

NBASLH PRAXIS REVIEW COURSE

**RECEPTIVE AND EXPRESSIVE
LANGUAGE**

Iris Johnson Arnold, Ph.D., CCC-SLP

Department of Speech Pathology

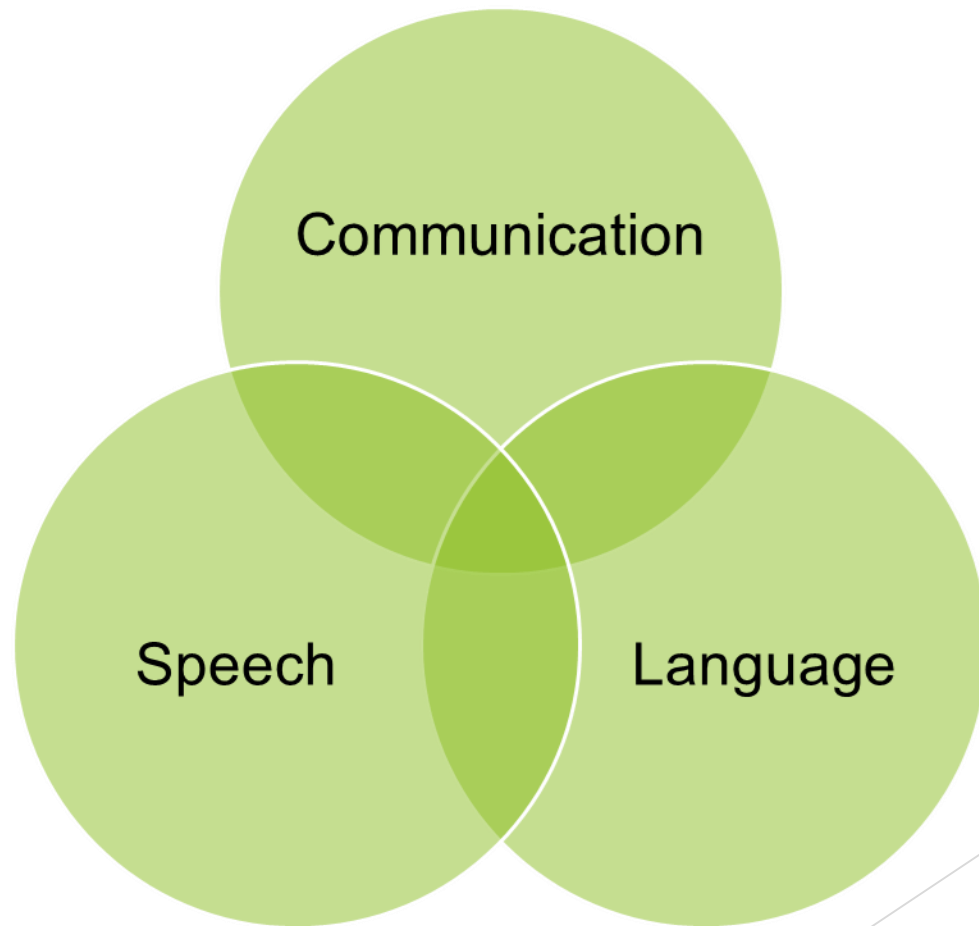
Tennessee State University

ijohnson@tnstate.edu

Language Acquisition: Preverbal and Early Language

- Definitions
 - Language, communication, speech
 - Five Aspects of Language:
 1. Pragmatics
 2. Phonology
 3. Semantics
 4. Morphology
 5. Syntax
 - Two Modalities
 1. Receptive
 2. Expressive

LANGUAGE STRUCTURE



Language Structure

- Speech: verbal; planning & execution; neuromuscular coordination; voice quality, intonation & rate
- Language: shared code; dialect
 - A system of abstract symbols and rule-governed structures, the specific conventions of which are learned
- Communication:
 - Paralinguistic codes- intonation, stress, rate of delivery, and pause or hesitation signal attitude or emotion when superimposed on speech.
 - Nonlinguistic cues - include gestures, body posture, facial expression, eye contact, head and body movement, and proxemics (i.e., physical distance).
 - Metalinguistics- is the abilities to talk about language, analyze it, think about it, judge it, and see it as an entity separate from its content.
 - Metalinguistic skills are used to judge the appropriateness of the language we produce and receive. Therefore, metalinguistic cues indicate the success of communication.

MODALITIES

Two Primary Ones

Receptive

Auditory Comprehension

Expressive

Verbal Output
(may be written as well)

ASPECTS/COMPONENTS OF LANGUAGE

Form: Phonology,
Morphology & Syntax

Content: Semantics

Use: Pragmatics

Aspects/Components of Language

1. Pragmatics: Rules related to language use (i.e., function).
2. Syntax: Governs sentence structure.
3. Morphology: Internal organization of words
4. Phonology: Rules governing the structure, distribution, and sequencing of speech sounds and the shape of syllables.
5. Semantics: Rules governing the *meaning* of words and word combinations.

Let's TALK ABOUT PRAGMATICS

- ▶ AKA language use
- ▶ Function Competence and Social Interaction
- ▶ Perlocutionary, illocutionary and locutionary (stages of intentionality)
- ▶ Relates to understanding the social rules of communication. These rules change depending on the context and purpose of the communication.
- ▶ Includes: conversations, dialogues, narratives
- ▶ Maintaining topics; turn taking, requests for clarifications
- ▶ Jokes, Sarcasm, Double meanings, etc.

Let's TALK ABOUT PRAGMATICS

- ▶ AKA language use
- ▶ Function Competence and Social Interaction
 - ▶ The domain of language that governs communication to be functional and socially appropriate within a given context
 - ▶ Pragmatics refers to communication competence
 - ▶ Pragmatic rules guide the use of language in social interactions in a variety of contexts.

PRAGMATICS: Three Stages of Pragmatic Development

▶ Perlocutionary Stage

- ▶ Birth - 8 months
- ▶ Adults infer communicative intent from unintentional, vegetative behaviors such as the infant's cough or burp

▶ Illocutionary Stage

- ▶ 8 months - 12 months
- ▶ The use of gestures and vocalizations but no words to express intentions to communicate
- ▶ Infants show objects and shortly after give objects over to adults to initiate interaction
- ▶ Pointing to precedes and predicts first words

▶ Locutionary Stage

PRAGMATICS: Three Stages of Pragmatic Development

- ▶ Stages of Pragmatic Development
 - ▶ Perlocutionary Stage
 - ▶ Illocutionary Stage
 - ▶ Locutionary Stage
 - ▶ 12 months - life span
 - ▶ The use of words to express intention to communicate
 - ▶ Gesture and other nonverbal behaviors become integrated with spoken language

PRAGMATICS: Skills in Infancy

- ▶ Pragmatic skills present in infancy that are foundation for the social use of language:
 - ▶ Eye contact
 - ▶ Turn taking
 - ▶ Joint attention
- ▶ Children initially express their intentions using gestures, vocalization or words
 - ▶ Communication intentions (aka speech acts):
 - ▶ Requesting action
 - ▶ Naming or labeling
 - ▶ Protesting
 - ▶ Greeting
 - ▶ Repeating
 - ▶ Practicing
 - ▶ Answering

PRAGMATICS: Skills in Preschoolers

- ▶ Children initially express their intentions using gestures, vocalization or words
 - ▶ Communication intentions (aka speech acts):
 - ▶ Requesting permission
 - ▶ Acknowledging
 - ▶ Asking questions
 - ▶ Making jokes
 - ▶ Relating a story
 - ▶ Suggesting
 - ▶ Indirect requesting
 - ▶ **Analyses of early pragmatic development**
 - ▶ Dore's Primitive Speech Acts
 - ▶ Dore's Conversational Acts
 - ▶ Martlew's Conversational Moves

PRAGMATICS: Longer Linguistic Units

- ▶ Engaging in longer linguistic units of discourse is a pragmatic skill that requires the integration of all five domains of language
 - ▶ **Narratives** - decontextualized monologue that conveys a story, personal recount or account
 - ▶ **Conversations** - a dialogue between two communicative partners that emerges in toddlerhood and is refined during the preschool years
 - ▶ Pragmatic concepts related to narratives:
 - ▶ Cohesion devices makes communication efficient in preschool
 - ▶ Ellipsis refers to deleting already said information
 - ▶ Deixis devices are words or gestures that rely on context to glean meaning (e.g. pronouns such as “this, that, here)

PRAGMATICS: Theory of Mind

- ▶ Ability to take the listener's point of view including what they may believe, know or feel
- ▶ Must be taken into account to convey sufficient and accurate information to a listener

Let's TALK ABOUT SEMANTICS

- ▶ The parameter of semantics addresses the meaning of language. It includes word meaning.
- ▶ Can include understanding relational terms (hard-soft); proverbs and idioms (figurative language)
- ▶ Pronouns used anaphorically (referring to a previously named word)
- ▶ Vocabulary; abstract concepts
- ▶ Related terms—content, lexicon; vocabulary; nominals

SEMANTICS: Word Learning

- ▶ Word learning encompasses mapping the word form or label (lexical representation), word meaning (semantic representation) and grammatical specification (word class information)
- ▶ Word learning is a graduate and long term process that includes fast mapping and slow mapping
 - ▶ Fast mapping - happens when the initial association or link between the word label and meaning is made and stored in memory
 - ▶ Slow mapping refers to the learning that occurs during the subsequent long/extensive period of word learning after fast mapping occurs
 - ▶ Words that are more frequently heard in the ambient language are learned more quickly
 - ▶ Nouns are more easily learned than other word classes
 - ▶ Neighborhood density of a word refers to the number of possible words (aka neighbors) that differ by one phoneme from it.
 - ▶ The word “cat” resides in a high density neighborhood (sat, pat, cab, coat, cute)

SEMANTICS: Semantic Hierarchy

- ▶ There is a hierarchical organization to the semantic system
 - ▶ From superordinate (animal) to
 - ▶ Ordinate (cat) to
 - ▶ Subordinate (Persian, Siamese, Calico) words
- ▶ Semantically related words are linked more closely in the lexicon
- ▶ Children's first words are ordinate terms
- ▶ Relate this concept to the cognitive terms of schema, assimilation and accommodation

Grammatical Categories - **Think of the TTR**

Parts of Speech:

- noun
- pronoun
- verb
- adjective
- adverb
- preposition
- conjunction
- interjection

Grammatical Categories of the First 50 Words

Nominal

- Specific Nominal: (e.g., *Mama, Bill*)
- General Nominal: (e.g., *snow, birthday*)

Action Words: (e.g., *bye-bye, go, look, see, up, out*)

Modifiers: (e.g., *there, little, pretty*)

Personal-Social: (e.g., *want, feel, please, thank you, yes, no*)

Functional: (e.g., *what, where, is, for*)

(Nelson' One-Word Utterance Types. Adapted from Retherford, 2000)

SEMANTICS: Spoken Language

- ▶ The first word is spoken at roughly one year old (13.6 months)
 - ▶ This first word can come a little earlier or even later
- ▶ Initial vocabulary growth, from 12 to 18 months is characterized by halts/stops and starts
- ▶ The initial vocabulary growth, at 15 months is approximately 10 words
- ▶ By 19 months (on average), they have slowly acquired 50 words in their expressive vocabulary
- ▶ By 24 months (on average), they have 100 - 300 words
- ▶ A word spurt occurs after acquiring the first 50 words

SEMANTICS: Late Talkers

- ▶ Toddlers who do not meet early word learning milestones in a timely manner are referred to as late talkers
 - ▶ Most will outgrow their early language delay (late bloomers) while a small percentage persist in language delay beyond the preschool years
 - ▶ Late talkers are characterized by small vocabularies and no two word combinations
 - ▶ Children who reach the age of 24 months and do *not demonstrate the use of 50* different words in their expressive vocabularies and do not yet combine words

LET'S TALK ABOUT SYNTAX

- ▶ Relates to language form; AKA structure
- ▶ Refers to rules of word order
- ▶ Syntactic rules apply on the sentence, clause and phrase levels
- ▶ Using two, three, etc. word utterances
- ▶ S+V+O
- ▶ Often linked with morphology; Brown's stages
- ▶ Chomsky (and linguists in general) are usually very interested in syntax
- ▶ **Brown's 14 morphemes**

SYNTAX

- ▶ System of governing word order and combination of words to form sentences and the relationships among the elements with a sentence
- ▶ The theory of universal grammar and government binding theory by Noam Chomsky describe the learning and use of syntax (*discussed later with theories*)
 - ▶ *Deep structure*
 - ▶ *Surface structure*
- ▶ The length of a child's sentences in morphemes is a good measure of syntactic development
- ▶ Sentences are constructed of content words (open classed words such as nouns and verbs) and function words (closed class words such as prepositions, articles, conjunctions, pronouns)

Examples of Morphemes

- One morpheme
boy (one syllable)
desire, lady, water (two syllables)
crocodile (three syllables)
salamander (four syllables), or more syllables
- Two morphemes
boy + ish
desire + able
- Three morphemes
boy + ish + ness
desire + able + ity

Morpheme

A morpheme is a unit of meaning. It does not necessarily relate to the "word count" or "syllable count" of an utterance. Here is an example of the way morphemes are counted in the words happy, unhappy, unhappily, and unhappiest, and the sentence 'He meets the unhappiest boys': **happy** 'Happy' is ONE WORD, it has TWO SYLLABLES (ha-ppy), and because it contains only one unit of meaning it counts as ONE MORPHEME.

unhappy If you add another unit of meaning, such as 'un', to make 'happy' into 'unhappy' you still have ONE WORD, but THREE SYLLABLES ('un-ha-ppy') and TWO MORPHEMES ('un' and 'happy')

unhappily 'Unhappily' is ONE WORD, FOUR SYLLABLES (un-happ-i-ly), and THREE MORPHEMES ('un', 'happy' and 'ly').

unhappiest 'Unhappiest' is also ONE WORD, FOUR SYLLABLES, and THREE MORPHEMES.

"**He meets the unhappiest boys**" is 1-sentence, it has 5-words, and 8-syllables, and it contains nine morphemes:

He	meet	s	the	un	happi	est	boy	s
1	2	3	4	5	6	7	8	9

"**The girl's mother slowly filled the bucket with water**" is 1-sentence, it has 9-words, and 13-syllables, and it contains twelve morphemes.

SYNTAX Development

- ▶ Subject-Verb-Object **declarative sentences** emerge by **30 months of age** and gradually increase in length to include verb phrase components and indirect objects
- ▶ **Interrogatives** (questioning utterances) develop from the use of rising intonation on one word utterances and gradually increase the syntactic complexity of them by including wh-question words and auxiliaries:
 - ▶ What, where, and who questions
- ▶ Tag questions and negative interrogatives are last to develop
 - ▶ E.g. It's nice, isn't it?
 - ▶ Don't you like me?
- ▶ **Imperatives**(gives requests, demands, or instructions) appear between 2 - 3 years of age
 - ▶ E.g. Help me

SYNTAX: COMPOUND SENTENCES

The officer waved his hands and the car stopped.

(Independent clause) (conj.) (Indep. Clause)

The bird sang in the tree; later it flew away.

(Indep. Cl. + semicolon) (Indep. Clause)

SYNTAX: COMPLEX SENTENCES

I will be at the station if it doesn't rain.

(Independent Cl.) *(Dependent Clause)*

You can have a lollipop after you take a bath.

(Independent Clause) *(Dependent Clause)*

LET'S TALK ABOUT MORPHOLOGY

- ▶ Comes under the aspect—Form
- ▶ Think about the MLU (mean length utterance)
- ▶ Prefixes and suffixes
- ▶ Brown's 14 morphemes
- ▶ Often connected with syntax

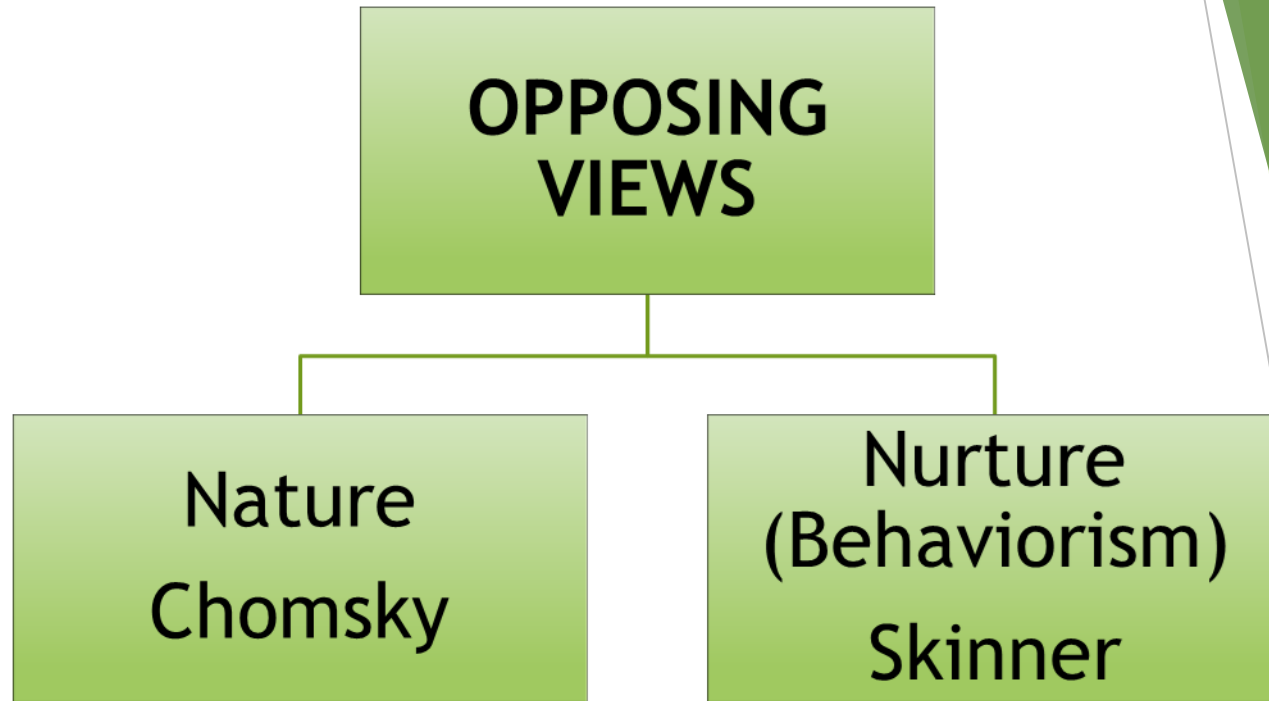
MORPHOLOGY

- ▶ System that governs the structure of words and the construction of word forms
- ▶ Morphemes are free of or bound to other morphemes:
 - ▶ Free morphemes are those that stand alone and carry meaning
 - ▶ Dog, cat, table
 - ▶ Bound morphemes must be connected to a free morpheme to be meaningful
 - ▶ Plural 's' marker
 - ▶ Dogss, catss, tabless
- ▶ During early development, the length and complexity of utterances increases by the use of morphemes
 - ▶ The MLU is the average length of an utterance based on free and bound morphemes
 - ▶ The MLU is a good indicator of grammatical development before 6 years of age

1. Present Progressive	19 – 28	I eating
2&3. Prepositions in, on	27 – 30	Ball in box, car on table
4. Plural – s	24 – 33	Toys
5. Irregular Past Tense	25 – 46	Ate, ran
6. Possessive – s	26 – 40	Kayla's doll
7. Uncontractible Copula – is	27 – 39	This is cold
8. Articles – a, the	28 – 46	This is a car, put in the box
9. Regular Past Tense – ed	26 – 48	He jumped
10. 3 rd Person Present Tense – s (regular)	26 – 46	She dances
11. 3 rd Person Present Tense (irregular)	28 – 50	He does not
12. Uncontractible Auxiliary	29 – 49	Kayla was dancing
13. Contractible Copula – 's	29 – 49	She's nice
14. Contractible Auxiliary – 's	30 – 50	She's dancing

THEORIES OF LANGUAGE DEVELOPMENT

- NATURE VERSUS NURTURE
- THEORIES WITH COGNITION BASIS



NATURE VS. NURTURE

? Is the child genetically predisposed to talk?

- ? Nativist - nature
- ? Nativists embrace the concept of a language acquisition device or LAD which is the innate language reservoir filled with information about the rules of language structure.
- ? Nativists view the structure of language as being independent of its use

? Is the child taught to talk?

- ? Behaviorist - nurture
- ? Assumes the environment is the critical & most important factor
- ? Behaviorists focus on the external forces that shape the child's verbal behaviors into language.
- ? They see the child as an empty vessel who reacts to these forces (tabula rasa).

Learning Theories of Language (cont'd)

Nativist Theory

- An influential theory of syntax (Chomsky, 1950's).
- Syntactic structures are the essence of language.
- Children are born with a *Language Acquisition Device* (LAD).
- The child's environment provides information about the unique rules of the language the child is exposed to.
- Children are born with an innate capacity to learn language.

Nativist Theory (cont'd).

- language *competence* (knowledge of rules) and language *performance* (actual production).
- *Surface* structure (arrangement of words) and *deep* structure (abstract).
- Chomsky is THE Nativist; Treatment according to Chomskyan principles would emphasize **syntax**
- Reinforcement initially viewed as unnecessary.

Behavioral Theory (NURTURE)

- The Behavioral theory does not explain the acquisition of language, but the acquisition of *verbal behavior*.
- Skinner is THE Behaviorist
- It suggests *learning*, not innate mechanisms, has the major role in the acquisition of verbal behaviors.
- The emphasis is on *performance* over *competence*.
- Events in the *environment* are important.
- Verbal behavior is produced as a result of social stimulation.

- ❑ Nurture - Behaviorists; Environment
- ❑ Recall the behaviorists assume that the environment is the critical and most important factor.
- ❑ The behaviorists see imitation as a key strategy the child uses in acquiring language.
- ❑ An operant is any behavior whose frequency of occurrence can be affected by the responses that follow it.
- ❑ In operant conditioning, the events that follow target behaviors are critical to learning, but the events preceding the target behaviors are also important because they can come to control whether or not these target behaviors will be produced.
- ❑ Skinner - THE Nurturer

Theories with a Cognitive Basis

```
graph TD; A[Theories with a Cognitive Basis] --> B[Jean Piaget's Developmental Theory]; A --> C[Social Interactionism  
Lev Vygotsky's]; A --> D[Information Processing Theory];
```

Jean Piaget's
Developmental
Theory

Social
Interactionism
Lev Vygotsky's

Information
Processing
Theory

Learning Theories of Language (cont'd)

Cognitive Theory

- Emphasizes knowledge and mental processes such as attention, memory, and auditory & visual perception.
- Language acquisition is made possible by cognition and general intellectual processes.
- The ***strong cognition hypothesis*** - language development is dependent on cognitive development.
- The ***weak cognition hypothesis*** - language emerges as a result of cognitive growth.

LANGUAGE AND COGNITION

Two Integral Figures in the Cognition & Language Discussion

? Piaget

- ? Viewed cognitive development as an essential prerequisite for the development of all symbolic functions (thinking, reasoning, play etc)

? Vygotsky

- ? Viewed cognitive development is heavily influenced by his environment and by his culture from the very beginning of knowledge acquisition

Piaget's Four Stages

SENSORIMOTOR STAGE

The infant constructs an understanding of the world by coordinating sensory experiences with physical actions. An infant progresses from reflexive, instinctual action at birth to the beginning of symbolic thought toward the end of the stage.

Birth to 2 Years of Age

PREOPERATIONAL STAGE

The child begins to represent the world with words and images. These words and images reflect increased symbolic thinking and go beyond the connection of sensory information and physical action.

2 to 7 Years of Age

CONCRETE OPERATIONAL STAGE

The child can now reason logically about concrete events and classify objects into different sets.

7 to 11 Years of Age

FORMAL OPERATIONAL STAGE

The adolescent reasons in more abstract, idealistic, and logical ways.

11 Years of Age
Through Adulthood

JEAN PIAGET'S FOUR STAGES OF INTELLECTUAL DEVELOPMENT

- ❑ Sensorimotor (birth - 2 years)
 - ❑ Child interacts with environment in physical and unlearned ways
- ❑ Preoperational (2 - 7 years)
 - ❑ Child is able to think conceptually, categorize things in environment & solve physical problems
- ❑ Concrete operations (7-11 years)
 - ❑ Child is able to think logically in dealing with concrete or physical problems; able to place
- ❑ Formal operations (11- 15 years)
 - ❑ Child is able to think abstractly; solves problems mentally and develop mental hypotheses

Vygotsky's Developmental Theory

- Cognitive development is promoted through interactions with more advanced & capable individuals
- Tasks within the ***zone of proximal development*** (ZPD) promote maximum cognitive growth
- Scaffolding facilitates performance on task within the ZPD
- Thought and language become interdependent about two years of age

Zone of Proximal Development



Learning Theories of Language (cont'd)

Social Interactionism Theory

- Suggests language originates from *social-communicative function*.
- Emphasizes *function*, not *structure*.
- Verbal guidance required through adult *modeling* and *scaffolding*.
- Interpersonal interactions (i.e., talking aloud to oneself) leads to language structuring thought.
- Language develops across the life span.
- Motivation

Learning Theories of Language (cont'd)

Information-Processing Theory

- Emphasis on cognitive *functioning*, or *how* language is learned, as opposed to structures and concepts.
 - Information-Processing involves: *organization, memory, transfer, attention, and discrimination.*
- ***Auditory Processing.***
 - Auditory Processing includes: *Auditory discrimination; auditory attention; auditory memory; auditory rate; auditory sequencing.*

MODELS OF LANGUAGE DISORDERS

1. NORMATIVE PERSPECTIVE
2. COMMUNICATION PERSPECTIVE
3. PRAGMATIC PERSPECTIVE

MODELS OF LANGUAGE DISORDERS

- **NORMATIVE PERSPECTIVE** - what is normal (related to numbers and standards)?
 - Standardized/objective data used to define a language disorder
- **COMMUNICATION PERSPECTIVE** - when the communication demands of the child's environment are considered, does the child have sufficient language competences>
 - Mismatch model
 - This model represents a functional approach to describing language disorders
- **PRAGMATIC PERSPECTIVE** - looks at if the child apparent understanding of the use of language as a tool for conveying information to a conversational partner.

Language Disorders

- **Language delay.** The acquisition of normal language competencies at a slower rate than expected given chronological age and level of cognitive functioning.
- **Language Disorder.** A disruption in the learning of language skills and behaviors. Typically includes language behaviors not considered part of normally developing linguistic skills.
- **Language difference.** Language behaviors and skills that are common with those of the person's primary speech community, but do not meet the norms of standard English.

Description of Language Disorders

- Limited amount of language. Significant deficiency in the quantity of language learned and understood
- Deficient grammar. Syntactic structures and morphologic features may be difficult to learn under normal condition
- Inadequate or inappropriate social communication. Pragmatic aspects of language
- Deficient nonverbal communication skills. Use of gestures, facial expressions, and so forth may be limited
- Deficient literacy skills. Difficulties in reading, writing, and spelling.

Bibliography

- Hulit, L. M., & Howard, M. R. (2002). *Born to talk*. Boston, MA: Allyn & Bacon.
- Lof, G. & Johnson, A. (2015). National speech-language pathology examination review and study guide. Evanston, Il: TherapyEd, Ltd.
- Owens, R. E., Jr. (2008). *Language development: An introduction* (7th ed.). Needham Heights, MA: Allyn & Bacon.
- Roseberry-McKibben, C., & Hegde, M. N. (2011). *An advanced review of speech-language pathology 3rd Edition: Preparation for NESPA and comprehensive examination*. Austin, TX: Pro-ed, Inc.

**SPEAK PASSING THE PRAXIS
INTO BEING!!**