

Language development in humans is a process starting early in life. Infants start without knowing a language, yet by 10 months, babies can distinguish speech sounds and engage in babbling. Some research has shown that the earliest learning begins in utero when the fetus starts to recognize the sounds and speech patterns of its mother's voice and differentiate them from other sounds after birth.

Typically, children develop receptive language abilities before their verbal or expressive language develops. Receptive language is the internal processing and understanding of language. As receptive language continues to increase, expressive language begins to slowly develop.

Usually, productive/expressive language is considered to begin with a stage of pre-verbal communication in which infants use gestures and vocalizations to make their intents known to others. According to a general principle of development, new forms then take over old functions, so that children learn words to express the same communicative functions they had already expressed by proverbial means.

Language acquisition

Language development is thought to proceed by ordinary processes of learning in which children acquire the forms, meanings, and uses of words and utterances from the linguistic input. Children often begin reproducing the words that they are repetitively exposed to. The method in which we develop language skills is universal; however, the major debate is how the rules of syntax are acquired. There are two quite separate major theories of syntactic development: an empiricist account by which children learn all syntactic rules from the linguistic input, and a nativist approach by which some principles of syntax are innate and are transmitted through the human genome.

The **nativist theory**, proposed by Noam Chomsky, argues that language is a unique human accomplishment, and can be attributed to either "millions of years of evolution" or to "principles of neural organization that may be even more deeply grounded in physical law". Chomsky says that all children have what is called an innate language acquisition device (LAD). Theoretically, the LAD is an area of the brain that has a set of universal syntactic rules for all languages. This device provides children with the ability to make sense of knowledge and construct novel sentences with minimal external input and little experience. Chomsky's claim is based upon the view that what children hear—their linguistic input—is insufficient to explain how they come to learn language. He argues that linguistic input from the environment is limited and full of errors. Therefore, nativists assume that it is impossible for children to learn linguistic information solely from their environment. However, because children possess this LAD, they are in fact, able to learn language despite incomplete information from their environment. Their capacity to learn language is also attributed to the theory of universal grammar (UG), which posits that a certain set of structural rules are innate to humans, independent of sensory experience. This view has dominated linguistic theory for over fifty years and remains highly influential. The **empiricist theory** suggests, contra Chomsky, that there is enough information in the linguistic input children receive and therefore, there is no need to assume an innate language acquisition device exists (see above). Rather than a LAD evolved specifically for language, empiricists believe that general brain processes are sufficient enough for language acquisition. During this process, it is necessary for the child to actively engage with their environment. For a child to learn language, the parent or caregiver adopts a particular way of

appropriately communicating with the child; this is known as child-directed speech (CDS). CDS is used so that children are given the necessary linguistic information needed for their language. Empiricism is a general approach and sometimes goes along with the interactionist approach. **Statistical language acquisition**, which falls under empiricist theory, suggests that infants acquire language by means of pattern perception,

Other researchers embrace an **interactionist perspective**, consisting of **social-interactionist theories** of language development. In such approaches, children learn language in the interactive and communicative context, learning language forms for meaningful moves of communication. These theories focus mainly on the caregiver's attitudes and attentiveness to their children in order to promote productive language habits. An older empiricist theory, the **behaviorist theory** proposed by B. F. Skinner suggested that language is learned through operant conditioning, namely, by imitation of stimuli and by reinforcement of correct responses. This perspective has not been widely accepted at any time, but by some accounts, is experiencing a resurgence. New studies use this theory now to treat individuals diagnosed with autism spectrum disorders. Additionally, Relational Frame Theory is growing from the behaviorist theory, which is important for Acceptance and Commitment Therapy. Some empiricist theory accounts today use behaviorist models.

STAGES



Relationship between interpersonal communication and the stages of development. The greatest development of language occurs in the stage of infancy. As the child matures, the rate of language development decreases.

0-1 years of age:

An infant mainly uses non-verbal communication (mostly gestures) to communicate. For a newborn, crying is the only means of communication. Infants 1-5 months old have different tones of crying that indicate their emotions. Infants also begin laughing at this stage. At 6-7 months old, infants begin to respond to their own name, yell and squeal, and distinguish emotions based on the tone of voice of the mother and father. Between 7 and 10 months the infant starts putting words together, for example "mama" and "dada", but these words lack meaning and significance. Verbal communication begins at approximately 10-12 months, and the child starts to imitate any sounds they hear, for example animal sounds. The non-verbal communication of infants includes the use of gaze, head orientation and body positioning. Gestures are also widely used as an act of communication. All these stages can be delayed if the parents do not communicate with their infant on a daily basis.

Nonverbal communication begins with the comprehension of parents and how they use it effectively in conversation. Infants are able to break down what adults and others are saying to them and use their comprehension of this communication to produce their own.^[19]

1–2 years of age:

Verbal and nonverbal communication are both used at this stage of development. At 12 months, children start to repeat the words they hear. Adults, especially parents, are used as a point of reference for children in terms of the sound of words and what they mean in context of the conversation. Children learn much of their verbal communication through repetition and observing others. If parents do not speak to their children at this age it can become quite difficult for them to learn the essentials of conversation.^[20] The vocabulary of a 1–2 year old should consist of 50 words and can be up to 500. Gestures that were used earlier on in development begin to be replaced by words and eventually are only used when needed. Verbal communication is chosen over nonverbal as development progresses.^[21]

2–3 years of age:

Children aged 2–3 communicate best in a turn-taking style. This creates a conversational structure that makes it easier for verbal communication to develop. It also teaches patience, kindness, and respect as they learn from the direction of elders that one person should speak at a time. This creates interactional synchrony during their preverbal routines that shapes their interpersonal communication skills early on in their development.^[22] Children during this stage in their life also go through a recognition and continuity phase. Children start to see that shared awareness is a factor in communication along with their development of symbolic direction of language. This especially affects the relationship between the child and the caregiver; it is a crucial part of self-discovery for the child when they begin to take ownership over their own actions in a continuous manner.^[22]

3–5 years of age:

In this age group children are still learning how to form abstract thoughts and are still communicating concretely. Children begin to be fluent in connecting sounds, syllables, and linking words that make sense together in one thought. They begin to participate in short conversations with others. Stuttering can develop, generally resulting in slowed-down speech with a few letter enunciation errors (f, v, s, z).^[23] At the beginning of this stage toddlers tend to be missing function words and misunderstand how to use verb tenses. Over time they start including functional words, pronouns, and auxiliary verbs.^[24] This is the stage at which most children can pick up on emotional cues of the tone of adults' conversation. If negative feedback is distinguished by the child, this ends with fear and avoidance of the associated verbal and nonverbal cues. Toddlers develop the skills to listen and partially understand what another person is saying and can develop an appropriate response.

5–10 years of age:

Much language development during this time period takes place in a school setting. At the beginning of the school age years, a child's vocabulary expands through exposure to reading, which also helps children to learn more difficult grammatical forms,

including plurals and pronouns. They also begin to develop metalinguistic awareness which allows them to reflect and more clearly understand the language they use. They therefore start to understand jokes and riddles. Reading is a gateway for learning new vernacular and having confidence in complex word choices while talking with adults. This is an important developmental stage socially and physiologically for the child.^[25] School-aged children can easily be influenced through communication and gestures.^[23] As children continue to learn communication, they realize the difference between forms of intentions and understand that there are numerous different ways to express the same intent, with different meaning.^[22]

10–18 years of age:

By the age of 10, the child's cognitive potential has matured and they can participate fully and understand the purpose of their conversations. During this time, the sophistication and effectiveness of communication skills increase and understanding of vocabulary and grammar increases as a result of education. Adolescents go through changes in social interactions and cognitive development that influence the way they communicate.^[26] They often use colloquial speech (slang), however, which can increase confusion and misunderstandings.^[23] An individual's style of interpersonal communication depends on who they are communicating with. Their relationships change influencing how they communicate with others. During this period, adolescents tend to communicate less with their parents and more with their friends. When discussions are initiated in different channels of communication, attitude and predispositions are key factors that drive the individual to discuss their feelings. This also shows that respect in communication is a trait in interpersonal communication that is built on throughout development.^[25] The end of this adolescent stage is the basis for communication in the adult stage.

Stages of Language Development: Pre-Linguistic and Symbolic Language

Introduction to Syntax

The term that refers to the order or sequencing of words in a language is syntax.

Studies show that syntax is learned as young children are exposed to speech with proper, complex sentence structure. So, how does this process take place? Before babies say their first word, they have made a lot of progress towards understanding language and speech. A young child listens and attempts to imitate the sounds it hears. In turn, we respond to and reinforce these attempts at speech. A young child does not develop this ability all at one time. Instead, the process consists of a series of developmental stages. These stages are typically divided into two categories: pre-linguistic and linguistic.

Pre-linguistic language development is when a child is learning to control the sounds he can produce and to string these sounds together in vocal play. In this stage, the child is not yet able to manipulate these sounds into proper words.

There are four categories of pre-linguistic development that can be distinguished. Vegetative sounds occur at 0-2 months of age and include the natural sounds that babies make, such as burping or crying. **Cooing and laughter occur at 2-5 months of**

age. These are vocalizations that the baby makes when it's happy or content and can be made up of vowel or consonant sounds. Vocal play begins around the ages of 4-8 months. During vocal play, the baby begins to string together longer vowel or consonant sounds. Finally, babbling occurs around the ages of 6-13 months. At this time, the child begins to produce a series of consonant-vowel syllables and may develop utterances, such as ma-ma and da-da.

Linguistic Language Development

Linguistic language development is the stage of language development signaled by the emergence of words and symbolic communication. Prior to this stage, most of the sounds a child produces are no more than the practice of sound manipulation and sound sequencing in order to gain the motor skills necessary to create words. There are six periods of linguistic language development.

Before a child masters the ability to form words, they will first begin to use specific sound combinations consistently with specific meaning. This is the early one word period that begins around 12-19 months of age. An example of this would be a child saying 'baba' every time he wants a bottle of milk. Even though this is not the exact same as the word bottle, the child is using 'baba' in the same manner as you would use the word 'bottle.'

The later one word period begins around 14-24 months of age. In this stage, the words used by the child are readily identifiable, and he begins to name and label people and objects in his environment. A child's typical vocabulary during this period will consist of words like 'dog,' 'go,' 'daddy' and 'bye-bye.'

Next comes the two word period of language development. As the name implies, this is when he will begin to combine two words together to make simple phrases, such as 'mommy go' or 'shoe on.' The two word period typically begins from 20-30 months of age.

The three word period begins around the ages of 28-42 months of age. During this period, a child adds at least one more word to their phrases and begins to use pronouns. They may also begin to use articles and simple prepositions. Examples would be 'me go daddy,' 'you on chair' or 'he kick a ball.'

At around 34-48 months of age, the four word period begins. At this time, the child will begin to use combinations of four to six words. They will use more prepositions, and adjectives begin to appear in speech. Examples would be 'Suzy has a little dog' or 'I sleep on the top bunk.'

The last period of linguistic language development is the complex utterance period. It begins around the ages of 48-60 months. At this time, a child regularly produces phrases longer than six words in length, and they begin to express concepts of past and future time. Examples are 'Daddy comes home from the trip tomorrow' and 'I saw a dog at the park yesterday.' They may also begin to use contractions, such as 'can't' or 'don't.' Researchers do not agree on when this period is completed and adult sentence structure is achieved. Opinions range from 5 years of age to 12 years of age.

Expressive vs. Receptive Language

This lesson on language development has focused on the progression of syntax and the increased ability to communicate through speech. This is considered expressive language. There's also the development of receptive language to consider.

Receptive language refers to speech comprehension or the ability to understand what is being said. Receptive and expressive language develops separately of one another, but there is some parallel development of note between them. A child must be able to understand at least at the same level that they can express themselves. Typically, a child will actually always understand more than they can express, although the degree to which this occurs varies greatly from one child to the next.

BABBLING

Babbling is a stage in child development and a state in language acquisition during which an infant appears to be experimenting with uttering articulate sounds, but does not yet produce any recognizable words. Babbling begins shortly after birth and progresses through several stages as the infant's repertoire of sounds expands and vocalizations become more speech-like. Infants typically begin to produce recognizable words when they are around 12 months of age, though babbling may continue for some time afterward.

Babbling can be seen as a precursor to language development or simply as vocal experimentation. The physical structures involved in babbling are still being developed in the first year of a child's life. This continued physical development is responsible for some of the changes in abilities and variations of sound babies can produce. Abnormal developments such as certain medical conditions, developmental delays, and hearing impairments may interfere with a child's ability to babble normally. Though there is still disagreement about the uniqueness of language to humans, babbling is not unique to the human species.

Summary

The order or sequencing of words in a language is called syntax. Language development focused on the progression of syntax and the increased ability to communicate through speech is considered expressive language. Speech comprehension, or the ability to understand what is being said, develops separately and is called receptive language. A child must be able to understand at least as much as they can communicate their needs. This varies from child to child, but they will typically always understand more than they can express.

Pre-linguistic language development is when a child is learning to control the sounds it can produce and string these sounds together in vocal play. In this stage, the child is not yet able to manipulate these sounds into proper words. Pre-linguistic language development can be divided into four categories: vegetative sounds, cooing and laughter, vocal play and babbling.

Linguistic language development is the stage of language development signaled by the emergence of words and symbolic communication. Linguistic language development

can be divided into six categories: early one word, later one word, two word, three word, four word and complex utterance.