Lesson-23

COGNITIVE PROCESSES

Topic-134: Operating Principles

One of the most productive approaches to the question has been Slobin's work on operating principles. We may think of operating principles as children's preferred ways of taking in (or operating on) information. These principles have proven useful in explaining certain patterns in early child grammar. For instance, children in virtually all languages use fixed word order to create meanings, even though some languages have much freer word order than others.

Topic-135: Sensorimotor Schemata

Piaget refers to the first 2 years as the sensorimotor period of development because the schemata the child uses to organize experience are directly related to taking in sensory information and acting on it. Sensorimotor schemata include banging, sucking, and throwing. The major development that culminates near the end of the sensorimotor period is the acquisition of object permanence, the notion that objects continue to exist even when they cannot be perceived. Once object permanence is acquired, the child is no longer at the mercy of immediate stimuli but can respond on the basis of stimuli no longer present. We would certainly anticipate that developments of this magnitude would be related to the child's language development. More specifically, we can make two predictions about child language.

Topic-136: Whole Object Bias and Taxonomic Bias

Whole object bias in developmental psychology: For example, if a child is shown and given the label "truck", the child will assume truck refers to the whole object instead of the tires, doors, colors or other parts. If a researcher points to an object while simultaneously saying a new name, children will assume that the new label refers to the whole object. Ellen Markman pioneered work in this field. Her studies suggest that even in cases where color or dynamic activities are made salient to children, they will still interpret the new word as a label for whole objects. Furthermore, infants hold a primitive theory of the physical world that is guided by three constraints on the behavior of physical bodies: objects must move as wholes, objects move independently of each other, and objects move on connected paths. It is suggested that these three constraints help guide children's interpretations of scenes, and, in turn, explain how the whole object bias reflects the nonlinguistic status of objects.

In addition, children seem to use a taxonomic bias: they will assume that the object label is a taxonomic category rather than a name for an individual dog. For example, they will assume that dog is a label for a group of animals, not just Fido. Ordinarily, children focus on thematic relations between objects when categorizing. If given milk, a spoon, or a car, children will group each item with a cow, soup, or a stop sign, respectively.

Lesson-24

INNATE MECHANISM

Topic-139: The Language Bioprogram Hypothesis

Pidgins and Creoles: To understand this idea more fully, we have to make a few distinctions. A pidgin is 'an auxiliary language that arises when speakers of several mutually unintelligible languages are in close contact' (Bickerton, 1984, p. 173). Typically this occurs when workers from diverse countries are brought in as cheap labor in an agricultural community. Immigrant workers come to speak a simpler form of the dominant language of the area—just enough to get by. A creole occurs when the children of these immigrants acquire a pidgin as their native language. Because access to native speakers of the dominant language is usually limited, these children receive the impoverished pidgin version as their primary linguistic input. Bickerton (1983) observes that the conditions necessary to produce creoles have existed numerous times between 1500 and 1900 when various European nations developed labor-intensive agricultural economies on isolated, under populated tropical islands throughout the world. Bickerton's studies have focused on creoles in Hawaii. Although Hawaiian contact with Europeans goes back to the 18th century, it was not until 1876 that a revision of the U.S. tariff laws led to a large influx of indentured workers to harvest Hawaiian sugar. Because Hawaiian creole developed between 1900 and 1920, it was possible for Bickerton to study the development of the creole by studying the speech of people who are still living. In particular, he examined the language of immigrants who moved to Hawaii and that of their children who were born in the first two decades of the 20th century. The speech of pidgin speakers was rudimentary. In many cases, there was no recognizable syntax, and the language resembled a linguistic free-for-all. Some speakers used one word order and others another; the word orders were often related to the speaker's own native language. Moreover, complex sentences were absent in pidgin: pidgin sentences had no subordinate clauses, and even single-clause utterances often lacked verbs. In addition, there was no consistent system of anaphora.

Topic-140: The Language Bioprogram

Unlike pidgins, the creoles resembled the structural rules of other languages. From these observations, Bickerton concludes that children have an innate grammar that, in the absence of proper environmental input, serves as the child's language system. He calls this system the language bio program. Bickerton (1984) has responded to other possible interpretations of his research. One is that the sophistication found in the children's creoles was based on their access to English, the language of the plantation owners. Bickerton points out, however, that contact between immigrant families and owners was limited and that the Hawaiian creole differed in several respects from English.

Topic-141: Parameter Setting

Parameters is a framework within generative linguistics in which the syntax of a natural language is described in accordance with general principles (i.e. abstract rules or grammars) and specific parameters (i.e. markers, switches) that for particular languages are either turned on or off. For example, the position of heads in phrases is determined by a parameter.

Lesson-25

BRIAN MECHANISM AND LANGUAGE

Topic-145: Broca's Aphasia

A person with expressive aphasia will exhibit effortful speech. Speech generally includes important content words, but leaves out function words that have only grammatical significance and not real-world meaning, such as prepositions and articles. This is known as "telegraphic speech." The person's intended message may still be understood but his or her sentence will not be grammatically correct. In very severe forms of expressive aphasia, a

person may only speak using single word utterances. Typically, comprehension is mildly to moderately impaired in expressive aphasia due to difficulty in understanding complex grammar.

The speech of a person with expressive aphasia contains mostly content words such as nouns, verbs, and some adjectives. However, function words like conjunctions, articles, and prepositions are rarely used except for “and” which is prevalent in the speech of most patients with aphasia. The omission of function words makes the person's speech agrammatic. A communication partner of a person with aphasia may say that the person's speech sounds telegraphic due to poor sentence construction and disjointed words. For example, a person with expressive aphasia might say "Smart... university... smart... good... good..."

Topic-146: Wernicke’s and Conduction Aphasia

The following are common symptoms seen in patients with Wernicke's aphasia: Impaired comprehension: It deficits in understanding (receptive) written and spoken language. This is because Wernicke's area is responsible for assigning meaning to the language that is heard, so if it is damaged, the brain cannot comprehend the information that is being received. Poor word retrieval: The ability to retrieve target words is impaired. This is also referred to as Anomia. Fluent speech: Individuals with Wernicke's aphasia do not have difficulty with producing connected speech that flows. Although the connection of the words may be appropriate, the words they are using may not belong together or make sense (see Production of Jargon below). Production of jargon: Speech that lacks content, consists of typical intonation, and is structurally intact. Jargon can consist of a string of neologisms, as well as a combination of real words that do not make sense together in context. It may include word salads. Awareness: Individuals with Wernicke's aphasia are often not aware of their incorrect productions which would further explain why they do not correct themselves when they produce jargon, paraphasias, or neologisms. Conduction aphasics will show relatively well-preserved auditory comprehension, which may even be completely functional. Spontaneous speech production will be fluent and generally grammatically and syntactically correct. Intonation and articulation will also be preserved. Speech will often contain paraphasic errors: phonemes and syllables will be dropped or transposed (e.g., "snowball" → "snowall",

"television" → "vellitision", "ninety-five percent" → "ninety-twenty percent"). The hallmark deficit of this disorder, however, is in repetition. Patients will show a marked inability to repeat words or sentences when prompted by an examiner.

After saying a sentence to a person with conduction aphasia, he or she will be able to paraphrase the sentence accurately but will not be able to repeat it, possibly because their "motor speech error processing is disrupted by inaccurate forward predictions, or because detected errors are not translated into corrective commands due to damage to the auditory-motor interface."

Topic-148: Geschwind’s Models of Language Processing

1. For listening to and understanding spoken words, the sounds of the words are sent through the auditory pathways to the primary auditory cortex (Heschl’s gyrus). From there, they continue to Wernicke’s area, where the meaning of the words is extracted.
2. In order to speak, the meanings of words are sent from Wernicke’s area via the arcuate fasciculus to Broca’s area, where morphemes are assembled. The model proposes that Broca’s area holds a representation for articulating words. Instructions for speech are sent from Broca’s area to the facial area of the motor cortex, and from there instructions are sent to facial motor neurons in the brainstem, which relay movement orders to facial muscles.
3. In order to read, information concerning the written text is sent from visual areas to the angular gyrus and from there to Wernicke’s area, for silent reading or, together with Broca’s area, for reading out loud.

Lesson-26

LATERALIZATION OF LANGUAGE PROCESSES

Topic-151: Split-Brain Research

A consistent finding in the research on aphasia is that language deficits are associated with damage to the left hemisphere of the brain more often than to the right hemisphere. Moreover, we have known for some time, from studies of animals, that communication between the hemispheres may be disrupted by severing the corpus callosum. In the animal studies, one hemisphere could be taught a specific task, and then the other hemisphere could be tested. Typically, little or no learning was found in the other hemisphere, indicating little or no transfer of information between the hemispheres following severing of the corpus callosum. The goal of these studies is to determine what skills are lateralized to one or the other side of the brain.

Topic-153: Contributions of the Right Hemisphere

However, the right hemisphere also has some talents in the linguistic realm. Normal individuals use the skills of both hemispheres to comprehend and produce language, so we need to examine some of the ways that the two hemispheres interact during language use. It appears that the right hemisphere is better prepared than the left to appreciate some of the pragmatic aspects of language.

Topic-154: Aphasia in Children and Hemispherectomy Studies

We learn more about the development of lateralization from examining the results of a surgical operation known as a hemispherectomy. This operation is normally used to treat incurable and potentially fatal tumors and involves the removal of either the left or the right cerebral hemisphere. Removal of the right hemisphere in adults leads to little or no language impairment, whereas removal of the left hemisphere leads to significant language problems

Lesson-27

EVOLUTION OF LANGUAGE

Topic-157: Evolution of Language

Continuity theories: Continuity theories are built on the idea that language exhibits so much complexity that one cannot imagine it simply appearing from nothing in its final form; therefore it must have evolved from earlier pre-linguistic systems among our primate ancestors.Discontinuity theories: Discontinuity theories take the opposite approach—that language, as a unique trait which cannot be compared to anything found among non-humans, must have appeared fairly suddenly during the course of human evolution.

Some theories see language mostly as an innate faculty—largely genetically encoded. Other theories regard language as a mainly cultural system—learned through social interaction.

Topic-158: Communication in Present Day Primates

Noam Chomsky, a prominent proponent of discontinuity theory, argues that a single chance mutation occurred in one individual in the order of 100,000 years ago, installing the language faculty (a component of the mid-brain) in "perfect" or "near-perfect" form. A majority of linguistic scholars as of 2018 hold continuity-based theories, but they vary in how they envision language development. Among those who see language as mostly innate, some—notably Steven Pinker—avoid speculating about specific precursors in nonhuman primates stressing simply that the language faculty must have evolved in the usual gradual way. Others in this intellectual camp—notably Ib Ulbæk—hold that language evolved not from primate communication but from primate cognition, which is significantly more complex.

Lesson-28

LANGUAGE, CULTURE AND COGNITION

Topic-164: Linguistic Determination and Relativity

The Whorf hypothesis consists of two parts: linguistic determinism and linguistic relativity. Linguistic determinism refers to the notion that a language determines certain nonlinguistic cognitive processes. That is, learning a language changes the way a person thinks. Linguistic relativity refers to the claim that the cognitive processes that are determined are different for different languages. Thus, speakers of different languages are said to think in different ways.

Lesson-29

THEORIES ON CULTURE AND LANGUAGE

Topic-169: Theories on Language & Culture.

Theory 1: Speech is Essential for Thought

Following are the theories given by different researchers on language and culture. (We must learn how to speak aloud, otherwise we cannot develop thinking.)

Proponents:

a) Thought is a kind of behavior, speech, which originates from speech production (verbal or non-verbal)
b) Thought develops as a kind of speech - By speaking aloud, you start to speak subvocally or make internal articulations. (Thought is defined as subvocal speech or behavior.

Topic-170: Theory 2: Language is Essential for Thought

Inadequacies of the theory:

Deaf persons without language can think. E.g. Deaf children, when at play and when participating in activities around the home, behave as intelligently and rationally with respect to the environment as do hearing children. - If one holds that language is the basis for thought, then these deaf children do not think and that they were merely robots.

Topic-171: Theory 3: Language Determines or Shapes Our Perception of Nature

Inadequacies of the theory

1) **Perception, interest, and need determine vocabulary** - It is our interest and need that determine our coinage of vocabulary and its use. E.g. Children, from all over the world, are enchanted by dinosaurs. They perceive the types of dinosaurs. Through perception, they develop their interesting dinosaurs and later they feel the need to seek the names of these objects.
2) **Color and snow vocabulary** - Rather than language determining perception, it is perception that determines language.

- Color words E.g. Speakers of a language with limited repertoire of color terms appeared no different from speakers with broader repertoire of color terms in terms of distinguishing colors of rainbow.

- Snow words E.g. Hawaiians have only one, the English word 'snow' but the Inuits have single words for snow-on-theground, hard-snow-on-the-ground, block-of-snow and others. As for English-speaking skiers in cold countries, they name snow through its physical condition by creating phrases namely 'powder snow', 'wet snow', etc. - It is because of the importance of snow in their lives that they have created more words for snow than have Hawaiians. - It is this language device of creating phrases which every language has that makes up for any vocabulary deficiency.

3) **Hopi 'Time' and Chinese 'Counterfactuals'**
   - Hopi people and time - People are not different because of their language, but because of their experiences. Deep down, we are all the same; it couldn't be otherwise. E.g. Hopi people use periods relating to the harvest, the moon, the sun and other significant events. We do much the same in English ("……when it gets dark", ".... when the weather gets warm").

- **The Chinese language and 'counterfactuals'** - Chinese were not as able as English speakers to think hypothetically about what is not true because of certain grammatical features of the Chinese language. - This happened due to faulty translations but once proper translations were made, there was no basis for claiming a difference in thinking.

4) **Lack of vocabulary does not indicate lack of concept** - We describe a thing, which does not have a single word for it, with a phrase carrying a similar concept. E.g., we have a name for the underside of our hand that is called 'palm' but we have no word for the topside. Instead we use the phrase 'back of the hand.' - This shows that lack of vocabulary item is not indicative of a lack of a concept.
5) **Knowledge overrides literal word meanings** - We can believe something quite different from what the language literally specifies and that the continual use of a language form may not change an underlying thought. In other words, one thing is said but another is understood. (similar to lying, but in this case, people know it is not true) E.g., the word 'sunset'. We always hear and use this word that it leads us to believe that the sun sets on its own. The truth is, it is the earth that moves, not the sun.
6) **Multilingual's view of nature** - If it is said that different languages have distinctive and important effects on the way we view nature, then the multilingual must similarly have distinctive and important ways of viewing nature. But such is not the case. Multilingual is a whole person who perceives nature as other humans do.

Lesson-30

LEXICAL INFLUENCES ON COGNITION

Topic-176: Color Terms

Codability: A concept that has figured in much of the research on color cognition is codability. Brown (1958; see also Lenneberg, 1953) defined codability as the length of a verbal expression. As we saw in our discussion of differentiation, some languages have single words to refer to a particular object or event, whereas others do not. If one's language does not have a specific word for the occasion, the speaker can still make the reference but will need to do so by some combination of words. Relative to the case in which a single word serves the purpose, the phrase is, in Brown's terms, less codable. Brown (1958) suggested a relationship between the frequency of usage of a verbal expression, its length (codability), and the ease with which it may be used. The relationship between frequency and length is captured in what is called Zipf 's law. Some time ago, Zipf (1935) examined Chinese, Latin, and English and found that the length of a word is negatively correlated with its frequency of usage. That is, the more frequently a word is used in a language, the shorter the word (measured either in phonemes or syllables). English contains many examples of Zipf's law. Whenever mass-produced technological innovations are introduced in society, their initial, cumbersome names become shortened for easy reference (for example, video camera-videocassette recorder becomes camcorder). It may be that the differences in the differentiation of domains that Whorf observed are a special instance of Zipf's law.

Topic-179: Object Terms

Recent research in how infants learn names pertaining to objects is also relevant here. You may recall the studies in Chapter 10 that discussed the relationship between object permanence and language acquisition. The conclusion drawn by some researchers (e.g., Gopnik, 2001) was that conceptual categories related to object names are constructed at the time when we learn a language, not before. If so, then we might expect to see different kinds of early object terms in children acquiring different languages. Gopnik and Choi (1990) examined the linguistic and cognitive development of Korean-speaking children. Compared to English, Korean uses fewer nouns and permits noun ellipsis, particularly when it is contextually obvious what is being referred to (Clancy, 1985). Gopnik and Choi found that compared to English children, Korean children were delayed in categorization tasks and the naming explosion.

Lesson-32

NEUROLINGUISTICS AND DISORDERS

Topic-187: Neurolinguistics and Disorders: Disorder of Syntax

Syntactic deficits are common in language disorders and have always been at the focus of research on language disorders. The investigation whether or not syntactic deficits occur in a given acquired or developmental language disorder, which syntactic structures or processes are eventually affected and how to capture such deficits in an explanatory theoretical account has dominated the linguistic research on language disorders since its very first beginnings to the present. Interest on syntactic deficits in language disorders first focused on Broca's aphasia – an acquired language disorder caused by strokes affecting left frontal brain regions.

Topic-188: Aphasia to Neurolinguistics

Aphasia is an acquired language disorder subsequent to brain damage in the left hemisphere. It is characterized by diminished abilities to produce and understand both spoken and written language compared with the speaker's presumed ability pre-cerebral damage. The type and severity of the aphasia depends not only on the location and extent of the cerebral damage but also the effect the lesion has on connecting areas of the brain. Type and severity of aphasia is diagnosed in comparison with assumed normal adult language. Language changes associated with normal aging are not classed as aphasia. The diagnosis and assessment of aphasia in children, which is unusual, takes account of age norms.

The most common cause of aphasia is a cerebral vascular accident (CVA) commonly referred to as a stroke, but brain damage following traumatic head injury such as road accidents or gunshot wounds can also cause aphasia. Aphasia following such traumatic events is non-progressive in contrast to aphasia arising from brain tumor, some types of infection, or language disturbances in progressive conditions such as Alzheimer's disease, where the language disturbance increases as the disease progresses.

The diagnosis of primary progressive aphasia (as opposed to non-progressive aphasia, the main focus of this article) is based on the following inclusion and exclusion criteria by M. Marsel Mesulam, in 2001. Inclusion criteria are as follows: difficulty with language that interferes with activities of daily living and aphasia is the most prominent symptom. Exclusion criteria are as follows: other nondegenerative disease or medical disorder, psychiatric diagnosis, episodic memory, visual memory, and visuo-perceptual impairment, and, finally, initial behavioral disturbance.

Topic-189: Reading and Writing Disorders

Reading disorders occur when a person has trouble with any part of the reading process. Reading and language-based learning disabilities are commonly called dyslexia. These disorders are present from a young age and usually result from specific differences in the way the brain processes language.

There are many different symptoms and types of reading disorders, and not everyone with a reading disorder has every symptom. People with reading disorders may have problems recognizing words that they already know and may also be poor spellers. Other symptoms may include the following:

• Trouble with handwriting • Difficulty reading quickly • Problems reading with correct expression • Problems understanding the written word

Reading disorders are not a type of intellectual and development disorder, and they are not a sign of lower intelligence or unwillingness to learn.

People with reading disorders may have other learning disabilities, too, including problems with writing or numbers.

Topic-190: Phonological and Surface Dyslexia

Surface dyslexia is a type of dyslexia, or reading disorder. According to Marshall & Newcombe's (1973) and McCarthy & Warrington's study (1990), patients with this kind of disorder cannot recognize a word as a whole due to the damage of the left parietal or temporal lobe. Individuals with surface dyslexia are unable to recognize a word as a whole word and retrieve its pronunciation from memory. Rather, individuals with surface dyslexia rely on pronunciation rules. Thus, patients with this particular type of reading disorder read non-words fluently, like "yatchet", but struggle with words that defy pronunciation rules (i.e. exception words). For example, a patient with

surface dyslexia can correctly read regular words like "mint" but will err when presented a word that disobeys typical pronunciation rules, like "pint". Often, semantic knowledge is preserved in individuals with surface dyslexia.

Phonological disorder: Individuals with that form of dyslexia typically have difficulty sounding out unfamiliar words and do poorly on tests of non-word reading. Students can't break down individual sounds of language (phonemic awareness) and match them with written symbols.

This makes it difficult to sound out or "decode" words. Most kids with reading issues have some degree of phonological dyslexia. It's also sometimes referred to as dysphonetic dyslexia.

Topic-191: Dyslexia

Dyslexia is a brain-based type of learning disability that specifically impairs a person's ability to read. Individuals with dyslexia typically read at levels significantly lower than expected despite having normal intelligence. Although the disorder varies from person to person, common characteristics among people with dyslexia are: difficulty with phonological processing (the manipulation of sounds), spelling, and/or rapid visual-verbal responding. Dyslexia can be inherited in some families, and recent studies have identified a number of genes that may predispose an individual to developing dyslexia. Examples of specific types of reading disorders include:

• Word decoding: People who have difficulty sounding out written words; matching the letters to sounds to be able to read a word. • Lack of fluency: People who lack fluency have difficulty reading quickly, accurately, and with proper expression (if reading aloud). • Poor reading comprehension: People with poor reading comprehension have trouble understanding what they read.

Topic-192: Deep Dyslexia

Deep dyslexia is usually classified as an acquired reading disorder, as opposed to developmental dyslexia, in previously literate adults as a consequence of a brain injury. However, recently, developmental deep dyslexia has also been reported in children with Williams's syndrome.

Deep dyslexia is considered to be "central dyslexia" as compared to "peripheral dyslexia." Peripheral dyslexics have difficulty matching the visual characteristics of letters that comprise a word to a stored memory of this word from prior encounters. Central dyslexics are unable to properly match the visual word to the word's meaning. They may also be incapable of speaking, or phonating, the sequence of written letters that they see into the word these letters represent. Deep dyslexia differs from other forms of central dyslexia (phonological dyslexia and surface dyslexia) in that deep dyslexics have many more symptoms and these symptoms are generally more severe. According to the "continuum" hypothesis, deep dyslexia is a more severe form of phonological dyslexia.

Lesson-33

FIRST LANGUAGE ACQUISITION

Topic-196: Nature or Nurture Universal

Nativists contend that a child is born with an innate knowledge of or predisposition toward language, and that this innate property (the LAD or UG) is universal in all human beings. The innateness hypothesis was a possible resolution of the contradiction between the behavioral notion that language is a set of habits that can be acquired by

a process of conditioning and the fact that such conditioning is much too slow and inefficient a process to account for the acquisition of a phenomenon as complex as language. But the innateness hypothesis presented a number of problems itself.

Lesson-34
AGE AND ACQUISITION

Cognitive considerations

Jean Piaget (1972; 1955; Piaget & Inhelder, 1969) outlined the course of intellectual development in a child through various stages: * Sensorimotor stage (birth to 2) * Preoperational stage (ages 2 to 7) * Operational stage (ages 7 to 16) • Concrete operational stage (ages 7 to 11) * Formal operational stage (ages 11 to 16). A critical stage for a consideration of the effects of age on second language acquisition appears to occur, in Piaget's outline, at puberty (age 11 in his model).

It is here that a person becomes capable of abstraction, of formal thinking which transcends concrete experience and direct perception. Cognitively, then, an argument can be made for a critical period of language acquisition by connecting language acquisition and the concrete/formal stage transition. However, as reasonable as such a contention might sound, even here some caution is warranted. Singleton and Ryan offer a number of objections to connecting Piagetian stages of development with critical period arguments, not the least of which was the "vagueness" and lack of empirical data in Piaget's theory.

Topic-203: Issues in First Language Acquisition Revisited

Issue one: Position meeting the criteria for a scientific theory: Chomsky's innateness position seems to meet a convincing criterion for a scientific theory. It covers aspects of some other theories, possesses the properties of scientific theory and has claims for contents. Chomsky believes that both body and mind exist, and the elements needed for theory-making are body, behavior, and mind. His position shares aspects from other positions; for example, epiphenomenalism considers mind as the side effect of an action.

Issue two: Child's logical thinking: Piaget supports the child's logical thinking which is attributable to his third stage of development called "concerned operational period" (occurring roughly around the age of 7 to 11 years). Piaget labels stage three as "preparation for an achievement of concrete operations."

Issue three: The origins of language: First, we refer to Chomsky's position and then to that of Vygotsky. Chomsky is nativist, and he argues that the ability to acquire language is innate and that children are programmed to learn language. Some form of pre-programming can explain the speed with which children learn the complex skill of using language and the similarity of language acquisition across cultures.

Topic-204: Order of Acquisition

The order of acquisition is a concept in language acquisition describing the specific order in which all language learners acquire the grammatical features of their first language. This concept is based on the observation that all children acquire their first language in a fixed, universal order, regardless of the specific grammatical structure of the language they learn. Linguistic research has largely confirmed that this phenomenon is true for first-language learners; order of acquisition for second-language learners is much less consistent. It is not clear why the order differs for second-language learners, though current research suggests this variability may stem from first-language interference or general cognitive interference from nonlinguistic mental faculties.

Lesson-35

CHILDREN VS. ADULTS IN SECOND-LANGUAGE LEARNING

Topic-205: Children are Better: A Common Belief Psychological Category

Speaking a second language is an important skill for all people, both young and old. It has long been believed that children are better able to learn a second language. In actuality, it is not that children learn language better than adults, but that adults and children learn language differently. By understanding these differences and making adjustments to the learning process, all people can acquire a second language, no matter their age.

Processing differences: There are distinct differences in the way an adult brain processes a foreign language when compared to the brain of a child. Dr. Paul Thompson of UCLA used MRI imaging and animation technology to view what parts of the brain adults and children use when learning a second language. What was found is that children use a part of their brain called the "deep motor area." The "deep motor area" of the brain is responsible for processes that are not consciously thought about, like brushing your teeth or getting dressed. For children, processing a new language is second nature. Adults process language in a more active part of the brain, meaning that they think more consciously about language rather than it being intuitive.

Proficiency differences: One reason that it seems that children acquire a second language quicker than adults is because of the different standards of proficiency between adults and children. Children have a smaller vocabulary and it is easy to learn enough of a second language to communicate their needs. Adults have a much larger vocabulary and think and communicate in more complex ways than children. This means it takes them longer to acquire the ability to communicate effectively in a second language. Although it seems that children learn language quicker than adults, in actuality adults and adolescents have the edge.

Pronunciation: Another reason that the myth persists that children learn second languages easier than adults is because of the child's ability to adapt the proper pronunciation of a language. It is true that the younger a child begins to learn a second language, the better their pronunciation. Adults have a more difficult time adapting the pronunciation of a foreign language, and so sound less competent than a child who has the ability to speak a second language with the proper accent.

Aging and learning ability: Another common misconception is that as people age, their ability to learn a new skill diminishes. In actuality, people do not lose their ability to learn as they age. The only challenges an older learner of a second language faces is the weakening of vision and hearing. The loss of hearing in particular can affect a person's ability to learn a language in the traditional classroom setting. A healthy, older adult is perfectly capable of learning a second language.

Learning methods: Because children and adults learn differently and use different parts of their brains to process language, the way they are taught a second language should also differ. Exposing children to a second language at home as well as at school is essential to their learning. Singing songs, reading books, and repetition of foreign words are all useful tools in helping a child learn a new language.

Older learners, especially those with hearing and vision difficulties, may have difficulties learning in a traditional classroom setting. Working with a group that focuses more on understanding the language rather than perfecting pronunciation, and integrates new concepts into the adults preexisting cognitive structures will help the older learner succeed.

Motivation: A number of factors that affect second-language learning operate only in certain types of situations. 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 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, or the child may prefer other activities.

Attitude: A negative attitude towards the target language or its speakers, or the other members of the class, may also affect one's determination and persistence to be involved in the classroom and its activities. This same negative attitude could impair memory functioning and detract from focusing on the target language. In the same way, any of a host of personality and sociocultural variables could have deleterious effects (Brown, 1987).

Topic-206: Social Category

Three types of social structures which can affect the acquisition of second languages are: sociolinguistic setting, specific social factors, and situational factors. Sociolinguistic setting refers to the role of the second language in society. Specific social factors that can affect second language acquisition include age, gender, social class, and ethnic identity. Situational factors are those which vary between each social interaction.

Language attitudes: Language attitudes in the learner, the peer group, the school, the neighborhood, and society at large can have an enormous effect on the second language learning process, both positive and negative.

Learner attitudes: Learners manifest different attitudes towards 1) the target language, 2) the target language speakers, 3) the target language culture, 4) the social value of learning the L2, 5) particular use of the target language, and 6) themselves as members of their own culture. In general, positive attitudes towards the L2, its speakers, and its culture can enhance learning, which can in turn be influenced by this success; negative attitudes can impede learning. However, if learners have a strong reason for learning, negative attitude can have a positive effect. Learners may have conflicting attitudes. Learners might want to learn the L2 as a way of assimilating into the majority culture, but at the same time, they may wish to keep their L1 as a means of maintaining their L1 identity.

Age: Younger speakers are subject to peer group pressure, (and they use the nonstandard form used by their peer group); the middle-aged group is less subject to peer group pressure, and they are more influenced by mainstream societal values. For older people, the social pressures lessen and social networks again become narrow. Generally, learners who learn an L2 after puberty (or possibility earlier) are unlikely to acquire a native-speaker accent while those who begin after 15 years are less likely to develop full grammatical ability – Chambers and Trudgill (1980).

Gender: Two apparently contradictory principles noticed by sociolinguists are:

1. In stable sociolinguistic stratification, men use a higher frequency of nonstandard forms than women.
2. In the majority of linguistic changes, women use a higher frequency of the incoming forms than men.

Lesson-36

LANGUAGE, LEARNING, AND TEACHING

Cognitive strategy: People who adopt the cognitive strategy tend to analyze and reason. They form internal mental codes and revise them to receive and produce the message in the target language. Adopting this strategy will enable you to internalize the language in direct ways such as through reasoning, analysis, note-taking, summarizing, synthesizing, outlining, and practicing in naturalistic settings, and practicing structures and sounds formally.

Things they do: People learning Korean watch Korean dramas and try to replicate how the characters pronounce Korean words. Watch Korean dramas and try to replicate how the characters use certain words in a sentence. Write emails or letters in SL. Read SL reading materials such as magazines and newspapers.

Comprehension strategy: People who adopt the comprehension strategy find themselves guessing unknown words when listening and reading. They also try to replace words they do not know with longer phrases or other words that they know when speaking and writing to overcome gaps in knowledge.

Things they do: Try to guess the meaning of words they don't know. Try to understand the meaning through looking at the word in context. Guess the meaning of some words by reading the whole passage. Try to look for cues or nonverbal signs when in conversation.

Metacognitive strategy: People who adopt the metacognitive strategy plan, arrange, focus, evaluate on their own learning process. They identify and monitor their own learning style preferences and needs, such as gathering and organizing L2 materials, arranging a study space and a schedule for L2 revision and learning, monitoring mistakes made in L2, evaluating task success, and evaluating the success of any type of learning strategy.

Things they do: Observe how the SL teacher speaks in the SL. Observe how they themselves speak in the SL. Practice speaking in SL in front of the mirror. Crosscheck with Google to find out if their pronunciation is correct, and correct it. Doing crossword puzzles and play word games like scrabble. Take note of how other people communicate in SL, especially natives.

Topic-215: Nineteen Centuries of Language Teaching

Latin was taught by means of what has been called the Classical Method: focus on grammatical rules, memorization of vocabulary and of various declensions and conjugations, translation of texts, doing written exercises. As other languages began to be taught in educational institutions in the eighteenth and nineteenth centuries, the Classical Method was adopted as the chief means for teaching foreign languages. Little thought was given at the time to teaching oral use of languages; after all, languages were not being taught primarily to learn oral/aural communication.

Lesson-37

LEARNING STYLE

Topic-217: Learning Style: Field Independence

Learning styles mediate between emotion and cognition, as you will soon discover. For example, a reflective style invariably grows out of a reflective personality or a reflective mood. An impulsive style, on the other hand, usually arises out of an impulsive emotional state. People's styles are determined by the way they internalize their total environment, and since that internalization process is not strictly cognitive, we find that physical, affective, and

cognitive domains merge in learning styles. Some would claim that styles are stable traits in adults. This is a questionable view, as noted by Donvyei and Skehan (2003, p.602): "a predisposition may be deep-seated, but it does imply some capacity for flexibility, and scope for adaptation of particular styles to meet the demands of particular circumstances." It would appear that individuals show general tendencies toward one style or another, but that differing contexts will evoke differing styles in the same individual. Perhaps an "intelligent" and "successful" person is one who is "bicognitive"—one who can manipulate both ends of a style continuum.

Topic-218: Learning Styles in the Classroom

Auditory and musical learners

Auditory learners like to hear solutions and examples explained to them and may gravitate towards music subjects and group learning as a way to understand information. Auditory learners often have a high aptitude for distinguishing notes and tones in music and speech.

Qualities often associated with auditory learners include:

 Possessing a ‘good ear’ for music and tones May be distractible Likes to talk to self /others /hum /sing

Auditory learners might say words out loud or hum tones to better learn them. This strategy is a key for keeping musical learners engaged in class lessons.

Topic-222: Students’ Diverse Learning Styles in Learning English as A Second Language

Perceptual learning style is an approach to learning through the five senses. It comprises of auditory learner, visual learner, tactile learner, kinesthetic learner, and haptic learner. Auditory learners learn more through hearing. Visual learners learn more through seeing. Tactile learners discover things through sense of touch. Kinesthetic learners enjoy learning through movement and body experience. Haptic learners are the combination of tactile and kinesthetic learners where they learn more through sense of touch and body involvement. Environmental learning style, on the other hand, comprises of only one dimension which is physical versus sociological. Physical learners can learn better when there are variables such as temperature, sound, light, food, time, and classroom management. These variables have to be taken into considerations during the learning process. In contrast, sociological learners are motivated to learn when there are variables such as group, individual, pair and team work, and level of teacher authority. These variables are important in encouraging the students’ motivation to learn.

Lesson-38

LEARNING STRATEGIES

Topic-225: Communication Strategies

Communication strategies are strategies that learners use to overcome these problems in order to convey their intended meaning. Strategies used may include paraphrasing, substitution, coining new words, switching to the first language, and asking for clarification. These strategies, with the exception of switching languages, are also used by native speakers.

Topic-228: Strategy Based Instructions

Much of the work of researchers and teachers on the application of both learning and communication strategies to classroom learning has come to be known generically as strategies-based instruction (SBI) (McDonough, 1999; Cohen. 1998), or as learner strategy training. Cohen (1998) likes to refer to "5581"—styles and strategies-based instruction —to emphasize the productive link between styles and strategies. As we seek to make the language classroom an effective milieu for learning, it has become increasingly apparent that "teaching learners how to learn" is crucial. Wenden (1985) was among the first to assert that learner strategies are the key to learner autonomy, and that one of the most important goals of language teaching should be the facilitation of that autonomy.

Lesson-39

STRATEGIES-BASED INSTRUCTION

Topic-229: Identifying Learners' Styles and Strategies

The most widely used instrument for learners to identify strategies is Oxford's (1990a) Strategy Inventory for Language Learning (SILL), a questionnaire that has now been tested in many countries and translated into several languages.

Topic-230: Students' Awareness of Learning Styles and Perceptions

Learning strategies are specific combinations or patterns of learning activities used during the learning process. The quality of learning outcomes achieved is dependent to a considerable extent on the learning activities used by learners. These learning strategies can be broadly divided into self-regulated strategy in which the students perform most regulation activities themselves, externally regulated strategy in which the students let their learning process to be regulated by teachers/books or lack of regulation when students are unable to regulate their learning process by themselves and also experience insufficient support from external regulation as provided by teachers and learning environment.

Topic-234: Language Learning Strategies and its Implications for Second Language Teaching

There are two common ways to approach language learning strategy instruction: uninformed strategy instruction or direct and integrated instruction. In uninformed strategy instruction, students work through materials and activities designed to elicit the use of specific strategies, but students are not informed of the name, purpose, or value of the specific learning strategy. Direct and integrated instruction (O'Malley & Chamot, 1995, p.153) informs learners of the value and purpose of learning strategies and helps learners to use, identify, and develop learning strategies in a systematic way as they learn the target language.

Lesson-40

AFFECTIVE FACTORS IN SECOND LANGUAGE ACQUISITION

Self-esteem

Self-esteem is probably the most pervasive aspect of any human behavior. It could easily be claimed that no successful cognitive or affective activity can be carried out without some degree of selfesteem, self-confidence, knowledge of yourself, and self-efficacy—belief in your own capabilities to successfully perform that activity. Malinowski (1923) noted that all human beings have a need for phatic communion—defining one self and finding acceptance in expressing that self in relation to valued others. Personality development universally involves the growth of a person's concept of self, acceptance of self, and reflection of self as seen in the interaction between self and others. The following is a well-accepted definition of self-esteem (Coopersmith, 1967, pp. 4-5): by self-esteem, we refer to the evaluation which individuals make and customarily maintain with regard to themselves; it expresses an attitude of approval or disapproval, and indicates the extent to which individuals believe themselves to be capable, significant, successful, and worthy. In short, self-esteem is a personal judgment of worthiness that is expressed in the attitudes that individuals hold toward themselves. It is a subjective experience which the individual conveys to others by verbal reports and other overt expressive behavior.

Topic-236: Attribution Theory and Self-Efficacy

Underlying the issues and questions about the role of self-esteem in language learning are the foundational concepts of attribution and self-efficacy. Based on the seminal work of psychologist Bernard Weiner (1986. 1992, 2000), attribution theory focuses on how people explain the causes of their own successes and failures. Weiner and others (Slavin, 2003; Dornyei, 2001b; Williams & Burden, 1997) describe attribution theory in terms of four explanations for success and/or failure in achieving a personal objective: ability, effort, perceived difficulty of a task, and luck. Two of those four factors are internal to the learner: ability and effort; and two are attributable to external circumstances outside of the learner: task difficulty and luck. According to Weiner, learners tend to explain, that is, to attribute, their success on a task on these four dimensions. Depending on the individual, a number of causal determinants might be cited.

Topic-239: Anxiety

Intricately intertwined with self-esteem, self-efficacy, inhibition, and risk taking, the construct of anxiety plays a major affective role in second language acquisition. Even though we all know what anxiety is and we all have experienced feelings of anxiousness, anxiety is still not easy to define in a simple sentence.

Topic-240: Extroversion

Extroversion and its counterpart, introversion, are also potentially important factors in the acquisition of a second language. The terms are often misunderstood because of a tendency to stereotype extroversion. We are prone to think of an extroverted person as a gregarious, "life of the party" person. Introverts, conversely, are thought of as quiet and reserved, with tendencies toward reclusiveness. Western society values the stereotypical extrovert. Nowhere is this more evident than in the classroom where teachers admire the talkative, outgoing student who participates freely in class discussions. On the other hand, introverts are sometimes thought of as not being as bright as extroverts. Such a view of extroversion is misleading. Extroversion is the extent to which a person has a deep-seated need to receive ego enhancement, self-esteem, and a sense of wholeness from other people as opposed to receiving that affirmation within oneself. Extroverts actually need other people in order to feel "good."

Lesson-41

MOTIVATION

Topic-242: Instrumental and Integrative Orientations

Motivation was examined as a factor for a number of different kinds of attitudes. Two different clusters of attitudes divided two basic types of what Gardner and Lambert identified as instrumental and integrative orientations to motivation. The instrumental side of the dichotomy referred to acquiring a language as a means for attaining instrumental goals: furthering a career, reading technical material, translation, and so forth. The integrative side described learners who wished to integrate themselves into the culture of the second language group and become involved in social interchange in that group.

Topic-243: Intrinsic and Extrinsic Motivation

Intrinsically motivated activities are ones for which there is no apparent reward except the activity itself. People seem to engage in the activities for their own sake and not because they lead to an extrinsic reward. Intrinsically motivated behaviors are aimed at bringing about certain internally rewarding consequences, namely, feelings of competence and self-determination. On the other hand, extrinsic motivation is fueled by the anticipation of a reward from outside and beyond the self. 'Typical extrinsic rewards are money, prizes, grades, and even certain types of positive feedback. Behaviors initiated solely to avoid punishment are also extrinsically motivated. Even though numerous intrinsic benefits can ultimately accrue to those who, instead, view punishment avoidance as a challenge that can build their sense of competence and self-determination.

Lesson-42

SOCIOCULTURAL FACTORS

Topic-248: Stereotypes or Generalizations

Generalizations become stereotypes when all members of a group are categorized as having the same characteristics. Stereotypes can be linked to any type of cultural membership, such as nationality, religion, gender, race, or age.

Topic-249: Second Culture Acquisition & Social Distance

Robinson Stuart and Nocon suggested that language learners undergo culture learning as a "process, that is, as a way of perceiving, interpreting, feeling, being in the world, ... and relating to where one is and who one meets" (p. 432). Culture learning is a process of creating shared meaning between cultural representatives. It is experiential, a process that continues over years of language learning, and penetrates deeply into one's patterns of thinking, feeling, and acting.

It is common to describe culture shock as the second of four successive stages of culture acquisition: 1. Stage 1 is a period of excitement and euphoria over the newness of the surroundings. 2. Stage 2—culture shock—emerges as individuals feel the intrusion of more and more cultural differences into their own images of self and security. In this stage, individuals rely on and seek out the support of their fellow countrymen in the second culture, taking solace in complaining about local customs and conditions, and seeking escape from their predicament. 3. Stage 3 is one of gradual, and at first tentative and vacillating, recovery. This stage is typified by what Larson and Smalley (1972) called "culture stress": some problems of acculturation are solved while other problems continue for some time. But general progress is made, slowly but surely, as individuals begin to accept the differences in thinking and feeling that surround them, slowly becoming more empathic with other persons in the second culture. 4. Stage 4 represents

near or full recovery, either assimilation or adaptation, acceptance of the new culture and self-confidence in the "new" person that has developed in this culture.

Lesson-43

NEW DIRECTIONS

Topic-254: Mirror Neurons and Language: Challenges and Future Directions

The role of mirror neurons in imitation is more contentious. Although mirror neurons have not been recorded directly in humans, brain-imaging studies point to an equivalent system in the human brain, and this system is activated when people imitate action (Nishitani and Hari, 2000, Nishitani and Hari, 2002, Rizzolatti and Craighero, 2004). Yet monkeys appear to be incapable of imitation (Visalberghi and Fragaszy, 1990, Visalberghi and Fragaszy, 2002), suggesting that the mirror system did not evolve to mediate imitation. Rizzolatti and colleagues have suggested instead that the primary role of mirror neurons is in action understanding (Rizzolatti et al., 2001, Rizzolatti and Sinigaglia, 2008); that is, mirror neurons allow the monkey—or human—to understand actions performed by others by mapping those actions onto actions that it can itself perform, but they do not mediate the actual imitation of those actions.

Lesson-44

PSYCHOLINGUISTICS IN APPLIED LINGUISTICS: TRENDS AND PERSPECTIVES

Topic-259: Relating Psycholinguistics and Applied Linguistics

If we want to clarify the role psycholinguistics can or should play in AL, we need to narrow down the definition of the latter, or rather look at only a part of that vast field. The acquisition and use of a second language seem to be the appropriate chunk of AL in this context. This sub-area relates to many other parts of our field, but its core is, in my view at any rate, essentially psycholinguistic in nature. The psycholinguistic interest would be in the processing mechanisms involved in using more than one language and the acquisition of additional languages. The AL interest would be in understanding why language learners behave the way they do, or in other words, what the mechanisms are for L2 use and acquisition. Ultimately, interest also lies in interventions that change and improve those mechanisms

Topic-260: Key Issues in The Multilingual Processing: The Structure of The Bilingual Lexicon

Lexical development in children who learn their second language when their first language is already developed is different from that of children who grow up in a bilingual environment (i.e. simultaneous bilingualism). The beginning step of learning words in the second language is translation, or learning the definitions. This is different from how they learned their first language which involves inputting the information of semantic and formal entities together. When accessing these newly learned words, the basic language semantic system will be activated, which means when a second language word is activated, the basic language word with the same meaning is also activated.

Topic-262: The Language Mode

In several publications, Grosjean has developed the idea of a language mode to explain the various ways multilingual use their languages. The language mode is defined as follows: "The state of activation of the bilingual's languages and language processing mechanisms, at a given point in time." The language mode is a continuum, ranging from a monolingual mode to a bilingual speech mode (Grosjean to appear). In the monolingual mode only one language is activated and the other languages in a multilingual are deactivated. The notion of a language mode is related to the issues of the language cue discussed above: the language mode is defined by the setting and the communicative intentions of a speaker.

Lesson-45

TEACHING TO PSYCHOLINGUISTICS

Topic-269: A Universal Four-Phase Reading Programme

Phase 1: Word Familiarization

The purpose of this phase is to acquaint children with the shapes of written words and to have them become aware that different spoken words of the language have different written manifestations.

Phase 2: Word Identification

In this phase, the child learns which particular written words are associated with which particular spoken words or objects. The difference between this phase and the preceding one is that this one requires the use of long-term memory.

Phase 3: Phrase and Sentence Identification

This phase is similar to that of the preceding word identification one, except that larger linguistic units are dealt with. Its goal is for the child to read the largest basic linguistic unit, the sentence.

Phase 4: Paragraphs, Stories, and Book Reading

The paragraph involves the largest meaningful written linguistic unit. It consists of a sequence of two or more sentences that are related to one another. A sequence of paragraphs can make a story.

More on ENG511

Bilingual First-Language Acquisitions

Popular ideas about bilingual language development are curiously mixed. Because bilingualism is the norm in many parts of the world and younger children are often regarded as superior language learners than older children or adults, some believe that young children can effortlessly acquire two or more languages simultaneously. At the same time, some parents and educators fear that bilingual language exposure may slow children's language development and even cause them to mix or confuse their languages. We will examine some of these ideas.

The Critical Period Hypothesis

There is a period early in life in which we are especially prepared to acquire a language is referred to as the critical period hypothesis. Many investigators who favor the critical period hypothesis suggest that there are neurological changes in the brain that leave a learner less able to acquire a language, although the nature of these supposed changes is not well understood. Most commonly, these changes are assumed to occur near puberty.

Language acquisition and learning

- **Lang Acquisition**: How people learn language acquisition is the process by which humans acquire the capacity to perceive and comprehend language, as well as to produce and use words to communicate.
- **Lang learning** means a person is trying to learn the language consciously through practice, training, or experience.

Three levels of self-esteem [This was the answer given by the instructor via email.]

1. Inflated Self-Esteem This is when someone thinks they are better than others and have no doubts about underestimating or taking every opportunity to demean everyone else. This is the negative version of self-esteem, as it holds you back from establishing close and healthy relationships.
2. High Self-Esteem The goal that we are all striving for. When we have it and when we don't have it, we know it. When you have high self-esteem, you accept & value who you are. It is the positive selfesteem that helps you feel satisfied with your life. It gives you confidence and courage to face all problems that show up & make them easier to deal with. Believing in yourself and trusting in who you are is what characterizes people who possess this type of self-esteem.
3. Low Self-Esteem : This carries an aggressive, passive, or negative attitude to accept other points of view or being unable to have an opinion or action that is honest and true. People who have low self-esteem are the opposite of those with high self- esteem. They do not value themselves nor do they trust in the possibility they will come out on top of any situation. Fear of failure is something that torments them and holds them back from taking the risk of change for the better.

Type of information is stored in left hemisphere

- Analytic thought
- Logical
- Language
- Reasoning
- Science and Math
- Written
- Number skills
- Right-hand control