

# UNIT 7 — COGNITION AND LANGUAGE

Vocabulary Term	Definition of Term	Example
Cognition	The mental activities associated with thinking, knowing, remembering, and communicating	
Concept	A mental grouping of similar objects, events, ideas, or people	Chairs, birds, dog, ball, etc.
Prototype	A mental image that comes to mind when you picture that concept	Concept= bird and robin comes to mind. Robin= Prototype
Algorithm	Step by step procedures that guarantee results/ solutions	Voel trying every possible way to unscramble the word to get Love.
Heuristic	A strategy like algorithms that allows us to make judgments and solve problems; but is quicker and more error-prone	When searching for juice you could go down every aisle in a grocery (algorithm) you could go to the juice aisle (heuristic)
Insight	Sudden realization of the solution	Working on a problem all day long then bam! It just comes to you
Confirmation bias	A tendency to search for information that confirms your thoughts even if it contradicts the obvious evidence	After having bought a piece of clothing, we will look for the same clothing in a more expensive store to confirm that we have bought a bargain.
Fixation	The inability to see a problem from a new perspective	Her fixation on making more money proved to be the cause of her corruption.
Mental set	A tendency to approach a problem one way, often one that has been successful in the past	always taking in a deep breath and stay calm before big test
Functional fixedness	The tendency to think of things only for their initial purpose and nothing else	Not being able to see that you could use a milk crate as a book shelf
Representativeness heuristic	Judging the likelihood in terms of how well they represent, or match prototypes, may lead us to ignore other relative info	When describing a short, slim, likes to read poetry we are more likely to chose that this is a profe4ssor of classics at an ivy league university then a truck driver. Even though the odds would favor a truck driver
Availability heuristic	Estimating the likelihood of events based on their availability in our memory	Right after the attack of 9/11 people thought terrorism was a huge problem and need to be top priority even though the day before they would have thought nothing of it.
Overconfidence	The tendency to be more confident that correct	Over confident of how quickly you can get an assignment done and end up rushing
Framing	The way an issue is presented and how something is framed can significantly affect decisions and judgments	The media does this with politicians, if they make them look bad (sweaty, nervous, loud, etc.) we tend not to like them
Intuition	An effortless immediate automatic feeling or thought, contrasted with explicit, conscious	a football player knowing how to throw the ball just right
Belief perseverance	Once we have decided that we believe something, we will tend to keep on believing it, even in the face of disconfirming evidence.	People who say that global warming is not real
Language	Spoken, written, or signed words and the ways that they are combined to communicate meaning	

Phonemes	In language the smallest distinctive sound unit	B, a, and t Th, a, and t
Morphemes	In language the smallest part that carries meaning, may be a word or part of a word.	-ed, bat, pre-, -s
Grammar	A system of rules that enables us to communicate with and understand others	prefixes, run on sentences, punctuation, verbs
Semantics	The set of rules that we derive meaning from morphemes, words, and sentences in a given language	Adding “-ed” to the end of a word means that it happened in the past
Syntax	The rules for combining words into grammatically sensible sentences in a given language	All adjectives come before words, so we say white house , not house white
Babbling stage	Begins about 4 months, stage of speech development, and is unrelated to house hold language	*not an imitation of adult speech, contains words from all over the world never heard before
One-word stage	Age 1-2 child speaks mostly in single words	“Mine!” “Dog.”
Two-word stage	Age 2 where they speak in 2 word sentences	“I want!” “Dog run.”(characterized by telegraphic speech)
Telegraphic speech	Early speech stage where child speaks like a telegram, nouns and verbs	“Go car.”
Aphasia	Damage of language either in Broca’s and Wernicke’s area	
Broca’s area	Controls language expression (frontal lobe left hem) directs muscle movements to form words in speech	Broken speech, stuttering
Wernicke’s area	Controls language reception, language comprehension, and expression (left temporal lobe)	Meaningless word “mother is away her working her work to get her better, but when she’s looking the two boys looking the other part. She’s working another time.”
Linguistic determinism (relativity)	Idea that language determines the way we think	

Authors of Important Study	Basic of What Was Done	Lesson(s) learned from the study
Cognitive Scientists/Genie (found at 13 and couldn't grasp language)	Statistical learning and critical periods	<ul style="list-style-type: none"> <li>2<sup>nd</sup> languages spoken with accent from 1<sup>st</sup> language</li> <li>Window for critical learning period closes at 7</li> </ul>

Summary of Language Development	
Month (Approximate)	Stages
4	Babbles many speech sounds
10	Babbling resembles household language
12	One-word stage
24	Two-word, telegraphic speech
24+	Language develops rapidly into complete sentences

Name of Important Person	What this person is known for	Impact on Psychology
B. F. Skinner	Explaining Language development <ul style="list-style-type: none"> <li>Operant Learning</li> </ul>	<ul style="list-style-type: none"> <li>Association- pair words with image</li> <li>Imitation- words, syntax</li> <li>Reinforcement- success, smiles, hugs</li> </ul>

<p>Noam Chomsky</p>	<p>Explaining Language Development</p> <ul style="list-style-type: none"> <li>• Inborn Universal Grammar</li> <li>• Language will occur naturally</li> </ul>	<p>Considered skinner naïve</p> <ul style="list-style-type: none"> <li>• kids acquire untaught words quickly</li> <li>• we come up with sentences we have never heard</li> <li>• over generalized grammatical rule</li> <li>• begin using morphemes in predictable order</li> </ul> <p>Language will occur naturally</p> <ul style="list-style-type: none"> <li>• all languages have: names, verbs, subjects, and objects, negations of question</li> <li>• 6000 languages fit this grammar</li> <li>• Language acquisition</li> </ul>
<p>Whorf</p>	<p>Linguistic determinism (relativity) hypothesis</p>	<ul style="list-style-type: none"> <li>• New way of looking at things: language shapes the way we think and thoughts influence what we say ~ Words forming thought and vice versa.</li> </ul>