vocabulary items in the second language is found time consuming. A lot of time is wasted if the meanings of lexical items are explained through definitions and illustrations in the second language. Further, learners acquire some short of accuracy in understanding synonyms in the source language and the target language.

- b. Teacher and students are easy to communicate/It does not need native language

Teacher's labor is saved. Since the textbooks are taught through the medium of the mother tongue, the teacher may ask comprehension questions on the text taught in the mother tongue. Pupils will not have much difficulty in responding to questions on the mother tongue. So, the teacher can easily assess whether the students have learnt what he has taught them. Communication between the teacher and the learners does not cause linguistic problems. Even teachers who are not fluent in English can teach English through this method. That is perhaps the reason why this method has been practiced so widely and has survived so long.

c. The students easy to understand because of grammatical lessons.

ESL students taught successfully under the grammar translation method will have the ability to translate even difficult texts from their native language into English. They possess a thorough knowledge of English grammar, including verb tenses. These students will be familiar with several classical pieces of English literature, which are used for grammatical analysis and exercises. This method requires few specialized skills on the part of teachers. Grammar rules and Translation Tests are easy to construct and can be objectively scored. Many standardized tests of foreign languages still do not attempt to test communicative abilities, so students have little motivation to go beyond grammar analogies, translations and other written exercises.

Disadvantages (Demerits)

Every Method must have advantages and disadvantages. The advantages of Grammar Translation Method have been explained on the passage above. Here are the disadvantages:

a. No Scope for Effective Communication and Very Tedious for Learners

Direct translation is widely regarded as an inefficient way of becoming fluent in any language. For example, translating a sentence word-for-word from Spanish to English might not result in a sentence with the same meaning because so little attention is paid in class to listening and speaking. Students with years of English lessons through this method are often unable to hold even a basic conversation in English because classes with this method are usually taught in a lecture style, with the teacher mostly speaking the students' native language rather than English, class can be dull and cause students to lose interest.

b. Ineffective Method

It is a teaching method which studies a foreign language in order to read its literature focusing on the analysis of its grammar rules, and to translate sentences and texts into and out the target language. In the Grammar Translation Method the teaching of the second language starts with the teaching of reading. Little attention is paid to the content of texts, which are treated as exercises in grammatical analysis. Thus, the learning process is reversed.

c. More Importance on Grammar Rules than on Meaning

Exact translation is not possible. Translation is, indeed, a difficult task and exact translation from one language to another is not always possible. A language is the result of various customs, traditions, and modes of behavior of a speech community and these traditions differ from community to community. There are several lexical items in one language, which have no synonyms/equivalents in another language. For instance, the meaning of the English word 'table' does not fit in such expression as the 'table of contents', 'table of figures', 'multiplication table', 'time table' and 'table the resolution', etc. English prepositions are also difficult to translate. Consider sentences such as 'We see with our eyes', 'Bombay is far from Delhi', 'He died of cholera', 'He succeeded through hard work'. In these sentences 'with', 'from', 'of', 'through' can be translated into the Hindi preposition 'se' and vice versa. Each language has its own structure, idiom and usage, which do not have their exact counterparts in another language. Thus, translation should be considered an index of one's proficiency in a language.

d. Slow Learning Rate and Making Learners Think in L1

It does not give pattern practice. A person can learn a language only when he internalizes its patterns to the extent that they form his habit. But the Grammar Translation Method does not provide any such practice to the learner of a language. It rather attempts to teach language through rules and not by use. Researchers in linguistics have proved that to speak any language, whether native or foreign entirely by rule is quite impossible. Language learning means acquiring certain skills, which can be learnt through practice and not by just memorizing rules. The persons who have learnt a foreign or second language through this method find it difficult to give up the habit of first thinking in their mother tongue and then translating their ideas into the second language. They, therefore, fail to get proficiency in the second language approximating that in the first language. The method, therefore, suffers from certain weaknesses for which there is no remedy.

B. The Natural Method

The Natural Method (NM) developed as a reaction to Grammar-Translation and was the outgrowth of scientific thought on the nature of language and language learning.

That approach to language learning, where ‘natural is best’, so to speak, led to a method of teaching that stressed the value of introducing a second language to a learner exactly as the native language had been experienced. The model for the natural of second language learning was the child learning its native language. This meant adherence to the natural sequence of the child’s acquiring its first language, i.e.

- Speech comprehension
- Speech production, and must later
- Reading, and
- Writing
- Grammar was not taught directly.

The great advantage of NM was that by exposure to natural language in a natural context, learners could acquire a speech capability both in understanding and production. However, one problem for this method is that it requires the teacher to create interesting situations so that students may be naturally exposed to language. Class size, too, could be a problem, since the number of students must be quite small, usually less than 15. Actually, the problem mentioned here are not unique to NM indeed, all speech-based methods have similar problems, given their emphasis on exposure to natural speech and student participation in a variety of communicative situation.

C. The Direct Method

Lessons begin with a dialogue using a modern conversational style in the target language. Material is first presented orally with actions or pictures. The mother tongue is NEVER, NEVER used. There is no translation. The preferred type of exercise is a series of questions in the target language based on the dialogue or an anecdotal narrative. Questions are answered in the target language. Grammar is taught inductively--rules are generalized from the practice and experience with the target language. Verbs are used first and systematically

conjugated only much later after some oral mastery of the target language. Advanced students read literature for comprehension and pleasure. Literary texts are not analyzed grammatically. The culture associated with the target language is also taught inductively. Culture is considered an important aspect of learning the language.

The direct method of teaching, which is sometimes called the natural method, and is often (but not exclusively) used in teaching foreign languages, refrains from using the learners' native language and uses only the target language. It was established in Germany and France around 1900 and contrasts with the Grammar Translation Method and other traditional approaches. It was adopted by key international language schools such as Berlitz and in lingua in the 1970s and many of the language departments of the Foreign Service Institute of the U.S. State Department in 2012.

In general, teaching focuses on the development of oral skills. Characteristic features of the direct method are:

- teaching concepts and vocabulary through pantomiming, real-life objects and other visual materials
- teaching grammar by using an inductive approach (i.e. having learners find out rules through the presentation of adequate linguistic forms in the target language)
- centrality of spoken language (including a native-like pronunciation)
- Focused on question-answer patterns.

D. Audio lingual Method

This method is based on the principles of behavior psychology. It adapted many of the principles and procedures of the Direct Method, in part as a reaction to the lack of speaking skills of the Reading Approach.

New material is presented in the form of a dialogue. Based on the principle that language learning is habit formation, the method fosters dependence on mimicry, memorization of set phrases and over-learning. Structures are sequenced and taught one at a time. Structural patterns are taught using repetitive drills. Little or no grammatical explanations are provided; grammar is taught inductively. Skills are sequenced: Listening, speaking, reading and writing are developed in

order. Vocabulary is strictly limited and learned in context. Teaching points are determined by contrastive analysis between L1 and L2. There is abundant use of language laboratories, tapes and visual aids. There is an extended pre-reading period at the beginning of the course. Great importance is given to precise native-like pronunciation. Use of the mother tongue by the teacher is permitted, but discouraged among and by the students. Successful responses are reinforced; great care is taken to prevent learner errors. There is a tendency to focus on manipulation of the target language and to disregard content and meaning.

The audio-lingual method, Army Method, or New Key, is a style of teaching used in teaching foreign languages. It is based on behaviorist theory, which professes that certain traits of living things, and in this case humans could be trained through a system of reinforcement—correct use of a trait would receive positive feedback while incorrect use of that trait would receive negative feedback.

This approach to language learning was similar to another, earlier method called the direct method. Like the direct method, the audio-lingual method advised that students be taught a language directly, without using the students' native language to explain new words or grammar in the target language. However, unlike the direct method, the audio-lingual method didn't focus on teaching vocabulary. Rather, the teacher drilled students in the use of grammar.

3. The Chomskyan Revolution Bring Down the Foundations of the Audio lingual Method

Chomsky's attraction was the formulation of a powerful grammar cast as a set of recursive (repeatable) rules. These rules were of a conceptual abstract nature and differed qualitatively from the observable words of a sentence. He argued for grammar that required mind and mental operation: the very sort of entities which Behaviourist psychologists and Structural linguistic had opposed and had founded their arguments against. Chomsky was convincingly demonstrated the adequacy of his notions. The outcome of Chomsky's theorizing was that if language use and language learning were to be explained, both linguistics and psychology would require a Mentalistic base.

With both the linguistic and psychological foundations of its method undermined, the impact on the Audio lingual Method was devastating. All that remains of ALM today is the occasional use of pattern practice drills as an auxiliary exercise in the second-language classroom.

4. Offbeat Method Appear then Disappear: Cognitive Code, Community Language Learning, Silent Way, and Suggestopedia.

Since the downfall of the Audio Lingual Method in the 1960s, a number of new methods have arisen. However, only a small number have managed to survive, and fewer still have managed to thrive. Four that have not survived are Cognitive Code, Community Language Learning, Silent Way, and Suggestopedia. Of course, there are a few adherents sprinkled about, just as there are some Audiolingualists around, but they have disappeared.

A. Cognitive Code.

Lessons focused on learning grammatical structures but the cognitive code approach emphasized the importance of meaningful practice, and the structures were presented inductively, i.e. the rules came after exposure to examples. There was, however, little use of examples from authentic material.

The approach included the clear and structured use of concept questions to help learners identify the limits of use of structure and lexis, and teachers still find this useful. The PPP methodology, (Presentation, Practice and Production), through which learners gain a clear understanding of a grammatical rule before they practice it in meaningful contexts, may still suit some learning contexts and teachers.

B. Community Language Learning.

Community language Learning (CLL) or Counseling Learning as it is sometimes called. The teacher takes role of client. The clients are to interact independently with one another, with the counselor's role being only to foster that interaction. In effect, this is reduced to the counselor translating into the target language whatever it is that the client wishes to say to one another. The client sits in a circle and converse using only the target language. The counselor stands behind the client who is to speak. The client tells the counselor in the native

language what it is that he or she wants to say, and the counselor provides the translation.

C. Silent Way

In silent way, student speaks, teacher silent. The Silent Way (SW) (Gattegno (1972, 1976), is based on the radical notion that the teacher is to be as silent as possible while the students employ their own abilities to discover and create the language themselves.

In contrast to other speech-based methods, the SW virtually reverses the natural sequence in first-language learning by having speech production precede speech comprehension. The teacher says little but rather encourages the students to talk.

The teacher then uses a certain set of physical objects, such as the colored rods that Gattegno specified, in order to convey the meaning of the words and the grammatical rules by which sentences are to be constructed. Some participants of silent way classes are enthusiastic about the method. However, a good many students react quite negatively to the stress of having to discover grammatical rules with no speech model present.

An advantage with SW, students are supposed to take the method does not take initiative in the learning process under the silent way, there is little that a student can do when the teacher is not present. It is the teacher who points at the wall chart, moves objects, etc. although the method may be successful to some degree with some students within tightly controlled settings, any success may not be easily transferable outside of those settings (Lantolf, 1986)

D. Suggestopedia

Suggestopedia purports to produce in students an altered state of consciousness which is brought about by certain relaxation techniques which serve to build the confidence of the learner and thus to break down the anti-suggestive barriers'. Relaxation is achieved through listening to certain specified passages of classical music. The music must be played at a specific tempo to enable it to induce the desired state of mental readiness.

Teaching involves the presentation of dialogues and vocabulary which the student is to study and memorize. The materials are presented first in written then in spoken form. A translation is offered along with the written form. There is certainly nothing wrong with the idea of memory enhancement. If a second-language teaching method comes along and claims, as does suggestopedia, suggestopedia's only legacy today seems to be that some teachers play music before they begin class in order to calm students down.

5. Contemporary Methods: Total Physical Response, Communicative Language Teaching, natural Approach.

In contemporary method that appears in 1970s there are many methods within, such as TPR (Total Physical Response), CLT (Communicative Learning Teaching) and Task-based Approach. On each method that consists in contemporary method, there are a lot of techniques that will conduct in the classroom.

A. Total Physical Response

Total Physical Response, frequently referred to as TPR, is very much a natural-type method: speech understanding precedes speech production, which, in turn, precedes reading and writing. Only the target language is used in the classroom and meaning is derived from actual objects and situations. Students are encouraged to induce rules on their own and speak when they are ready. Again, as with other natural-type methods, things go best with a small number of students.

Classroom materials and activities

Initially, in a classroom of beginners in English for example, commands are given such as "Stand up", "Sit down", "Open the door".

TPR (Total Physical Response) has their characteristic, touch something or do something. TPR usually use for the beginner, because they have to know and memorize the simply vocabulary. So, TPR is the one of favorite method. The purpose of TPR method is having students enjoy their experience in learning to communicate in a target language.

There are many techniques in TPR, such as:

1. Using command to direct behavior. Ex: to clarify the meaning and simply memorize.

2. Role reversal. Ex: Student command their teacher & classmates to perform.
3. Action sequence. Ex: Giving some connected commands.

B. Communicative Language Teaching

Communicative Language Teaching (CTL) presumes that students want to communicate and it enables them to do just that. Lessons often start with the simultaneous reading and hearing of a dialogue based on a real-life everyday situation, such as greeting a friend or buying something in a shop. Initially, there is no translation and no explanation of the structures involved, although the method does not exclude native language aids if that is what the students feel they need for a particular point. There is total reliance on situations and the students' desire to communication within those situations.

This method appears because the situation is still found only teachers who play an active role in the classroom, while the student passive. So, the method appears to improve the method of teaching before. The purpose is making students being able to use the language in social context, or using target language in the real social conversation.

The characteristics of this method are communicated in the classroom. Students and teacher being active during the lesson, there is a questions and answers. This method usually called as an umbrella approach, because this method is flexible, it can combine with other method. With this method, we also can integrate all skills in target language.

There are many techniques in CLT, such as:

1. Using authentic materials – genuine ones to expose students to natural language in a variety situation
2. Discussion
3. Language games
4. Role play

C. Natural Approach

Natural Approach is more of an attempt to provide the theoretical description of the processes involved in second-language acquisition. The importance of listening comprehension and delayed speech production is stressed

in Natural Approach. Production is delayed until the students are believed to be ready.

NA defines itself as a method for developing basic personal communicative skills, oral and written. Goal of the method would include the ability to engage in simple conversational exchanges, to understand announcement in public places, to read newspaper, write personal letter, etc. Like most other speech-based method, teacher of the Natural Approach make ample use of pictures, objects, and the situation in the classroom as the source of language input.

The natural approach is a method of language teaching developed by Stephen Krashen and Tracy Terrell in the late 1970s and early 1980s. It aims to foster naturalistic language acquisition in a classroom setting, and to this end it emphasizes communication, and places decreased importance on conscious grammar study and explicit correction of student errors. Efforts are also made to make the learning environment as stress-free as possible. In the natural approach, language output is not forced, but allowed to emerge spontaneously after students have attended to large amounts of comprehensible language input.

The natural approach has become closely associated with Krashen's monitor model, and it is often seen as an application of the theory to language teaching. Despite this perception, there are some differences, particularly Terrell's view that some degree of conscious grammar study can be beneficial. The syllabus focuses on activities which Terrell sees as promoting subconscious language acquisition. He divides these activities into four main areas: content activities, such as learning a new subject in the target language; activities which focus on personalizing language, such as students sharing their favorite music; games; and problem-solving activities.

6. Krashen's Theory

Stephen Krashen (University of Southern California) is an expert in the field of linguistics, specializing in theories of language acquisition and development. Much of his recent research has involved the study of non-English and bilingual language acquisition. During the past 20 years, he has published

well over 100 books and articles and has been invited to deliver over 300 lectures at universities throughout the United States and Canada.

Krashen's widely known and well accepted theory of second language acquisition has had a large impact in all areas of second language research and teaching since the 1980s.

Summary of Krashen's Theory of Second Language Acquisition

Krashen's theory of second language acquisition consists of five main hypotheses:

- the Acquisition-Learning hypothesis,
- the Monitor hypothesis,
- the Input hypothesis,
- the Natural Order hypothesis,
- and the Affective Filter hypothesis.

The Acquisition-Learning distinction is the most important of all the hypotheses in Krashen's theory and the most widely known and influential among linguists and language practitioners.

According to Krashen there are two independent systems of second language performance: 'the acquired system' and 'the learned system'. The 'acquired system' or 'acquisition' is the product of a subconscious process very similar to the process children undergo when they acquire their first language. It requires meaningful interaction in the target language - natural communication - in which speakers are concentrated not in the form of their utterances, but in the communicative act.

The 'learned system' or 'learning' is the product of formal instruction and it comprises a conscious process which results in conscious knowledge 'about' the language, for example knowledge of grammar rules. According to Krashen 'learning' is less important than 'acquisition'. (Veja o texto ao lado e também outra página em português sobre Acquisition/Learning).

The Monitor hypothesis explains the relationship between acquisition and learning and defines the influence of the latter on the former. The monitoring function is the practical result of the learned grammar. According to Krashen, the acquisition system is the utterance initiator, while the learning system performs the role of the 'monitor' or the 'editor'. The 'monitor' acts in a planning, editing and correcting function when three specific conditions are met: that is, the second

language learner has sufficient time at his/her disposal, he/she focuses on form or thinks about correctness, and he/she knows the rule.

It appears that the role of conscious learning is somewhat limited in second language performance. According to Krashen, the role of the monitor is - or should be - minor, being used only to correct deviations from 'normal' speech and to give speech a more 'polished' appearance.

Krashen also suggests that there is individual variation among language learners with regard to 'monitor' use. He distinguishes those learners that use the 'monitor' all the time (over-users); those learners who have not learned or who prefer not to use their conscious knowledge (under-users); and those learners that use the 'monitor' appropriately (optimal users). An evaluation of the person's psychological profile can help to determine to what group they belong. Usually extroverts are under-users, while introverts and perfectionists are over-users. Lack of self-confidence is frequently related to the over-use of the 'monitor'.

The Input hypothesis is Krashen's attempt to explain how the learner acquires a second language – how second language acquisition takes place. The Input hypothesis is only concerned with 'acquisition', not 'learning'. According to this hypothesis, the learner improves and progresses when he/she receives second language 'input' that is one step beyond his/her current stage of linguistic competence.

7. Modern Method

Modern derived from a latin word "nowadays". The modern term is primarily intended for system change of life (in a broader context: civilization), i.e. from a civilization has long been a civilization that is new. While the Method (method), derived from the *Greeka, metha*, (through or past), and *hodos* (ways), so the method is the path or way to go through to achieve a particular goal.

According to the Dictionary of the Indonesian Language has a way of working is the method that facilitates the implementation of an activity in order to achieve the specified goal. So the modern method is a method that completes the lack of previous methods.

A. Cooperative Learning

Cooperative learning is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject.

Technique of Cooperative Learning

1. Think Pair Share

Think-Pair-Share allows for students to contemplate a posed question or problem silently. The student may write down thoughts or simply just brainstorm in his or her head. When prompted, the student pair up with a peer and discusses his or her idea(s) and then listens to the ideas of his or her partner. Following pair dialogue, the teacher solicits responses from the whole group.

2. Jigsaw

Students are members of two groups: home group and expert group. In the heterogeneous home group, students are each assigned a different topic. Once a topic has been identified, students leave the home group and group with the other students with their assigned topic. In the new group, students learn the material together before returning to their home group. Once back in their home group, each student is accountable for teaching his or her assigned topic—is used with narrative material in grades 3-12

3. Reciprocal Teaching

It is a cooperative technique that allows for student pairs to participate in a dialogue about text. Partners take turns reading and asking questions of each other, receiving immediate feedback. Such a model allows for students to use important metacognitive techniques such as clarifying, questioning, predicting, and summarizing. It embraces the idea that students can effectively learn from each other.

4. STAD (or Student-Teams-Achievement Divisions)

Students with varying academic abilities are assigned to 4- or 5-member teams in order to study what has been initially taught by the teacher and to help each reach his or her highest level of achievement. Students are then tested individually. It is used in grades 2-12.

B. Task-Based Approach

Task-based Approach (TBA) or it called method that using task or project for explains the lesson. So this method is usually begun with some task or assignment to students in the classrooms. The characteristics of TBA are the project that will do in the last of lesson.

There are many techniques in TBA, such as:

1. Jigsaw tasks : these involve learners combining different pieces of information to form a whole
2. Information-gap tasks: one student or group of students has one set of information and another student or group has a complementary set of information.
3. Problem-solving tasks: students are given a problem and a set of information.
4. Decision-making tasks: students are given a problem for which there are a number of possible outcomes and they must choose one through negotiation and discussion.
5. Opinion exchange tasks: learners engage in discussion and exchange of ideas, they do not need to reach agreement.

Task-based instruction (TBI) focuses on the use of authentic language and on asking students to do meaningful tasks using the target language. Classroom is organized as a sequence of tasks and There must be final tasks to be done – real world problem solving.

Techniques of Task Based Approach

1. Information-gap activity,

Which involves a transfer of given information from one person to another – or from one form to another, or from one place to another – generally calling for the decoding or encoding of information from or into language. One example is completing a tabular representation with information available in a given piece of text. The activity often involves selection of relevant information as well, and learners may have to meet criteria of completeness and correctness in making the transfer.

2. Reasoning gap

Reasoning-gap activity involves deriving some new information from given information through processes of inference, deduction, practical reasoning, or a perception of relationships or patterns. The activity necessarily involves comprehending and conveying information, as in information-gap activity, but the information to be conveyed is not identical with that initially comprehended.

3. Opinion gap

Opinion-gap activity involves identifying and articulating a personal preference, feeling, or attitude in response to a given situation.

8. Goal Must Be Considered in the Selection of a Method.

It is safe to say that students will learn something from any method. No method is total failure because, in all method, students are exposed to the data of a second –language and are given the opportunity to learn the language. However, to the disappointment of all, there is no magic method. No method has been devised that will permit people over the age of 12 or so to learn a second-language effortlessly as they did their native language. Still, teachers can do much to make the experience for a learner rewarding and enjoyable, whatever method is employed.

In judging the relative merits of teaching method, one must consider goals. Just what is the purpose of having people learn a second-language? If the ability to speak and understand a second-language is the primary goals, then the speech based method would be best for them, if in other hand, the ability to read and write is the primary goal, and then Grammar-Translation should be the method of choice.

The goals of a nation are important in determining second-language teaching programs in the school system. One country may wish to promote the study of reading and translation of scientific material of a second language.

A teacher who can afford the luxury of selecting a method might well consider putting together a personal method of a second-language teaching. For example, with both speech and literacy as objectives, one could adopt Communicative Language Teaching and then supplement it with physical activities (from Total Physical Respond), pattern practice drills (from Audio

Lingual Method), and explication and translation (from Grammar-Translation Method). Most methods will have some feature which can be of benefit to the language learners.

CONCLUSION

Characterizing the Essentials of Methods

Language-teaching methods may be conveniently characterizes according to five principal dimensions (Steinberg, 1993):

1. Language focus: Speech Communication vs. Literacy
2. Meaning Learning: Direct Experience vs. Translation
3. Grammar Learning: Induction vs. Explication
4. Psychological Orientation: Mentalist vs. Behaviourist
5. Linguistic Orientation: Mentalist vs. Structuralist.

Traditional Method

- a. Grammar-Translation Method
- b. Natural Method
- c. Direct Method
- d. Audio lingual Method

Chomskyan Revolution

He argued for grammar that required mind and mental operation: the very sort of entities which Behaviourist psychologists and Structural linguistic had opposed and had founded their arguments against. Chomsky convincingly demonstrated the adequacy of his notions.

Method which Appear then Disappear

- a. Cognitive Code
- b. Community Language Teaching
- c. Silent Way
- d. Suggestopedia
5. Contemporary Method
 - a. Total Physical Respond
 - b. Communicative Language Teaching
 - c. Natural Approach

6. Modern Method

a. Cooperative Learning

b. Task-Based Approach

7. The Goal Must Be Considered in the Selection of a Method

It is true that students will learn something from any method; no method is total failure because, in all method, students are exposed to the data of L2 and are given the opportunity to learn the language.

We have to consider the purpose learn L2, if the ability to speak and understand a L2 is a goal, CLT would need the best for them, or if the ability to read and write is a goal, GTM should be the method of choice.

A teacher who can afford the luxury of selecting a method might consider putting together a personal method of second-language teaching. Most method will have the same features which can be of benefit to the learner.

Meeting 12

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore Bilingualism, Cognition, transfer and Learning Strategy

Topics: Bilingualism, Cognition, transfer and Learning Strategy
Varieties, Transfer effects, and strategies

Indicator of Achievement: Students can describe, explore, and discuss Bilingualism, Cognition, transfer and Learning Strategy

CHAPTER IX

Bilingualism, Cognition, transfer and Learning Strategy Varieties, Transfer effects, and strategies

BACKGROUND

Is it a good idea to become bilingual? Just what is a bilingual? Will a second language effect one's intelligence? Should a young child learn a second language? When should that be? How might learning a second language be effected by the first? These are questions which people and scientists commonly raise. We shall attempt to provide answers that offer some insight into these and other issues.

Some people worry that learning more than one language is bad for a child, but nothing could be further from the truth. In fact, there are a lot of advantages to knowing more than one language. First, many linguistics feel that knowing a second language is actually benefits a child's cognitive development. Second, if the child comes from a family that has recently immigrated to the U.S. the family may speak a language other than English at home, and they may still have strong ties to their ethnic roots (first language). In this case, being able to speak the language of the family's ethnic heritage may be important for the child's sense of cultural identity.

DISCUSSION

A. Definition of bilingualism

Put simply, bilingualism is the ability to use two languages. However, defining bilingualism is problematic since individuals with varying bilingual characteristics may be classified as bilingual. Definitions of bilingualism range from a minimal proficiency in two languages, to an advanced level of proficiency which allows the speaker to function and appear as a native-like speaker of two languages. A person may describe themselves as bilingual but may mean only the ability to converse and communicate orally. Others may be proficient in reading in two or more languages (or bi-literate). A person may be bilingual by virtue of having grown up learning and using two languages simultaneously (simultaneous bilingualism). Or they may become bilingual by learning a second language sometime after their first language. This is known as sequential bilingualism. To be bilingual means different things to different people.⁶⁵

There are three types of bilingualism are usually used by researchers to describe bilingualism children:

- a. Simultaneous bilingualism: learning two languages as “first language”, when a child acquires two languages simultaneously, for example they are raised by parents speaking more than one language.
- b. Receptive bilingualism: being able to understand two languages but express oneself in only one. For example, many children in Chinese or Mexican immigrant household hear English on TV, in store and so on, but use their home language in everyday communication. When they enter kindergarten, these children are likely to make rapid progress in English because their receptive language skills in English have been developed.
- c. Sequential bilingualism: learning one language after already established a first language. This is the situation for all those who become bilingual as adults, as well as for many who become bilingual earlier in life.

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http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0CD8QFjAB&url=http%3A%2F%2Fwww.naldic.org.uk%2FResources%2FNALDIC%2FInitial%2520Teacher%2520Education%2FDocuments%2FB1.pdf&ei=QwSAU7zxM8nd8AWP5ILIDg&usg=AFQjCNFgnu0N8RLHIGvSXndEiOLDmJuJmg&sig2=Z0OHgsOd3CYYLUW_VUiL9w&bvm=bv.67720277,d.dGc

SEQUENTIAL AND SIMULTANEOUS LEARNING SITUATIONS

There are essentially two conditions according to which a person may become bilingual: the two languages can be acquired (1) sequentially, such as the second language being learned later at school, or (2) simultaneous, such as where the young child is exposed to two different languages in the home at the same time. Simultaneous learning can be learned by nature and children only. On the other hand, sequential learning can occur with both children and adult.

A. Sequential Learning of Two Languages

The sequential kind of bilingual situation can occur for a child when a child learns a second language at school.

First language in the home, second language in the community

Sequential acquisition of the second language may take place at a variety of ages and under a variety of situations. For example, an immigrant couple who have come to America from China with their 4 years old daughter. They send their daughter to an English-speaking pre-school but they continue to speak only Chinese at home. By the time the child is 5 years old, she speaks English fluently with her playmates and teachers while continuing to speak Chinese at home with her parents. The child has learned two languages, Chinese and English sequentially. From this point on, the learning of the two languages will be occurring simultaneously.

Development of a second language

In sequential bilingualism young children pass through four common stages (Tabors & Snow, 1994): (1) Children attempt to use the language that used at home with other children in the wider community where a different language is used. As they begin to understand that others do not understand their home language, they give up trying to communicate in the home language outside of the home. They are *silent*. (2) They leave their home language in favor of communication through *gesture*. At this point, children are beginning to comprehend some of the second language. (3) The children begin to use the second language in ways similar to children learning a first language. They *produce abbreviated utterances* without function words as in

the telegraphic speech of first-language learners. (4) Finally, they begin to *produce grammatical utterances* in appropriate situations.

Young children can learn a second language faster than the first language.

It is uncommon to hear of a 4 years old child picking up a language in six months in foreign country. Theoretically, it must be the case that *the learning of a second language is facilitated by the prior learning of the first language.*

B. Simultaneous Learning

One person speaks one language only or one person speaks two languages

There are two basic situations in which a child may learn two (or more) languages at the same time. (1) Each person speaks one language only to the child: *One person-one language (1P-1L)*. or (2) Each person speaks the same two languages to the child: *One person-two languages (1P-2L)*.

The 1P-1L situation is better

The child in the 1P-1L situation will learn the two languages faster than the child in 1P-2L situation and attain a higher level of proficiency. The difference in speed of learning between the 1P-1L and 1P-2L situations would be significant. Overall, it would seem that 1P-1L situation is better since learning may be faster and less mixing might occur.

A simultaneous trilingual case (1P-1Lx3)

For example, in the family, the time of the birth of each of their two sons, who are about three years apart in age, the mother spoke only Japanese and the father spoke only English. To add to the situation, there was a grandmother who spoke only Russian to the children. The result, after three years later, each of the boys turned becoming trilingual in English, Japanese and Russian.

Developmental stages in bilingual language learning

Children learning two first languages simultaneously follow the same route as other children learning their first language (Lyon, 1996). Bilinguals move through the stages of one-word utterances, two and three-word utterances, then increasing complexity with morpheme acquisition

and complex sentences. In the two and three-word stages some mixing might occur between the two languages, especially for 1P-2L learners.

As with first language learning, when the child often incorrectly extends the meaning of a word to include too many objects, the bilingual child may also over generalize in one or both of the languages.

C. Consciousness and Learning

Whether the child must be conscious that two different languages are being learned in order to make progress is virtually impossible to determine. The child has acquired some degree of fluency in languages; even very young children may indicate a kind of awareness of knowing two languages.

Ianco-Worrall (1972) conducted a brilliant piece of research in which she matched bilingual and monolingual children for socio-economic class grade in grade school, age, gender, and IQ. Bilingual children more understand than monolingual children that a spoken word has no real relation to an object and is only an arbitrary name for it.

B. Varieties of Bilingualism

1. Any Two Languages: speech, sign, or written

Most of us, without a second thought, would think of a bilingual as a person who is able to speak and understand two languages (languages like English and Russian, or Chinese and Arabic) and for the most part, we would be right. Beyond this, thought, there might be varieties of bilinguals which would strike many of us odd at first. On second thought we would realize that there are people who, besides an ordinary speech-type language, also know a sign language, such as British Sign Language or Swedish Sign Language, which are true language.

Because language in all its complexity can be acquired through a variety of modalities – sound (speech), sight (writing), and visual motion (sign)- an adequate concept of a bilingual should allow for any of these realizations. Thus, we may say that a person is bilingual if he or she knows:

- Two languages in the *same modality*, for example, two speech-based languages such as spoken English and spoken German, or two sign-based languages such as American Sign Language and Japanese Sign Language.

- Two languages based on *different modalities*, e.g. spoken German and American Sign Language, or spoken French and written Sanskrit.

Proficiency in the second language

Proficiency in the second language may be evaluated with respect to a variety of variables, including knowledge of syntax, vocabulary, and pronunciation (signing or writing for non-speech). Just how much of a second language does one have to know before one can be considered proficient in it? While there are standardize tests available for many languages, researchers typically establish their own criteria study by study.⁶⁶

Bidialectalism

One thing I found of interest that I had never thought of before was bidialectalism. Obviously bi most times refers to two and so this means having more than one dialect. “Since the 1960s in the US, bidialectalism has been seen as an educational goal for vernacular English speakers in the US” (Hazen). As our country develops it seems that we want to be part of more things. So it really is not a surprise that people want to have more than one dialect. For some groups it would be easier than others. If you grew up in a town bordering two dialects or lived in an area with one dialect and then moved to another, it would be easy to have two. It seems that it would be a challenge if you were older because you have to learn the rules of the dialect and forget the rules of your old dialect, while at the same time be able to remember later when you want to use it.⁶⁷

We probably would not want to regard as bilingual someone who knows two dialects of the same language, e.g. British Yorkshire English and American Midwestern English.⁶⁸

C. The Advantages of Being Bilingual

Most children have the capacity and facility to learn more than one language. Researchers say that there are advantages to being bilingual. These advantages might include;

- Being able to learn new words easily

⁶⁶ Streinberg, Danny D, et al. 2001. Psycholinguistics: language, mind, and world (second edition). England. P 218-219

⁶⁷ <http://languagejournal-beabout.blogspot.com/2011/02/bidialectism.html>

⁶⁸ *Op cit*, p 219.

- Being able to use information in new ways
- Good listening skills
- Connecting with others.⁶⁹

Cognition

Cognition is a term for thinking process, how human see, remember, learn and thinking about information. Cognition was understood as mental process because cognition was mirroring thoughts and can't be saw directly. Therefore, cognition can't be measured directly, but through attitude the cognition can be measured.

Language is a very significant cognitive process in human. Language ability is a result from cognitive process. Language structure is very influenced by thinking structure's human (cognition).

Bilingualism can increases or improve cognitive ability. Bilingual ability can play important role in brain's functions. Bilinguals can develop a creative thinking and thinking ability more flexible. Bilingualism has positive effects in intellectual's development. A new research showed that bilinguals are better in IQ test than monolinguals.

D. Transfer Effect of Language 1 on The Learning of Language 2

The nature of the similarities relationship between the first and the second language will determine the rate of learning. For example, after having learned English as a first language, learning French would not be as difficult as would learn Japanese. There are differences between English and French syntax but these differences are small in comparison to the monumental differences between the syntax of English and Japanese.

To the extent that two languages have similarities, such as position of the article (as in English and French), gender (designation of nouns as masculine and feminine, as in French and Italian) obligatory marking of nouns for plurality, and similar syntactic structure (as in English and French), there will be greater facilitation. Thus, the higher similarity of languages, the faster the students or people learn those languages.

⁶⁹ <http://www.asha.org/public/speech/development/The-Advantages-of-Being-Bilingual/>

Japanese speaker would have some difficulties in learning English as well as English speaker would have some difficulties in learning Japanese because the syntax of these two languages is different. We may conclude that the greater the similarity between two languages in terms of their syntax, vocabulary, and sound system, the more rapid the rate of acquisition in the two languages.

If our first language has many similarities in syntax, grammar, vocabulary, sound system with our second language it called positive effects. While our first language didn't have any similarities in syntax, grammar, vocabulary, sound system with our second language, it called negative effects.

1. First-Language and Second-Language Relations Affect Learn ability

What one's first language is will affect one's learning of the second language. Thus, not every second language will be learned at the same rate. The nature of the similarity relationship between the first and second languages will determine the rate of learning. For example, after having learned English as a first language, learning French would not be as difficult as would learning Japanese. There are differences between English and French syntax but these differences are small in comparison to the monumental differences between the syntax of English and Japanese.

To the extent that two languages have similarities, such as the position of the article (as in English and French), gender (designation of nouns as masculine or feminine, as in French and Italian), obligatory marking of nouns for plurality, and similar syntactic structure (as in English and French), there will be a greater facilitation.

There can be significant similarities in terms of vocabulary, as well. Just looking over the past few sentences we can note shared vocabulary such as: vocabulary/ *vocabulaire*; similarity/ *similarité*; monumental/ *monumentale*; and comparison/ *comparaison*. A learner would not be starting at zero as he or she would if learning Japanese. (Although Japanese has many borrowed words from English, the nature of Japanese pronunciation and writing tends to obscure them).

The other hand, English speakers would not have as much trouble with Chinese syntax as they would with Japanese syntax because Chinese syntax is more similar to that of English. Yet, when it comes to the sound system, Chinese,

with its tones, is so different from English and Japanese that the English speaker will find the Japanese sound system easier to handle.

Thus, we may conclude that the greater the similarity between two languages in terms of their syntax, vocabulary, and sound system, the more rapid the rate of acquisition in the two languages. If we had to scale the importance of these variables, we would give syntax and then vocabulary the greater weight. Good pronunciation cannot compensate for poor syntax or vocabulary. Good syntax with good vocabulary is a combining for second-language learning.

2. Facilitation Occurs even between Very Different Languages

It is clear that the knowledge one has of one's first language may help the learning of a second language even when two languages are very different. The fact that a 5-year-old child in a foreign environment (a New York child moving to Tokyo) can often learn a second language in less than a year which is much faster than the child's learning of its first language.

The realization of such facts can enable us to explain the rapid learning of second languages, even, when the languages are quite different. There is a commonality that facilitates language learning even though it may not be immediately apparent. The reason that adults are not able to make such rapid gains as children is, in our view, due to the rich natural situation for the child and its excellent memory as opposed to the relatively impoverished natural situation for adults along with their reduced memory ability.

3. Second Language and Third Language Intrusions When Learning Another Language

One of the authors is a native speaker of English who learned French as a second language in school. When, late in life, he started to learn Japanese, French words would often come to mind even though it was a language with which he had not been in contact since leaving Canada for the USA some 15 years earlier. This French interference with Japanese continued intermittently for almost a year but then disappeared completely as his Japanese improved. Yet when he took a trip to France a few years later, to his surprise his newly learned Japanese unexpectedly came to mind when he tried to speak French.

It would seem that what is happening here is that when one wants to produce something in a new language, a more established second (or third) language may be accessed.

4. Is One First Language More Difficult Than Another?

One often hears second language learners complain that such-and-such language is more difficult than any other language. Here in Japan, the American or European foreigner is forever saying that Japanese is most difficult language that he or she has ever tried to learn. They find a greater difficulty in learning Japanese as compared to their experience in the past of learning languages more similar to English. When Japanese hear their complaining, they tend to draw the conclusion that Japanese is inherently more difficult than other language. They forget their own difficulty in learning English. They are unaware that it is the relationship between languages that causes most people to make the erroneous assertions that they do.

The fact is, as far as can be determined, no language is inherently more difficult than any other. Children around the world learn their native language at around the same age. The basics are learned by about 4 or 5 and the more intricate aspects are learned later. Children everywhere can carry on a conversation in their native language by the age 4. No language has been found which is more complex than any other, and there is no such thing as a primitive language, as modern linguistics research shows. Linguistics agrees that no one language is more complex overall than any other language, and psycholinguistics agree that no one language is easy to learn than any other language. Differences in the difficulty of learning a second language stem from the similarity relation which obtain between that second language and the first language, in terms of syntax, vocabulary and pronunciation.

E. Strategies for Second Language Production

1. The First-Language Strategy and The Second Language Strategy

Because errors are easy to observe and are good indicators of a person's level of second language knowledge, there have been many good studies done on errors. Rather most errors are systematic, being the result of the application of what we shall call the 'first language strategy' and the 'second language strategy'.

Consider the following errors made by Japanese university students while writing answers to an examination question.

1) *Now Tom happy is.

This sentence follows Japanese constituent order with the verb placed at the end.

2) *Afterwards they ate the dinner

The article is improperly inserted before the mass noun 'dinner'. This was no previous reference to a specific dinner.

3) a. * John Mary met theatre at yesterday. (Japanese order)

Here the Japanese Subject + Object + Verb constituent order is correct but the adverbials are improperly placed.

a. Yesterday theatre at John Mary met

Is the proper form in Japanese (Adverbials + Subject + Object + Verb).

Let us now discuss these sentences and the cause of the problems which they raise:

1) *Now Tom happy is. Interference

2) Afterwards they ate the dinner. Second language strategy

3) a. John Mary met theatre at yesterday. (In Japanese) first language strategy

2. Strategies for Sentence Production and Communication

Strategies that are used for the purpose of keeping the conversation going are known as 'communication' strategies (Faerch & Kasper, 1983; Kasper & Kallerman, 1997). Communication strategies may have an effect on learning since the more the learner speaks the greater linguistic input the learner will receive. This type of strategies includes overgeneralization, in which a rule of the second language is applied in inappropriate contexts such as the definite article being used with 'dinner' in the example above.

Communication strategies may also involve using words or phrase from the first language when they are unknown in the second language (code switching), or coining new words such as 'airball' for 'balloon' (Varadi, 1983).

3. Strategies for Becoming a Better Second-Language Learner

Learning strategies which will assist in the acquisition of a second language is a different topic from the one just has discussed. Thus, for example,

according to Rubin (1981) the strategies used by successful language learners include:

- Verification: checking to see if their hypotheses about the language are correct
- Inductive processing: creating hypotheses about the second language based on one's second or first language knowledge
- Deductive reasoning: using general logic in problem solving
- Practice : such as repetition and imitation
- Memorization: including mnemonic strategies and repetitions for the purpose of storage and retrieval
- Monitoring: being alert to the making of errors and paying attention to how one's message is received by the listener.⁷⁰

CONCLUSION

Bilingualism is the ability to use two languages. However, defining bilingualism is problematic since individuals with varying bilingual characteristics may be classified as bilingual. Definitions of bilingualism range from a minimal proficiency in two languages.

Varieties of Bilingualism:

1. Any Two Languages: speech, sign, or written

we may say that a person is bilingual if he or she knows: (1) Two languages in the *same modality*, for example, two speech-based languages such as spoken English and spoken German, or two sign-based languages such as American Sign Language and Japanese Sign Language. (2) Two languages based on *different modalities*, e.g. spoken German and American Sign Language, or spoken French and written Sanskrit.

- The Advantages Of Being Bilingual :

1. Being able to learn new words easily
2. Being able to use information in new ways
3. Good listening skills
4. Connecting with others

- Transfer Effect of Language 1 on The Learning of Language 2

⁷⁰ Streinberg, Danny D, et al. 2001. Psycholinguistics: language, mind, and world (second edition). England. P 233-238.

1. First-Language and Second-Language Relations Affect Learn ability
2. Facilitation Occurs even between Very Different Languages
3. Second/Third Language Intrusions When Learning Another Language
4. Is One First Language More Difficult Than Another?
 - Strategies for Second Language Production
 1. The First-Language Strategy and The Second Language Strategy
 2. Strategies for Sentence Production and Communication
 3. Strategies for Becoming a Better Second-Language Learner

Meeting 13

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore

Topics: PART 3: Language, Mind, and Brain

Where does language knowledge come from?

- How do we acquire knowledge
- Mentalism vs. Materialism
- Behaviorism (B.F Skinner)
- Innateness /Universal Grammar (Chomsky)
- Cognitive (Piaget)
- Interaction (Bruner)

Indicator of Achievement: Students can describe, discuss, and explore the source of language knowledge

CHAPTER X

Where does language knowledge come from?

BACKGROUND

A. How do we acquire knowledge

You say the world is not flat. How do you know that this is true? You say you know what a perfect circle is. Did someone tell you? How do you know that what they told you is true? Can your measurement be perfect? You say God exists or does not exist. How do you know this? Do ideas exist? Do we have minds and are there ideas in our minds? We have knowledge and learning but what is it and where did it come from?

The study of nature and origin of knowledge is a branch of philosophy called 'epistemology'. In psycholinguistic, we too are interested in epistemology since we are concerned with how a certain kind of knowledge, language knowledge, is acquired.

Does the human infant use intelligence or innate language ideas, or both? If it is the use of intelligence, are infants then born with this intelligence or do they have to develop it? And if it is the use of innate language ideas, what are those ideas and how are they activated so as to enable the infant to learn

language? Or is it the case that neither is relevant and a study of behavior conditioning or functions can provide the explanation?⁷¹

DISCUSSION

A. MENTALISM VS MATERIALISM

a. *Mentalism*

Watson (1924) regarded mind and consciousness as religious superstitions which were irrelevant to the study of psychology. For him, there was thus only one kind of stuff in the universe, the material or matter. The study of physiology is the study of psychology.

Such a philosophy has its origins in the ancient Greeks (Epicurus, the Stoics) and with La Mettrie in eighteenth-century France. Some recent philosophical Functionalists take this view a step further and grant mental characteristic, including consciousness, to any inanimate device so long as there is identity of function with that of humans (Chalmers, 1996). Incidentally, we use *philosophical* to qualify 'Functionalist' here because contemporary *linguistic* Functionalism is an unrelated *Mentalist* movement (Dik, 1991; Bates, 1979).

Other behaviorists, like Skinner (1971) and Osgood (1971), might allow that mind exists (a 'Yes' to Question 2) but they would give it no power and certainly would not study it (a 'No' to Question 3 and 4). The philosophical Behaviorist theories of Ryle (1949, p. 199) and Quine (1960), pp. 34-5 take a similar view, i.e. that the object of psychological study should not be mind but bodily disposition for behaving: mind and mental processes can be reduced to the physiological functioning of the body.⁷²

Despite the diversity of these anti-Mentalist theorists, they hold one principle in common: they argue for the study of the physical body (including the brain) where they can relate bodily processes and functioning of the body to situations and events in the physical environment.

b. *Mentalism*.

In opposition to the materialistically inclined theorists noted above, the mentalist holds that mind is of a different nature from matter. Thus, there are

⁷¹ Rodman Fromkin, et.al. *An Introduction to Language* (Australia: Harcourt Brace and Company: 1990) page. 276

⁷² Rodman Fromkin, et.al, *op-cit* page-278

qualitatively two kinds of substances in the universe, the material and the mental. Such a doctrine goes back to the ancient Greeks, such as Aristotle, through Locke and Descartes, up to the present day, including such theorists as Chomsky and Searle.

For the latter theorist, the understanding of mind and consciousness is essential to the understanding of the intellectuality of human being, particularly language. Most modern-day psycholinguists and linguists are mentalist, placing their emphasis as they do on the study of mind and the interaction of body and mind in order to understand the processes of language and its learning by children.⁷³

Two basic mind and body relationships with respect to environmental stimuli and behavioral responses in the world are: the *Interactionist* and the *Idealist*. We characterize these two views as follows.

1. Interactionism

Body and mind are seen as interacting with one another such that one may cause or control events in the other. An example of body affecting mind would be the activation of a pain receptor in the body after being stuck with a pin, resulting in a feeling of pain being experienced in the mind. An example of mind affecting body would be when a person doing trimming in the garden decides, in the mind, to cut down a certain plant, and then does so. According to this interactionist view, which is similar to the one proposed by Descartes (1641, Meditation VI), persons behave the way they do as the result of either the body acting alone (as in breathing, and the circulation of the blood or lifts one's hand).

Thus, a bodily response may be the result of the body acting alone in pure physiological functioning or in concert with the mind. Input stimuli may affect the mind through the body. This conception, it may be noted, is neutral with respect to the issue of Free Will; it does not specify whether the mind with its consciousness operates deterministically according to its own laws.

Incidentally, the interactionist would argue that is because of the two basic types of 'stuff' in the universe, the material and the mental, that sentences such as 'The idea of square is purple' and 'Happiness weighs 3 grams' are meaningless if

⁷³ Rodman Fromkin, et.al *op-cit* page-278

taken literally. For in these sentences physical attributes (weight and colour) of the material world are attributed to non-physical mental entities (idea and mental state) of the mental world.

2. (Subjective) idealism

Certain Mentalists, such as Plato, Berkeley in the early eighteenth century, and Hegel in the nineteenth century, took the radical position that *mind is the only stuff* of the universe. According to this radical Mentalist view, (*subjective*) *Idealism*, the body and the rest of the physical world are mere constructions of the mind. The world exists only in the mind of conscious individuals, with only reality. For Berkeley all minds were part of the mind of God. In a sense, subjective Idealism is at the other extreme from radical Materialism. While for the Materialist only matter exists, for the Idealist, only the mental exists.

Nowadays, there is little interest in Idealism. Rather, Interactionism is the principal notion of Mentalism being advocated (Searle, 1997). It is this notion of Mentalism that we are concerned with, especially as it is realized in the competing doctrines of Empiricism and Rationalism.⁷⁴

B. BEHAVIORISM (B.F.SKINNER)

Behaviorism (or **behaviourism**), is an approach to psychology that combines elements of philosophy, methodology, and theory. It emerged in the early twentieth century as a reaction to "mentalist" psychology, which often had difficulty making predictions that could be tested using rigorous experimental methods. The primary tenet of behaviorism, as expressed in the writings of John B. Watson, B. F. Skinner, and others, is that psychology should concern itself with the observable behavior of people and animals, not with unobservable events that take place in their minds. The behaviorist school of thought maintains that behaviors as such can be described scientifically without recourse either to internal physiological events or to hypothetical constructs such as thoughts and beliefs.⁷⁵

Behaviorism is a worldview that assumes a learner is essentially passive, responding to environmental stimuli. The learner starts off as a clean slate (i.e. *tabula rasa*) and behavior is shaped through positive reinforcement or negative

⁷⁴Rodman Fromkin, et.al *op-cit.* page. 279

⁷⁵ <http://Behaviorisme Innateness/Behaviorism - Wikipedia, the free encyclopedia.html>

reinforcement. Both positive reinforcement and negative reinforcement increase the probability that the antecedent behavior will happen again. In contrast, *punishment* (both positive and negative) decreases the likelihood that the antecedent behavior will happen again. Positive indicates the application of a stimulus; Negative indicates the withholding of a stimulus. Learning is therefore defined as a change in behavior in the learner. Lots of (early) behaviorist work was done with animals (e.g. Pavlov's dogs) and generalized to humans.

Developed by BF Skinner, Radical Behaviorism describes a particular school that emerged during the reign of behaviorism. It is distinct from other schools of behaviorism, with major differences in the acceptance of mediating structures, the role of emotions, etc.⁷⁶

Starting in 1959 (Chomsky, 1959), Chomsky raised absolutely telling arguments against Behaviorism, arguments which brought Chomsky himself to a mentalistic conception of the relationship of language and mind. These arguments, which concern the fundamental language abilities of speakers, and for the sake of brevity we will not repeat them here. However, in addition to those language arguments, we would like to offer three arguments of our own. We believe that only are they valid but that they serve to exemplify the principles involved in the dispute between Mentalism and Behaviorism.⁷⁷

1. Anti-Behaviorist Argument No. 1: Insincerity and Lying

Suppose that I tell someone, 'I will pay you tomorrow.' Suppose, too that when the next day comes, I do not pay that person. Now, if while uttering the statement I never had any intention of paying the person, we would say that I had been insincere or had lied. However, if I did have the intention but simply forgot the next day to make the payment, we would not say that I had been insincere; I would have been forgetful or irresponsible. Thus, for exactly the same observable judgments may be made.

2. Anti-Behaviorist Argument No. 2: Speech must not be Based on Dreams

People are forever talking about dreams. (The bible describes some of the dreams one the Pharaohs of Egypt experienced thousands of years ago.) After they awake, why do they say (a type of behavior) specifically what they say? Given

⁷⁶ http://Behaviorism/Innateness/Behaviorism_Learning_Theories.html

⁷⁷ Rodman Fromkin, et.al *op-cit.* page. 282

that the Behaviorist denies that mental experience can affect behavior, he is stuck for an explanation. From a Mentalist point of view, however, a dream is a phenomenal experience in the mind which occurs while the person is asleep. On awakening the person can be aware of the experience and then can talk about the details of the dream.

3. Anti-Behaviorist Argument No. 3: Toothache and Dentist

Suppose that one of us authors (all male) has had a toothache and as a result talked to his wife about it and then went to the dentist. Now, how are his speech and his behavior of going to the dentist to be explained? We would say that he spoke to his wife and then went to the dentist because he felt a pain in his tooth and wanted to get relief from the pain. This is a mentalistic interpretation where a state of mind that of experiencing pain is the precipitating cause of what was spoken and the act of going to the dentist. The explanation is simple, if you believe in mind and that conscious experience can be acted on.

C. INNATENESS/ UNIVERSAL GRAMMAR (CHOMSKY)

The issues of whether, and to what extent, language may be innate in humans, and if there are any universal features underlying the bewildering multitude of human languages, have always been debated among the students of language. A few decades ago, a more coherent and explicit version of the innateness hypothesis was proposed with a professor of linguistics at MIT Noam Chomsky as the principal spokesman. This hypothesis postulates the existence in the human brain of a “Language Acquisition Device”, equipped from birth human brain contains a predefined mechanism or “Universal Grammar”, Universal Grammar is a linguistic theory developed by Noam Chomsky according to which all human languages are constructed on the same, abstract template, and that this explains why all normal speakers acquire their native language quickly and accurately.

Chomsky currently refers to the set of innate language ideas that comprises the language faculty as ‘Universal Grammar’, or UG, for short. This UG is universal because every human being is born with it; it is further universal because with it any particular language but it contains the essentials with which any particular grammar can be acquired. According to Chomsky, humans are born

with minds that contain innate knowledge concerning a number of different areas. One such area or faculty of the mind concerns language.

Universal grammar, then, consists of a set of unconscious constraints that let us decide whether a sentence is correctly formed. This mental grammar is not necessarily the same for all languages. But according to Chomskyian theorists, the process by which, in any given language, certain sentences are perceived as correct while others are not is universal and independent of meaning.

It is Chomsky's belief that such faculties of the mind are relatively independent of one another. Thus, he contends that UG alone is sufficient for the acquisition of language and that mathematical or logical knowledge is not needed in the acquisition process (MacIntyre, 1970). This contention is one basis for Chomsky's oft-repeated assertion that language acquisition is independent of intelligence and logic.

Since all humans share the same basic brain structures which house our language abilities and which are the result of natural selection, there are deep similarities between all languages, even if they don't show up in surface grammar. Chinese grammar is quite different from English grammar which is quite different from Finnish grammar. Yet any human is capable of learning any other human language. Someone born to Spanish-speaking parents will pick up Arabic as their first language (if appropriately exposed) just as easily as someone whose birth parents were native speakers of Arabic. Thus, the human brain contains the basic structures needed to learn any language: an inborn universal grammar. This inborn cognitive structure could also account for why mathematics and logic are universally understood and not culturally relative.

According to Chomsky, humans are born with minds that contain innate knowledge concerning a number of different areas. One such area or faculty of the mind concerns language. Chomsky currently refers to the set of innate language ideas that comprises the language faculty as 'Universal Grammar', or UG, for short. This UG is universal because every human being is born with it; it is further universal because with it any particular language but it contains the essentials with which any particular grammar can be acquired.⁷⁸

⁷⁸Rodman Fromkin, et.al *op-cit.* page. 291

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1. The role of experience

It is important to note that Universal Grammar Does not become functional or operational unless a person receives certain speech input from the world. Thus, for example, given English sentences as input, UG will construct a grammar of English in a child's mind. The acquisition of a particular grammar therefore involves the *interaction* of UG with experiences of the world. The role of language experience is to active UG so that it can develop the grammatical essentials of a grammar. These essentials involve certain principles and parameters which are universal. (They are discussed more fully in the next section.)

The Universal Grammar hypothesized by Chomsky is said to consist of a system of principles and parameters. There is a network of binary switches of parameters. There is a network of binary switches of parameters which get set by particular linguistic input. Certain language data will trigger the proper parameter-settings for another language. consider the *head* parameter, fo example. This parameter defines the position of the head within phrases, e.g. the head verb in verb phrases, and prepositions or postposition in pre- or postpositional phrases. There are two values for this parameter, head-first and head-last. If children are exposed to English, they will her speech and then create in their mind a head-first type of language by setting the parameter in the head-first binary mode, i.e. in a simple ON-OFF position.

However, if children are exposed to Japanese, which is head-last type of language, they will set the parameter in the head-last mode. Thus, for example, in comparing English, a head-first language, with Japanese, a head-last language, we have roughly the following sentence elements, where the heads are noted in italics:

ENGLISH : (the *boy* who is active) + (*likes* the apples) + (*on* the table)
 JAPANESE : (active is *boy*) + (table *on*) + (apples *like*)

In Japanese, 'boy', 'on', and 'like' follow in their phrases ('head-last'), while in English these heads go first ('head-first'). The problem for Chomsky's theory is that the setting cannot be ON and OFF at the same time. Parameter theory fails here (Flynn & Martohardjono, 1994).

D. COGNITIVE (PIAGET)

Jean Piaget was a Swiss psychologist who studied the development of cognitive processes from infancy through adulthood. Piaget often spoke about the relationship between cognitive development and language skills, but he was never exclusively focused on childhood language development. Piaget's theories have been extremely influential on psychologists studying early childhood.

According to psychologist Jean Piaget, children progress through a series of four key stages of cognitive development marked by shifts in how they understand the world. Piaget believed that children are like "little scientists" and that they actively try to explore and make sense of the world around them. Through his observations of his own children, Piaget developed a stage theory of intellectual development that included four distinct stages: the sensory motor stage, from birth to age 2; the preoperational stage, from age 2 to about age 7; the concrete operational stage, from age 7 to 11; and the formal operational stage, which begins in adolescence and spans into adulthood.

It's famous theory is 'Formative Cognitive' one sees that ability thinks that someone through gradual's changes and in a row whereabouts mental process becomes to get complex. And this flow emerging beginning on year 60 as phenomena of discontents to behavioristic concepts. Theoretically cognitivism, studying is changed perception and grasp that don't can ever most see as behavior. This movement no longer see man as creature that reacts quiescently to environmentally, but as creature that do ever bethink (Sapiens's gay). This cognitivism concept grows up clan thinking effects rationalisms. In this model someone behavior determined by perception and its grasp about situation which is

engaged aim and behavior change really be regarded by process bethinks internal one be become up to studying process.⁷⁹

Cognitive psychology is concerned with the way in which the human mind thinks and learns. Cognitive Psychologists are therefore interested in the mental processes that are involved in learning. This includes such aspects as how people build up and draw upon their memories and the ways in which they become involved in the process of learning.

In recent years cognitive psychology has had a considerable influence on language teaching methodology. In a cognitive approach, the learner is seen as an active participant in the learning process, using various mental strategies in order to sort out the system of the language to be learned.

In direct contrast to the behaviorist approach, the cognitive school of psychologists perhaps best epitomizes George Miller's famous description of psychology as 'the science of mental life'. However, the ways in which human thought has been investigated have themselves varied considerably. At one extreme are *information theorists* who have drawn the analogy of the brain as highly complex computer and who seek to explain its workings in terms of rules and models of how different aspects of learning take place. Examples of this approach can be seen in work on artificial intelligence systems and, particularly, in models of memory and reading processes.

At the other extreme is the so-called *constructivist* movement, growing mainly out of the work of the Swiss developmental psychologist, Jean Piaget, but also encompassing George Kelly's *personal construct psychology*. Psychologists taking this approach have been mainly concerned with ways in which individuals come to make their own sense of the world.

Yet another aspect of cognitive psychology, which should not be overlooked in our present context, is the rich and varied literature on human intelligence. Here a distinction can be drawn between theories which seek to describe and explain what we mean by intelligence or, more helpfully, intelligent behavior, and attempts to measure it by such methods as IQ testing. Somewhat

⁷⁹ <http://psycholinguistic.bahasaindonesia/MakalahPsikolinguistikteoribehaviorismedanteorikognitifismeFarhanahAlhayubi.html>

surprisingly, standard approaches to measurement are not always built upon sound theories.⁸⁰

E. INTERACTION (BRUNER)

Bruner observes that the process of constructing knowledge of the world is not done in isolation but rather within a social context. The child is a social being and, through social life, acquires a framework for interpreting experiences (Bruner & Haste, 1987). J. S. Bruner is an American psychologist who has worked on human cognitive learning theory in educational psychology. According to Bruner the interaction between children and adults is the most important aspect of the language learning. To use the innate language faculty it requires the interaction. Social interaction is adapting with the development of the child. It happens intuitive, as an example: communication between a newborn baby and his / her mother.

Body and mind are seen as interacting with one another such that one way cause or control events in the other. An example of body affecting mind would be the activation of a pain receptor in the body after being stuck with a pin, resulting in a feeling of pain experienced in the mind. An example of mind affecting body would be when a person doing trimming in the garden decides, in the mind, to cut down a certain plant, and then does so. According to this interactionist view, which is similar to the one proposed by Descartes (1641, Meditation VI), persons behave the way they do as the result of either the body acting alone (as in breathing, and circulation of the blood) or the body interacting with mind (as when one holds one's breath or lifts one's hand).

Thus, a bodily response may be the result of the body acting alone in pure physiological functioning or in concert with the mind. Input stimuli may affect the mind through the body. This conception, it may be noted, is neutral with respect to the issue of Free Will; it does not specify whether the mind with its consciousness operates deterministically according to its own laws.

Incidentally, the interactionist would argue that it is because of the two basic types of "stuff" in the universe, the material and the mental that sentences such as "The idea of square is purple" and "Happiness weight 3 grams" are

⁸⁰ Robert Williams Marlon Burden, *Psychology for Language Teachers*, (Cambridge: Cambridge University Press: 2010). page

meaningless if taken literally. For in these sentences physical attributes (weight and color) of the material world are attributed to non-physical mental entities (idea and mental state) of the mental world.

CONCLUSION

➤ MENTALISM VS MATERIALISM

Materialism

Watson (1924) regarded mind and consciousness as religious superstitions which were irrelevant to the study of psychology. For him, there was thus only one kind of stuff in the universe, the material or matter. The study of physiology is the study of psychology.

Mentalism.

In opposition to the materialistically inclined theorists noted above, the mentalist holds that mind is of a different nature from matter. Thus, there are qualitatively two kinds of substances in the universe, the material and the mental. Such a doctrine goes back to the ancient Greeks, such as Aristotle, through Locke and Descartes, up to the present day, including such theorists as Chomsky and Searle.

Two basic mind and body relationships with respect to environmental stimuli and behavioral responses in the world are: the *Interactionist* and the *Idealist*. We characterize these two views as follows.

➤ BEHAVIORISM (B.F.SKINNER)

Behaviorism (or **behaviourism**), is an approach to psychology that combines elements of philosophy, methodology, and theory. It emerged in the early twentieth century as a reaction to "mentalistic" psychology, which often had difficulty making predictions that could be tested using rigorous experimental methods.

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According to Chomsky, humans are born with minds that contain innate knowledge concerning a number of different areas. One such area or faculty of the mind concerns language. Chomsky currently refers to the set of innate language ideas that comprises the language faculty as 'Universal Grammar', or UG, for short.

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Meeting 14

Objective: By the end of the meeting, students are expected to be able to describe, discuss and explore Language and the brain

Topics: Language and the brain

- General Brain Structure and Function
- Hemispheric Structure, Function, and Dominance
- Lateralized Hemispheric Functioning
- Language Disorder

Indicator of Achievement: Students can describe, explore, and discuss Language and the brain

CHAPTER XI

Language and the brain

BACKGROUND

Imagine that you are at the beach and there is a little beach ball, smaller than volleyball, at your feet. Someone calls out, ‘Kick it!’ Imagine now kicking it really hard. Good! Now, suppose the ball is at your feet again and someone calls out, ‘Pick it up and Throw it to me!’ Imagine now throwing that ball. Good!

Now, one last thing you are sitting in the doctor’s office facing the door into the doctor’s room. You hear some people talking in the room but you can’t make out what they are saying. So you strain to hear. You turn your head slightly towards the door. Now, you can make out what is being said!

Now, which foot did you use? Which hand did you use? And which side of your head did you turn? Most people would have used their right foot to kick, their right hand to throw, and they would have turned the right side of their head towards the sound. A minority of people, mainly male, would have used the opposite sides for these tasks. Why do we have such preferences? Try now to imagine kicking the ball, throwing the ball, and listening with the opposite side of your preferences. How does it feel? Not so satisfying, is it?

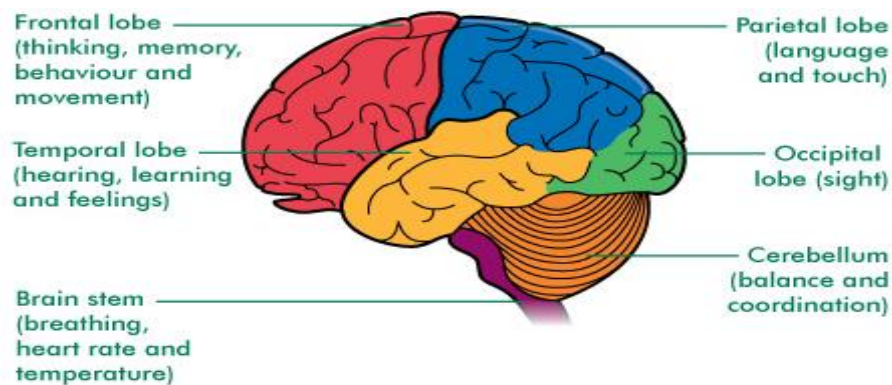
Why do we have these preferences? We have them from infancy and throughout our lives. Why? The answer lies in the brain, its structure and function. We will begin with a discussion of the brain and in doing so we will explain why it is that we have the preferences that we do.

DISCUSSION

A. General Brain Structure and Function

1. The Hemispheres of the Brain

Brain is one of the important things in human life, it helps in balancing human body, it helps in smoothing the bloodstream, and also helps human to thinking, memorize, and distinguish what is a good and bad. There are main parts of the brain and it will explain how important the brain is in human life.



The main parts of the brain are:

1. The cerebrum
2. The cerebellum
3. The brain stem.

Here the example of each part:

1. The Cerebrum

This is the largest area of the brain and controls all higher mental functions, such as thinking and memory. It's made up of two halves, or hemispheres. The right cerebral hemisphere controls the left side of the body, and the left cerebral hemisphere controls the right side of the body. In the cerebrum is also there are the parts and for easy in understand it, I show you the picture.

- Frontal lobe (red area)

This controls thought, memory, planning, problem solving and behaviour.

- Parietal lobe (blue area)

This is responsible for language, helping us form words and thoughts. It also deals with touch and how we recognize sensations, and helps us be aware of our body position.

- Temporal lobe (yellow area)

This helps us understand and process what we hear. It's also involved with how we learn and organize information. The temporal lobe is also responsible for emotions and emotional memory.

- Occipital lobe (green area)

This is where all visual information is processed, such as colour, shape and distance.

2. Cerebellum

This is the back part of the brain and is concerned with balance and coordination. These activities are carried out automatically (subconsciously) by this area of the brain and are not under a person's control.

3. Brain stem

This controls the basic functions that are essential for maintaining life, including breathing, body temperature, heart rate and blood pressure. It also controls eye movements and swallowing. It's a very sensitive and important part of the brain, and it connects the cerebral hemispheres to the spinal cord.

The general structure of the brain is that of a whole which is divided into vertical halves seem to be mirror images of one another. It looks much like a walnut with the two parts joined around the middle, except that there is little space between the two halves in the real brain. Each half of the brain is called a hemisphere. There is *left hemisphere* and a *right hemisphere*. The hemisphere comes out of the brain stem, which connects to spinal cord.

The hemisphere maintains connection with one another through a bundle of fibres called the *corpus callosum*. The brain, together with the spinal cord, is referred to as the central nervous system of human body. There is a covering on each hemisphere, called the *cortex*, which is a furrowed outer layer of cell matter. It is the cortex that is concerned with higher brain functions in both humans and animals.

Each cerebral hemisphere is divided into four parts or *lobes*: from front to back there are the *frontal*, *temporal*, *parietal* (located above temporal), and the *occipital*. This division of the brain into lobes is loosely based on physical features and not on actual separations.

General functions such as cognition (to some degree) occur in frontal lobe, hearing occurs in the temporal lobe, general somaesthetic sensing (feeling in the arms, legs, face, etc.) in the parietal lobe, and vision in the occipital lobe. Each hemisphere has these lobes with these functions. As we shall we later, there are other hemispheric-specific functions which are also located in some of these areas. For example, the left hemisphere typically involves language. *The corpus callosum* not only serves to connect the hemisphere but is itself a principal integrator and coordinator of mental processes carried but in the two hemispheres.

2. Size and weight of the brain

Our brain has a weight and also the size; actually it is not only human brain but also animal brain. The weights and the size of the brain are depending on the size of the body. The bigger the body of the human / the animal, the size and the weight of the brain are also more and more.

As far as our linguistic and intellectual abilities are concerned, it is not evident exactly how important the actual size and weight of the brain is. The brain of average human adult is weight from 1 to 1.5 kg (2.25 to 3.25 lb). Whales and elephants have bigger brains, including more cortexes, but they also have bigger bodies, so perhaps it is the ratio of the brain to body size and weight that is important. However, this turns out not to be the case. For example, the ratio of the brain of an average 13 years old human to total body weight is about equal to that of a 3 years old chimpanzee. Since humans, being more intelligent than chimpanzees, might be expected to have a higher ratio of brain to body weight, such a ratio fails to explain the intellectual and linguistic superiority of humans.

Thus, while brain size is certainly related to general intelligence in a very sense, as one moves up the evolutionary ladder from species to species, size alone cannot explain the occurrence of language in humans or its absence ... non humans. Inherent structural differences must also exist for humans who would account for their advanced intellectual functioning and language.

3. Central Nervous System and the Cerebral Cortex

The brain and the spinal cord, together, make up the central nervous system. From the top of the spine upwards are the medulla oblongata, the pons Varolii, the cerebellum, and the cerebral cortex (cerebrum) in that order. These

four major parts of the brain are from an integrated whole by means of connective tissue. The first three are concerned with essentially physical bodily functions, including breathing, heartbeat, transmission and coordination of movement, involuntary reflexes, digestion, and emotional arousal. The fourth part of the brain, the cortex, as noted earlier, is concerned with advanced intellectual functioning and language.

In comparing the brains of lower vertebrates (mice, fish, and birds) with those of higher vertebrates and primates (humans, chimps, and dolphins) the most noticeable difference is in the part of the brain which developed last in the course of evolution, the cerebral cortex. While in fish, for example, the cerebral cortex is barely visible, and is one of the smallest parts of the brain, in humans it has increased in size and complexity to become the largest part of the brain.

The cerebral cortex itself is layer of grooved, wrinkled, and winding tissue. In time, due to the growth in the number and complexity of the brain cells in the life of the human, the cerebral cortex becomes denser and takes on a greyer and less pink appearance.

B. Hemispheric structure and function

Left and right hemispheres control opposite sides of the body

The brain controls the body by a division of labor, so to speak. The left hemisphere controls the right side of the body, including the right hand, the right arm, and the right side of the face, while the right hemisphere controls the left side of the body. Those who have suffered a cerebral hemorrhage, common only called a 'stroke', provide clear examples of how this kind of cross over control operates. A stroke in the right hemisphere of the brain will affect victims in the left hand, left leg, and the left side of the face (including that side of the tongue and mouth). A stroke to the left part of the brain will similarly affect the right side of the body.

a) Vision

However, a stroke would not affect vision and hearing in exactly the same way. A stroke in the relevant areas in one side of the brain would not automatically render useless the eye and ear on the opposite side of the body, because there is a criss-cross control when it comes to our organs of sight and hearing.

For sight, there is what is termed 'fields of vision', in which each half of an eye sends what it senses to one hemisphere of the brain while the other half sends what it senses to the other hemisphere of the brain. Each eye is vertically divided into left and right fields. The left field of each eye is connected to the occipital lobe of the right hemisphere while the right field of each eye is connected to the occipital lobe of the left hemisphere. The left and right fields of vision are then integrated as a whole.

Thus, if, for example, one eye of a person is completely damaged, let us say the left eye, then that person will still be able to see a whole image from only the right eye, since both the left and right hemispheres will be involved. The divided fields of vision allow for direct sensory input to both hemispheres use visual information in different ways.

If only part of an eye is damaged, then the other half of that eye can still see what is on that side of the body and can then send an image to the brain. In this way, the person still can see what happening on both sides of the nose and have some degree of stereo vision for depth. From the point of view of survival, divided field-vision and criss-cross connections to the hemisphere have a number of advantages.

b) Audition

Hearing works in a somewhat similar fashion, with fibres of the acoustic nerve in each ear distributing the incoming signal to both hemispheres. However, many more fibres from each ear cross over to the other hemispheres while only a small number go directly to the hemisphere which is closest to that ear. Thus, for the right ear a big bundle of fibres will connect to the nearby right hemisphere. For the left ear a big bundle of fibres will cross over and connect to the right hemisphere while a small bundle of fibres will connect to the nearby left hemisphere.

Why we have divided pattern is probably related to the fact (which we discuss in a later section) that the hemispheres specialize in certain sounds certain types of sounds tend to be processed in one hemisphere while other types tend to be processed in the other hemisphere

There is a survival function here. Since there is hemispheric specialization (otherwise known as lateralization) then complete physical damage of hearing in one ear will not cause a loss of access to an entire hemisphere. For the other good ear can convey sounds to both hemispheres. The hemisphere closest to damaged ear will still be able to receive sound, since the undamaged ear will send sound signals internally to its opposite hemisphere (the one closest to the deaf ear)

Then, too, a partial loss of hearing due to physical damage may be compensated for since sounds may be received by both hemispheres and from both sides of the head. This will allow for some degree of binaural depth location. Again, an important aid is to survival.

C. Hemispheric dominance

Typically, the left hemisphere dominates the right

Now, even though the hemispheres of the brain divide the labors of the body, they do not do so evenly, in a sense, we might say that the body cannot serve two masters: one side must take charge. For human to have the two hemispheres competing over which hand or foot should be used first to fight off an attacker or jump at an animal in hunt would not be advantageous for survival of the species. This phenomenon, where one hemisphere is the controlling one, is called dominance

Interestingly, non-human primates, including chimps, do not have a genetic hand/foot preference, nor do any other animals. Individual animals, however, may develop a personal preference over their lifetime.

a) Hand and foot preference

Most persons prefer their right hand and their right foot. This generally indicates that the left hemisphere dominates the right hemisphere. The result of such dominance is that such people (left hemisphere dominant) would tend to prefer the right side of their bodies.

Incidentally, regarding the questions asked at the beginning of this chapter about the beach ball, you can now understand why it was that you imagined that you kicked and threw the ball with the particular foot and particular hand that you did. A left hemisphere dominant person would tend to use the right hand and the

right foot while a person who is right hemisphere dominant would tend to use the left hand and left foot.

b) Left-handers

About 9 per cent of the population would wide are left handed but counter to expectation, only about 30 percent of left-handers have right hemisphere dominance (Klar, 1999) the majority of left-handers are left hemisphere dominant but their dominance tends to be much less marked than in natural right handed persons. The lack of strong dominance for left-handers is believed to be a factor contributing to speech disorders and various reading and writing dysfunctions, such as stuttering and dyslexia, which includes the reversal or mirror-imaging of letters and words when reading or writing lamm and epsetein 1999, for example report that left handed native Hebrew speakers perform less well than right hander in the study of English, particularly reading. Such dysfunctions seem to be caused by the two hemispheres vying with one another for dominance. Some even argue that left handers die young (halpern & coren,1991) although this has been challenged by others (salvie,guralink &glynn 1993)

World- wide there is a higher proportion of males who are natural left hander than female. In USA estimates indicate that more than twice as many males as females are likely to be left handed. The effect of sexual hormones released in brain during the development of the fetus may be related to this phenomenon.

A gene for handedness?

One researcher who has studied handedness and believes there is a specific gene for it is Amar klar. 'I'm convinced there is a single gene that makes you right-handed,' said klar, head of the developmental genetics section of The US National Cancer Institute's Frederick Cancer Research and Development center in Frederick, Maryland. When this gene is detective, you have a 50 % chance of being right handed and a 50 % chance of being left handed or ambidextrous (Klar,1999).

There is a problem though with Klar's thesis in our view. For, if there is a gene for right handedness, there must also be a gene for right footedness of course, there may be. But if there is, there would have to be a single gene for each

of variety of other functions, besides handedness and footedness such as visual perception (as exemplified by reading and writing disorders) dominance, in Klar's view, would simply be an artifact of a host of various individual phenomena and not a casual agent in itself. However, rather than positing a number of single genes in this way to explain dominance, it seems to us more likely that Klar has identified is one for hemispheric dominance. That being so, handedness, footedness, visual perception, and other functions would be consequences of dominance whose origin is genetic.

Left hander: achievement and discrimination

Interestingly, among left hander there is greater proportion of artist musicians and writers than is found among right hander. Also, we have noted that many twentieth century US presidents, including Truman, Reagan, Bush and Clinton, are left hander. In case you have an aversion to politicians, it is worth considering that one of the greatest thinkers of all time, the physicist Albert Einstein, was also left handed.

Because dominance is a congenital condition, the practice of forcing children who are naturally left hander to be right hander not only will not remedy such problems but may serve to worsen them and create others. Many countries still force natural left hander to be right hander.

Ambidexterity

Those who can use both hands equally well, we call ambidextrous. (The word originates from Latin, meaning having two right hands.) The Greeks promoted ambidexterity because it gave one an advantage in sports and warfare. As with left handers, some ambidextrous people are especially renowned, such as Benjamin Franklin (who signed the Declaration of Independence with his left hand), Michelangelo and Leonardo da Vinci, who was known to devise all sorts of secret writing.

Jeff Mathews is also ambidextrous Matthews's report he can take a piece of chalk in each hand and start writing on the board with both hands at same time. The left hand will write normally but the right hand will write from right to left and in a mirror image of what his left hand is writing. Is this because both hemispheres are equally dominant and thus have gained an equal language writing

capacity? It has been reported that the corpus callosum of left handers and ambidextrous people is 11 per cent larger. The corpus callosum is that bundle of fibers grow because of greater amount of use, since the ambidextrous people would have more problems in dealing with dominance than natural right hander would have?

Sound Preferences

Speech sounds are differentiated from other types of sounds including music, animal sounds, and noises. The two hemispheres specialize in processing these two types of sounds (speech and non-speech). For true right hander, speech sounds are mainly processed in the left hemisphere while music, noises, and animals sound are mainly processed in the right hemisphere. The opposite will be the case for some left hander. Because of the nature of the arrangement of larger and bundles of fibers, right handed persons with lateralization for language in left hemisphere will perceive speech sounds more readily through the right ear than the left.

This phenomenon was artfully demonstrated in an ingenious experiment by Kimura (1961). What this researcher did was to present subjects with a different speech syllable in each ear by means of earphones. The speech sounds were presented simultaneously to both ears. Thus, for example, a person was simultaneously presented with 'ba' in the left ear and with 'da' in the right ear. The result is the 'da' was perceived more strongly or dominantly. The 'ba' was barely heard, if at all. Now, to understand this phenomenon, it is necessary to bear in mind the following. :

1. From each ear, a big bundle of fibers will cross over to the other hemisphere while a small bundle of fibers will go directly to nearby hemisphere. Thus, from the right ear a big bundle of fibers will cross over to the left hemisphere, and a small bundle of fibers will go directly to the right hemisphere. Similarly, from the left ear a big bundle of fibers will cross over to the right hemisphere and a small bundle of fibers will go directly to the left hemisphere.
2. The left hemisphere is the main language hemisphere for true right hander. The opposite will be the case for some left hander but for **simplicity's** sake we will consider only the case of the right hander.

Because the right ear hearing 'da' has a big bundle of fibres to carry the sound impulse to the left hemisphere, the sound passes to the speech processing centers in the left hemisphere. On the other hand, the 'ba' speech sound coming in the left ear has only a small number of fibres with which to carry the sound directly to speech processing centers in the left hemisphere for language processing. Therefore, the small impulse of 'ba' will reach the speech centre first while the impulse 'da' follows. The big impulse of 'ba' will follow much later since it has to travel from the left ear to the right hemisphere, where it is rerouted back to the left hemisphere. The effect is for the big impulse of 'da' to dominate, for it is the 'da' that subject typically report perceiving.

D. Lateralized Hemispheric Functioning

One of the major goals of neuroscience is to be able to understand the relationships between the structures of the nervous system and a person outward behavior. The cerebral hemispheres are very similar in appearance, but they differ significantly in their structure. One of the structures is motor control; the right hemisphere controls the left half of the body, the left hemisphere controls the right half of the body.

Even though the two hemispheres have different functions they do not work independently of each other. They communicate back and forth across the corpus callosum. This is not an equal partnership. However, one hemisphere usually dominates over the other, an effect best illustrated by the fact that most people are only good with either their right or left hand. In most cases the left hemisphere is believed to be the dominate hemisphere.

The longitudinal fissure separates the human brain into two distinct cerebral hemispheres, connected by the corpus callosum. The hemispheres exhibit strong, but not complete, bilateral symmetry in both structure and function. For example, structurally, the lateral sulcus generally is longer in the left hemisphere than in the right hemisphere, and functionally, Broca's area and Wernicke's area are located in the left cerebral hemisphere for about 95% of right-handers, but about 70% of left-handers.

Broad generalizations are often made in popular psychology about one side *or* the other having characteristic labels, such as "logical" for the left side or

"creative" for the right. These labels are not supported by studies on lateralization, as lateralization does not add specialized usage from either hemisphere. Both hemispheres contribute to both kinds of processes, and experimental evidence provides little support for correlating the structural differences between the sides with such broadly-defined functional differences.

Additionally, although some functions are lateralized, these are only a tendency. The trend across many individuals may also vary significantly as to how any specific function is implemented. The areas of exploration of this causal or effectual difference of a particular brain function include its gross anatomy, dendritic structure, and neurotransmitter distribution. The structural and chemical variance of a particular brain function, between the two hemispheres of one brain or between the same hemispheres of two different brains, is still being studied. Short of having undergone a hemispherectomy (removal of a cerebral hemisphere), no one is a "left-brain only" or "right-brain only" person.

1. Lateralization

Besides their general functioning, the hemispheres have some very specialized structure and functions. Some functions occur in one hemisphere while other functions occur in other hemisphere. This separation of function is called *lateralization*. Incoming experiences are directed to the left or right hemisphere depending on the nature of those experiences, be they speech faces, or sensations of touch. We will see that speech production and speech understanding are mainly located in the left hemisphere.

2. Left Hemisphere Specialization

Language, logical and Analytical Operations, Mathematics. Research has clearly shown that languages centers predominate in one hemisphere or the other. The main language centers are *Broca's Area*, in front of part the brain *Wernicke's Area*, towards the back, and the *Angular Gyrus*, which is even farther back. Broca's Area and Wernicke's Area are connected by tissue, the *Arcuate Fasciculus*.

For most people, language is in the left hemisphere, for roughly 99 per cent of right handes and about two thirds of the left hander. Language is located in the right hemisphere in less than 5 percent of the US population. For these

persons, in addition to language, convenience sake, we shall use the majority case for the purpose of discussion. In addition to language, the left hemisphere is concerned with logical and analytical operations, and higher mathematics.

3. Right Hemisphere Specialization

The right hemisphere is involved in recognizing emotions, recognizing faces, and perceiving the structures of thing globally without analysis. If the area of the brain which deals with faces, for example, is damaged, the person will not be able to recognize the faces of the people, even close family, and even that person's own face when looking into a mirror! Needless to say, such a situation is devastating to the life of the person.

The right hemisphere also deals with music and non-linguistic sounds, such as noises and animal sounds. As we shall see later, new research shows that the right hemisphere has some language functions and can take over the complete language functioning of the left hemisphere when that hemisphere has been surgically removed or damaged.

4. Sex Differences and Lateralization

Some studies suggest that there are differences between the brains of human males and females. It may be that females have a thicker left hemisphere while male have a thicker right hemisphere. Because language abilities typically are located in the left hemispheres and **visual-spatial** abilities are located in the right hemispheres, such findings, if validated, suggest a female propensity for language and a male propensity for the visual-spatial.

In a volume by Philips, Steele, and Tanz (1987) where the relationship between language and the brain and the sex was investigated, it was found that although there are some differences in males and female processing of use. Overall, the volume points to greater salience of cultural processes over biological processes in shaping of gender.

In an animal experiment, Professor Marian Diamond at the University of California at Berkeley has shown that injecting sex hormones into young rats can affect the development of the thickness and size of hemispheres of the brains. While females normally have a thicker left hemisphere (one

The distribution of speech areas in the brain appears to be related variety of factor, including, for example, what task bilinguals are (comprehension vs production), when second language is acquired what method of analysis is used, (fMRI is higher in resolution than see section 11.10.2 for description of these methods).

In conclusion, Female: had thicker left hemisphere, due to the fact that language located at left hemisphere, that's why woman really love to have conversation or chit chat. While, Male: had thicker right hemisphere, they are visual spatial, that's why they really good at map reading and giving direction.

5. Language Areas and Their Functioning

Language area is the area of the cerebral cortex thought to be particularly involved in the processing of language: *the language areas of the left cerebral hemisphere*. The two language areas of the brain that are important for language now bear their names: Broca's area and Wernicke's area.

Both Broca and Wernicke's areas are part of the cerebral cortex of the brain that are directly linked to normal language processing. Both of these portions of the brain are located in the left hemisphere; however Broca's area is more frontally located in the inferior frontal cortex, while Wernicke's area is found in the superior temporal lobe. Interestingly, although these areas were discovered separately, they are both part of the language loop in the left hemisphere of the brain that is responsible for language modality.

The function of Broca's area

Broca's area was the first of the two brain regions to be identified. This area of the brain is particularly associated with your ability to form complete thoughts. In this way, understanding language is unaffected as are motor skills; however, someone with a brain abnormality in Broca's area exhibits broken speech and writing. The idea itself is intact, but the person is simply incapable of expressing that idea in a complete and logical way.

The function of Wernicke's area

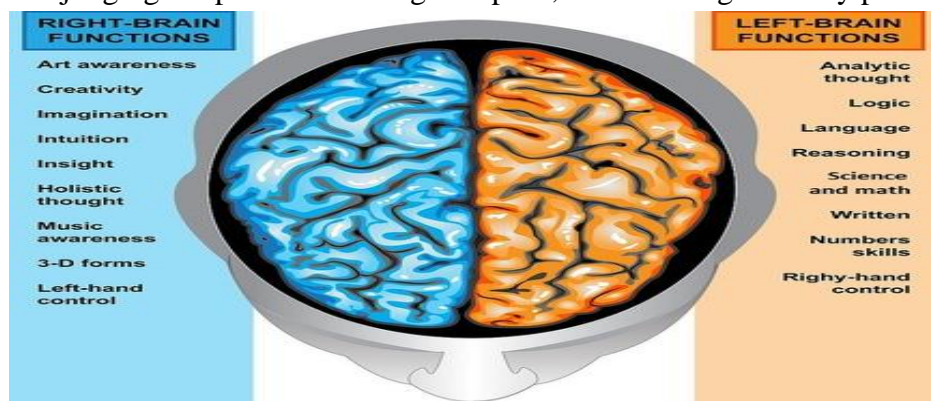
Wernicke's area is also associated with proper production of thoughts into words; however where Broca's area is defined by broken speech and writing patterns, these patterns are unaffected in a person with an abnormality in Wernicke's area. Instead, people with Wernicke's aphasia produce normally

constructed sentence, but the words themselves are completely jumbled making the sentence and the thought incomprehensible. Essentially, someone with a deficit in this region sounds like he is fluently speaking a completely different language than his own.

The brain is responsible for so many natural functions of your body that it is no wonder it is also so incredibly complex. Though Broca and Wernicke's areas are directly associated with normal language production, these areas are not the only parts of the brain responsible for language comprehension and output. It is fascinating to understand that these simple regions are responsible for such specific functions within a complex organ like the brain. Though there is an immeasurable amount still to learn about language in the brain, Broca and Wernicke provided an immense step forward with the discovery of each of their respectively named areas.

6. Right Hemisphere Language Abilities

The brain is divided into left and right hemispheres. Each hemisphere controls its own unique set of activities or tasks. The right side of the brain tends to be more dominant in creative activities, while the left side of the brain tends to be more dominant in logical or analytical activities. These hemispheres communicate with each other through a large bundle of nerve fibers called the corpus callosum, and through several smaller nerve pathways. The right side of the brain is more visual oriented, involved in activities such as visual imagery and face recognition. The right side of the brain tends to view information as a whole, rather than as individual details. It also tends to process information more intuitively or randomly. The right side of the brain is involved in spatial abilities, such as judging the position of things in space, and knowing the body position.



Specialization the right hemisphere is involved in recognizing/reading emotions, recognizing of objects faces, music appreciation, intuition, art awareness, imagination, creativity, non-verbal communication and perceiving the structures of thing globally without analysis. If the area of the brain which deals with faces, for example, is damaged, the person will not be able to recognize the faces of the people, even close family, and even that person's own face when looking into a mirror. Damage to the right hemisphere of the brain leads to cognitive-communication problems, such as impaired memory, attention problems and poor reasoning.

General right hemisphere attributes:

<i>Thinking</i>	Concrete, holistic
<i>Cognitive style</i>	Intuitive, artistic
<i>Specialized functions</i>	Music, rich dream imagery, good face and gestalt recognition
<i>Time experience</i>	"Lived" time, primitive time sense
<i>Spatial orientation</i>	Superior, also for shapes, wire figures

7. The Bilingual Brain

People often acquire more than one language. Recent neurolinguistics research has shown growing interest in how bilinguals represent different languages in the brain.

The bilingual brain is commonly referred to as **“bilingualism”**. Bilingualism can be defined simply as the regular use of two languages and is a phenomenon that affects almost every nation in the world, all classes of a society and all its age groups. Currently, more than half of the population of the world speaks more than one language and, because of the disappearance of the borders between certain countries in some parts of the world (as for instance in Europe), the need to learn more and more “foreign” languages increases.

A less conservative view defines a bilingual as a person who manages at least one of the three major linguistic abilities (either comprehension or speaking or writing) in a language other than the mother tongue. Finally, one of the most commonly used definitions sees bilingualism as the ability to express oneself in a mother tongue (called L1) and at least in a second learned language (called L2) in daily life. This ability allows bilinguals to understand and express themselves through an oral or written modality in both languages acquired, independent of the level of proficiency in L2. Other extended definitions of bilingualism take into consideration the age of acquisition of L2, such that: (1.) “early bilingualism” concerns people who learnt their L2 before 5–9 years old, (2.) “late bilingualism” refers to people who learnt after this period and (3.) “Simultaneous bilingualism” or “natural bilingualism” defines those people who went from speaking no language to speaking/ using two languages simultaneously from the first day.

A. Is there Hemispheric Specialization for Languages?

A.1 Studies showing right-hemisphere involvement

Albert and Obler (1978), Karanth and Rangamani (1988), and Willemin, Richardson, and Lynch (1994) report that greater involvement of the right hemisphere in bilinguals than in monolinguals. *Albert and Obler* argue that “the right hemisphere plays a major role in the learning of a second language, even in adulthood, then they argue that the location of the second language must be in the right hemisphere.

A.2 Studies finding no difference

A number of studies, on the other hand, have reported no difference in lateral dominance for the first and second language. Walters and Zatorre found no difference between bilinguals and monolinguals. *Galloway*, found no evidence for the right hemisphere being involved more in the initial stages of informal adult, second-language acquisition. *Soares (1984)*, found no lateralization differences across the bilinguals two languages (Portuguese/English) or between bilinguals and monolinguals (English).

A.3 Conclusion

While findings are not consistent, the fact that right-hemisphere difficulties are involved in so many studies suggests the distinct possibility that a

second language sometimes locates in the right hemisphere and sometimes not. There may be variables which determine hemispheric location but which have not been identified as yet. One such factor may be the age at which the second language was learned.

B. Does the Age at which a Second Language is Learned Relate to Lateralization?

Genesee, Hamers, Lambert, Mononen, Seitz, and Stark (1978) found that the age at which a second language is learned affected lateral dominance.

There were three groups of bilinguals:

1. Those who became bilingual from infancy.
2. Those who became bilingual from around 4 to 6 years of age
3. Those who became bilingual from adolescence

The researchers found that the left hemisphere is more involved than the right for the infancy and childhood bilinguals, while the reverse was the case for the adolescent bilinguals.

Sussman, Franklin, and Simon (1982) showed that early bilinguals (first and second languages acquired prior to age 6) revealed left-hemisphere dominance for both languages, while late bilinguals (second language acquired after age 6) revealed left-hemisphere dominance only for the first language and symmetrical hemisphere involvement for the second language.

However, *Vaid (1987)* reports the opposite for French-English bilinguals. The left hemisphere was more affected in late bilinguals (those who acquired the second language between the ages of 10 and 14) than in early bilinguals (those who acquired it before the age of 4). *Gordon and Zatorre* argued that the left hemisphere was primarily involved in processing both languages of bilinguals. Similar findings have been reported elsewhere by *Klein, Zatorre, Milner, Mayer, and Evans (1994)*.

The distribution of speech areas in the brain appears to be related in variety of factors, such as: what task bilinguals are given, when a second language is acquired, and what method analysis is used.

E. Language Disorder

1. Two Basic Group: Broca's Aphasia and Wernicke's Aphasia

Language disorders, known as aphasias, are presumed to have as their cause some form of damage to some specific site in the hemisphere where language is located. Such damage causes characteristic problems in speech, as well as in reading and writing. An extensive study using radio-isotope scanning by Benson and Patten (1967) served to support the traditional distinction that aphasias are generally classifiable into two groups, other aphasic sites were also found.

a. Broca's Aphasia

It was in 1861 that Broca published the first in a series of studies on language and brain. This was the beginning of the true scientific study of cases of aphasia, a term which covers a very broad range of language disorders which are commonly caused by tissue damage or destruction in the brain. War injuries, strokes, and car accidents are frequent causes of such injuries. Broca was one of the first researchers to discover that damage to certain portions of the brain, but not to others, results in speech disorders.

One particular condition, now called Broca's Aphasia, is characterized by meaningful but shortened speech and also occurs in writing. In the condition, grammatical inflections are often lacking, such as the third-person present tense '-s' ('Mary want candy' for 'Mary wants candy') and the auxiliary 'be' ('Joe coming' for 'Joe is coming'), as are articles, prepositions, and other so-called function words. In a way, the speech is similar to that of children at the telegraphic stage of speech production (Chapter 1).

Although the most noted feature of Broca's Aphasia is the fragmentary nature of speech production, it has recently been discovered that speech comprehension is also affected. In one experiment with a patient with Broca's Aphasia, when presented with the spoken sentence, 'The apple that the boy is eating is red', the patient was able to understand the sentence, particularly with regard to who was doing the eating (the boy). However, when presented with the sentence, 'The girl that the boy is looking at is tall', the same patient could not figure out who was doing the looking (the boy). In the previous sentence, the patient could guess the meaning simply from knowing the vocabulary items 'apple', 'boy', and 'eat', and from knowing what usually happens in the world

(‘boys eat apples’ and not vice versa). But the patient could not guess the meaning of the second sentence simply from the vocabulary, because boys look at girls and girls look at boys. To understand such a sentence, one must be able to analyze its syntactic relations. This the patient could not do.

Thus, there is a loss of syntactic knowledge in both speech production and understanding for those with Broca’s Aphasia. Interestingly, people with Broca’s Aphasia can often sing very well, even using the same words and structures they are unable to utter in conversation. This shows that Broca’s Aphasia is not simply a breakdown in the muscular control of speech movements, since those with this disorder can pronounce words. The loss, therefore, must be something of a deeper nature.

b. Wernicke’s Aphasia

Nonsense double-talk

This condition is characterized by speech which often resembles what is called nonsense speech or double-talk. It sounds right and is grammatical but it is meaningless. It can seem so normal that the listener thinks that he or she has somehow misheard what was said, as is often the case in ordinary conversation.

A patient with Wernicke’s Aphasia may say, ‘Before I was in the one here, I was over in the other one. My sister had the department in the other one. My sister had the department in the other one’, ‘My wires don’t hire right’, or ‘I’m supposed to take everything from the top so that we do four flashes of four volumes before we get down low’.

Word substitution

Patients with Wernicke’s Aphasia commonly provide substitute words for the proper ones on the basis of similar sounds, associations, or other features. The word ‘chair’, for example, elicited the following in some patients: ‘shair’ (similar sound), ‘table’ (association), ‘throne’ (related meaning), ‘wheel-base’ (?) and ‘You sit on it. It’s a . . .’ (word loss). As with Broca’s Aphasia, Wernicke’s Aphasia can also cause a serve loss of speech understanding, although the hearing of non-verbal sounds and music may be unimpaired.

c. Other Speech - Related Aphasias

In addition to the kinds of aphasias which can occur from damage to the two main language centers of the brain, Broca's Area and Wernicke's Area, there are other aphasias which occur due to damage at sites near or between those areas and at other sites in the brain as yet undetermined.

Damage to the area which leads into Wernicke's area from the auditory cortex may result in *pure word deafness*, where one cannot recognize the sounds of words as speech but can hear other types of sounds. For example, a person might be able to hear music quite clearly and even sing a melody which he or she has just heard but be unable to recognize the lyrics of the song as being words.

A condition known as *conduction aphasia* is characterized by a poor ability to repeat words despite relatively good comprehension. Persons with this aphasia might substitute a closely related sound for the one they actually hear, e.g. for 'teethe' (the verb) they say 'teeth' (the noun) and for 'bubble' they say 'bupple' (here inventing a new word but one that conforms to the sound pattern of English). Some may also have the ability to repeat strings of four or five digits, e.g. 3-8-4-2-7, yet be unable to repeat a simple three syllable sentence accurately, such as 'Joe is here', 'Betty sang'.

Anomic aphasia involves problems in finding the proper words for spontaneous speech, even though language comprehension and repetition are good. Typically, such a person has difficulty finding the correct names for objects. This is a phenomenon which we all experience at times, e.g. 'Hand me that uh . . . uh . . . uh . . . thing over there.' In this aphasia, however, the loss is frequent.

There are also reported cases of patients being unable, in response to a verbal command, to perform skilled motor movements with their hands, even though they understand the command and their spontaneous hand movements are perfectly normal. Thus, while a person might spontaneously be able to pick up a pen, he or she may not be able to perform the same task when asked to do so. This inability to respond appropriately to verbal commands is called *apraxia*.

There is also *global aphasia*, a terrible condition in which many or all aspects of language are severely affected, presumably due to massive damage numerous sites in the left hemisphere or to critical connections between language

areas. Such patients demonstrate little speech comprehension and display, at best, some stereotypic and automatic sequences of speech sounds. One woman who had suffered a massive stroke could say nothing but four nonsense syllables, ‘gadak la doh’, every time she tried to speak.

Determining the type of aphasia

In trying to determine what kind of aphasia will be produced by what kind of damage, there are a number of variables that must be taken into consideration. It is not just the location of damage to the brain that matters, it is also important to know what the nature of the damage or the lesion is. Was tissue completely destroyed or was the damage slight? Did the damage occur suddenly or gradually over time? Because childhood lesion may leave a mild deficit that can be difficult to detect, and since the same lesions in an adult would be much more noticeable, it is necessary to know the age at which the damage occurred.

d. Reading and Writing Aphasias: Dyslexia

The type of aphasia which involves disorders in reading and writing is called dyslexia. There are many sorts of dyslexia, one category of which is due to damage to the brain, *after* reading and writing have been acquired. With children, however, dyslexia may be observed while they are in the process of acquiring reading and writing skills. Problems of hemispheric dominance or defects in visual perception, for example, may play some role in causing difficulties in reading and writing. Some children may only be able to write backwards (*deer as reed*) or upside-down, or in reading they may confuse letters (*b* with *d*, *p* with *q*, *u* with *n*, *m* with *w*) and engage in other anomalies. As was noted earlier in Chapter 3 on reading, the orientation of letters is a general exception to the way we observe other objects.

Dyslexia may be subdivided into two basic categories: *alexia*, which involves disorders in reading, and *agraphia*, which involves disorders in writing. One may be afflicted by both conditions at the same time, in which case the person is unable to either read or write properly. In *pure agraphia* there is a total loss of the ability to write, even though the hand can be used skillfully for other purposes.

Japanese writing aphasias

Studies involving language with special writing systems provide interesting findings. Japanese aphasics display quite unusual characteristics due to the nature of their complex writing system, which involves both a syllabic system (in which symbols represent syllables) called *kana*, and a Chinese-character type (in which symbols represent morphemes) called *kanji*. In Japanese, anything that is written in *kanji* can be written in *kana* (but not vice versa). Imura (1940) studied a patient with Broca's Aphasia who was able to write the correct *kanji* for dictated words but was unable to write the same words in the syllabic writing system, *kana*, something that any normal Japanese can do, especially since *kana* is considered the easier of the two systems.

Then there was a patient with Wernicke's Aphasia who was able to write characters quite fluently but what was written was nonsensical: the *kanji* were malformed or made up of invented sets of strokes.

Besides writing problems, reading by Japanese can also be affected in strange ways. The noted researcher Sasanuma (1994) has found that while some patients may have their reading of *kana* words impaired, their reading of *kanji* words may not be much impaired, or vice versa, even when the *kana* and *kanji* words are familiar. These are right-handers who have had damage, due to strokes or automobile accidents, in the temporal or parietal regions of their left hemisphere. The loss may be due to damage of storage areas in the brain for *kana* and *kanji* words, or there may be damage to some processing or retrieval areas in the brain.

Incidentally, it might be worth pointing out here a common fallacy concerning Chinese-type characters, i.e. *kanji*. These are *not* located in the right hemisphere (in ordinary right-handed persons), even though these symbols are historically derived from pictures (as is the case for all writing systems). *Kanji* are largely abstract figures and they are stored in the left hemisphere, as are all writing systems.

e. Localism and Holism

This particular model of looking at the structure and function of language by relating specific aspects of language to certain localized areas of the brain is

called the localist model. Although it is true that certain areas of the brain are involved in language, it is also necessary to take into account holistic or global brain phenomena in order to understand what is happening.

The effect on language of broader psychological factors, such as attention span, motivation, alertness, the rate at which auditory and visual memory traces dissipate, etc., must be considered.

They represent people who have language disorders but do not have damage in the expected language areas, or, conversely, certain damage has not result the predicted symptoms. This cannot but make us reflect on the more global aspects of language in the brain. Furthermore, it is possible that, as some studies now suggest, the failure to produce grammatical sentences some aphasias may not be a loss of actual knowledge, but rather a breakdown in the process of constructing sentences; that is, aphasics still 'know' grammar, but they no longer know how to use it.

While there is an impressive accumulation of scientific knowledge on the brain to date, it is well to keep in mind the fact that even linguistic concept as simple as that of the noun or the verb have yet to be localized. While such researchers as Damasio and Damasio (1992) are doing excellent work in this area, science is still a long way from providing the detailed knowledge of the correspondence between language and the brain's structure and function that we would like to have.

f. Sign-Language Aphasia

There is a striking parallel between speech and sign language that is especially interesting since it confirms what research has found about language and the hemispheres of the brain. Readers will recall that the right hemisphere has been shown to be superior at spatial tasks such as facial recognition and visuo-constructive tasks such as copying designs and patterns. Following this board division of the hemispheres as 'left for language' and 'right for spatial', it might seem that the right hemisphere would be the one to be more involved with the production and comprehension of sign language, since signing is a space-related phenomenon. Strong evidence, however, from the study of sign language aphasics

shows that this is not the case. Sign and the signing system are located in the left hemisphere.

Broca's Aphasia with signers

The sign language of Broca's Aphasic consists largely of an inflected form with little ability to use designing space as a grammatical framework to mark verb inflections, person, aspect, or morphological changes. It is as awkward and as how thing as is Broca's Aphasia in spoken language. The implication is that the inability to produce correct sign is not due to a motor dysfunction but rather a defect in the ability to access the grammar properly.

Wernicke's Aphasia with signers

Similarly, a signer with Wernicke's Aphasia will produce fluent but nonsensical strings of sign, particularly for morphology, aspect, pronoun reference, etc. there are frequent errors with substitution made internal of the three characteristics of sign (configuration, location, and movement). The result is the production of many meaningless individual sign or of sign which have meaning but are nonsensical in sentences. And, just as in Wernicke's Aphasia for speech, much substitution occurs within the same lexical category: nouns for nouns, verbs for verbs, etc. One signing patient displayed Wernicke's Aphasia symptoms in his writing as well as sign language, leading researchers to conclude that there is a general linguistic dysfunction at work and not just a motor dysfunction impairing the ability to sign.

Their sign production seems to remain grammatical and unimpeded. However, these same persons are likely to suffer some impairment in their comprehension of sign. Why it should be the case that their ability to understand signs is disturbed but their ability to produce signs is untouched, as yet remains unexplained. In any case, the same general patterns of Aphasia emerge in sign as with speech. Those, even though the right hemisphere is disposed to process spatial task, when the task involved is a linguistic one and spatial syntax is involved, the left hemisphere asserts dominance. Clearly, this source that it is the left hemisphere that is specially equipped to handle language, whether the modality of the language is speech or sign.

Meeting 15

Objective: By the end of the meeting, students are expected to be able to answer all questions raised during classes

Topic: Review (The materials are from the beginning to the end of the course)

Indicator of Achievement: Students can discuss the questions raised during classes (the material that they do not understand yet).

Meeting 16 (Making Video individually about Psycholinguistics materials that have been learned from the beginning to the end)

1. This is video project about psycholinguistics materials for Final Test
2. Students make the video in the form of Oral Presentation (Task 1).
3. There are many different topics of psycholinguistics for the students' oral presentation and they have already chosen it before.
4. Video duration, minimal 2 minutes, maximal 4 minutes.
5. Please write it down the topic in the form of paper and hand it to the lecturer.
6. Please write down a small and simple research on one of topics in psycholinguistics (at least 3 sheets of paper) (Task 2).
7. Due date: 2 weeks after the announcement.
8. Assessment is from the lecturer and will be done outdoor (teacher assessment).

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SYLLABUS OF ENGLISH EDUCATION DEPARTMENT
FACULTY OF TARBIYAH AND TEACHERS TRAINING
ANTASARI STATE INSTITUTE FOR ISLAMIC STUDIES BANJARMASIN

Course Name	: Psycholinguistics
Course Code/ Credit	: TBI 2330/2 Credits
Semester	: 6
Status	: Compulsory
Prerequisite	: Introduction to Linguistics
Course Description	: Psycholinguistics is a discipline of linguistics that studies language as a mental phenomenon. This subject will focus on language acquisition, language processing and the mental representation of language and meaning.
General Objectives	: On successfully completing this course, the students are expected to know and understand about language acquisition, language processing and the mental representation of language and meaning and are able to do a small and simple research on one of topics in psycholinguistics.
Teaching and Learning Modes	: Lecture, Discussion, and Discovery Learning
Evaluation and assessment	: Mid test : 30% Assignments and classroom participation : 30 % Final test : 40 %
References	: 1. Steinberg, Danny D, et al. 2001. <i>Psycholinguistics: Language, mind, and world (second edition)</i> . England. Pearson Education Limited. 2. Yule, George, 2006. <i>The study of Language: An Introduction (Third Edition)</i> . Cambridge. Cambridge University Press 3. Troike, Muriel Saville. 2010. <i>Introducing second language acquisition</i> . Cambridge. Cambridge University Press 4. Dulay, Heidi, et.al. 1982. <i>Language Two</i> . New York: Oxford University Press 5. Williams, Marlon, Burden, Robert. 2010. <i>Psychology for Language Teachers</i> . Cambridge: Cambridge University Press 6. Fromkin, Rodman, et.al. 1990. <i>An Introduction to language</i> . Australia: Harcourt Brace and Company 7. Chaer, Abdul. 2003. <i>Psikolinguistik Kajian Teoretik</i> . Jakarta: PT. Rineka Cipta 8. Online sources

Banjarmasin, March 2014

Meeting	Objective	Topics	Indicator of achievement	Presenters	References
1	By the end of the meeting, students understand what the subject about and what they are expected to do during classes	Introduction to the course Short Explanation and Discussion about Psycholinguistics	Students understand what the subject about and what they are expected to do during classes	Lecturer and students (Discussion)	Book 1,2, 3, 4, 5, 6, 7 Online Sources (8)
2	By the end of the meeting, students are expected to understand How children learn a language well (part I)	Part 1: First –Language Learning How children learn a language - the development of speech production and comprehension - the relationship of speech production, speech comprehension and thought	Students can describe, explore, and discuss how children learn a language well (Part I).	Group 1	1. Chapter 1 (Book No.1) 2. Chapter 14 (Book No.2) 3. Chapter 1 and 2 (Book No.3) 4. Chapter 9 (Book No.4) 5. Chapter 10 (Book No.6) 6. Please add online sources
3	By the end of the meeting, students are expected to understand How children learn a language well (Part II)	- Parentese and Baby talk - Imitation, Rule learning and Correction - Learning abstract words - Memory and logic in Language Learning	Students can describe, explore, and discuss how children learn a language well (Part II).	Group 2	1. Chapter 1 (Book No.1) 2. Chapter 14 (Book No.2) 3. Chapter 1 and 2 (Book No.3) 4. Chapter 9 (Book No.4) 5. Chapter 10 (Book No.6) 6. Please add online sources
4	By the end of the meeting, students are expected to be able to describe, discuss and explore the deaf and language: Sign, oral, written (Part I)	The Deaf and Language: Sign, oral written - Sign language: A true language without speech - Speech- Based Sign Languages - Independent Sign Languages (ISIs) such as American Sign Language (ASL)	Students can describe, explore, and discuss The Deaf and Language: Sign, oral and written (Part I)	Group 3	1. Chapter 2 (Book No.1) 2. Chapter 16 (Book No.2) 3. Please add online sources
5	By the end of the meeting, students are expected to be able to describe, discuss and explore the deaf and language: Sign, oral, written (Part II)	- The process of learning ASL - The oral approach and total communication - The sign language vs. Oral Approach Controversy	Students can describe, explore, and discuss The Deaf and Language: Sign, oral and written (Part II)	Group 4	1. Chapter 2 (Book No.1) 2. Chapter 16 (Book No.2) 3. Please add online sources
6	By the end of the meeting, students are expected to be able to describe, discuss and explore Wild and Isolated Children and the Critical	Wild and Isolated Children and the Critical Age Issues for Language Learning - Legends, Evil Kings, and Emperors - A Critical Age for First Language	Students can describe, explore, and discuss Wild and Isolated Children and the Critical Age Issues for	Group 5	1. Chapter 4 (Book No.1) 2. Please add online sources

	Age Issues for Language Learning	Acquisition	Language Learning		
7	By the end of the meeting, students are expected to be able to describe, discuss and explore Children and Adults in Second –Language Learning (Part I)	Part 2: Second Language Learning Children and Adults in Second –Language Learning <ul style="list-style-type: none"> - Children are better: a common belief - Basic psychological factors affecting Second - Language Learning - Social Situation Affecting Second - Language Learning - Conclusion: Who is better? Adult or children 	Students can describe, explore, and discuss Children and Adults in Second –Language Learning (Part I)	Group 6	1. Chapter 6 (Book No.1) 2. Chapter 1 and 2 (Book No.3) 3. Chapter 4, 8, and 9 (Book No.4) 4. Please add online sources
8	By the end of the meeting, students are expected to be able to describe, discuss and explore Children and Adults in Second –Language Learning (Part II)	<ul style="list-style-type: none"> - Some other influences: ESL or EFL community, context, Motivation, and Attitude - Is there a critical period for Second - Language Learning 	Students can describe, explore, and discuss Children and Adults in Second –Language Learning (Part II)	Group 7	1. Chapter 6 (Book No.1) 2. Chapter 15 (Book No.2) 3. Chapter 1 and 2 (Book No.3) 4. Chapter 9 (Book No.4) 5. Chapter 6 (Book No.5) 6. Bab XIV (Book No.7) 7. Please add online sources
9		Mid-Term			Materials are from Group 1-7
10		Time for watching video			
11	By the end of the meeting, students are expected to be able to describe, discuss and explore Second Language Teaching Methods	Second Language Teaching Methods <ul style="list-style-type: none"> - Characterizing the essentials of Method - Traditional Methods - The Chomskyan revolution (ALM Method) - Contemporary methods (TPR, CLT) - Natural Approach - Krashen’s Theory 	Students can describe, explore, and discuss Second Language Teaching Methods	Group 8	1. Chapter 7 (Book No.1) 2. Chapter 15 (Book No.2) 3. Please add online sources
12	By the end of the meeting, students are expected to be able to describe, discuss and explore Bilingualism, Cognition, transfer and Learning	Bilingualism, Cognition, transfer and Learning Strategy <ul style="list-style-type: none"> - Varieties, Transfer effects, and strategies 	Students can describe, explore, and discuss Bilingualism, Cognition, transfer and Learning	Group 9	1. Chapter 8 (Book No.1) 2. Chapter 15 (Book No.2) 3. Please add online sources

	Strategy		Strategy		
13	By the end of the meeting, students are expected to be able to describe, discuss and explore	PART 3: Language, Mind, and Brain Where does language knowledge come from? <ul style="list-style-type: none"> - How do we acquire knowledge - Mentalism vs. Materialism - Behaviorism (B.F Skinner) - Innateness /Universal Grammar (Chomsky) - Cognitive (Piaget) - Interaction (Bruner) 	Students can describe, discuss, and explore the source of language knowledge	Group 10	1. Chapter 10 (Book No.1) 2. Chapter 1 (Book No.2) 3. Chapter 1 (Book No.5) 4. Chapter 11 (Book No.6) 5. Bab IV (Book No.7) 6. Please add online sources
14	By the end of the meeting, students are expected to be able to describe, discuss and explore Language and the brain	Language and the brain <ul style="list-style-type: none"> - General Brain Structure and Function - Hemispheric Structure, Function, and Dominance - Lateralized Hemispheric Functioning - Language Disorder 	Students can describe, explore, and discuss Language and the brain	Group 11	1. Chapter 11 (Book No.1) 2. Chapter 13 (Book No.2) 3. Chapter 4 (Book No.3) 4. Bab VII and VIII (Book No.7) 5. Please add online sources
15	By the end of the meeting, students are expected to be able to answer all questions raised during classes	Review	Students can discuss the questions raised during classes	Lecturer and students (Discussion)	The materials are from the beginning to the end of the course
16		Final Test			Materials are from Group 8-11