

LINA01 – Introduction to Linguistics

Fall 2016

Linguistics is the Scientific Study of Human Language

We ask: What is it that we know when we 'know' a language?

Nim Chimpsky demonstrated the ability to understand the significance of certain words, but not meaning nor grammar

Language is SYSTEMATIC -> Follows system of rules

Descriptivist -> Describes how language appears in native speakers

Prescriptivist -> Describes how language is supposed to be by steadfast grammatical rules

Wug Test -> Kids knew how to pluralize the word 'wug' even though it's not a real word. Proves internal rules

Languages are a symbolic system, that is, they are symbolic Signs.

Signs have two parts: Signifier, Signified.

Icon -> Form represents Referent Symbolic -> Form does not resemble referent

Productivity and Creativity

We can create seemingly endless numbers of different compositions of sentences

However, productivity is rule-governed still. It must all follow the rules

Human language is discretely combinatoric. There are finite sets of sounds and rule-governed patterns

Performance and Competence do not reflect each other. We can have a good mental grammar but not express it.

PHASE 1 - Phonetics

Study of physical properties of speech sounds

Production of sound: Movement of air from lungs through glottis through pharynx, out oral or nasal cavity

We need AIRFLOW and OBSTRUCTION to produce sounds

Articulation for Consonants: VPM, Voice, Place, Manner. ORDER MATTERS

Articulation for Vowels: Height, Backness, Tenseness, Rounding, ORDER MATTERS

Syllabic consonants -> LIQUIDS AND NASALS can be syllabic. Marked by [̩] underneath consonant |

NATURAL CLASSES:

Noncontinuants: Oral/Nasal stops

Continuants: All other consonants, and all vowels

Obstruents: Stops, Fricatives, Affricates (Think lowest sonority)

Sonorants: Nasal, Liquids, Glides (Think highest sonority)

Coronals: Alveolars, Alveopalatals, Palatals

Anteriors: Bilabials, Labiodentals, Interdentals, Alveolars

Sibilants: Fricative/Affricate in Alveolar/Alveopalatal

PHASE 2 - Phonology

Study of mental representation of speech sounds

Phoneme: Abstract mental representation of a distinctive sound in language. / /. Smallest unit that causes difference in meaning

Phone: (Think phonetics), the representation of the actual pronunciation []

Allophones: Set of predictable PHONETIC variants of a PHONEME.

Aspiration occurs at the beginning of a word or stressed syllable

Contrastive -> If minimal pairs exist and they have different meanings

Complementary -> Allophones of the same phoneme that predictably appears in different environments

Free variation -> Two phones that can be interchanged for no change in meaning

Phonological Processes:

Assimilation - Two segments become more alike each other (please -> ples)

Dissimilation - Two segments become more distinct from each other (fifths -> fifts)

Deletion - Unstressed vowels deleted in casual speech (suppose -> spo:z)

Epenthesis - Inserts a segment (something -> somethɪŋ)

Metathesis - Reorders a sequence of segments (ask -> aks)

Words can be broken down into syllables. They must follow the Sonority Principle

ORAL FRICATIVE NASAL LIQUID/GLIDE VOWELS

1 2 3 4 5

Must peak at vowel. /S/ is an exception, though, for English.

Maximum Onset Principle -> Syllables want as many onsets and as few coda as possible.

Accidental Gaps -> Words that are viable by Sonority, but do not exist

Systematic Gaps -> Words that are not viable by Sonority

PHASE 3 - Morphology

Study of internal structure of words and rules/processes by which they are formed

Morpheme - Smallest linguistic unit that carries a meaning or grammatical function

Idea of lexicon -> Mental dictionary

Complex words are composed of:

Root + Affix(es)

Root provides principal meaning of word

Affixes maintain consistent form and meaning across words (e.g. un, non)

Free vs Bound Morphemes

Free Morphemes can stand alone as an independent word (e.g. Texas)

Bound Morphemes cannot (e.g. -ed, pre-, suff-)

Affixes are bound morphemes that changes the meaning or category of the word it attaches to

Prefix, Suffix, Infix, Circumfix

Allomorphy -> Different pronunciations of same morphemes

There exists Phonological Rules that determine the pronunciation in a given context

Multi-morphemic words have an INTERNAL HIERARCHICAL STRUCTURE.

Those can be drawn as Morphological Trees

Derivational Affixes -> Creates a NEW WORD (meaning, lexical category, etc) e.g. (Contain + Able = Containable)

Inflectional Affixes -> Produce a different form of same word e.g. (Walk+ed = Walked)

PHASE 4 - Syntax

Word Formation:

Reduplication - repeats part (partial reduplication) or the entire word. e.g. cabuk -> cabuk cabuk

Suppletion - Replaces morpheme with entirely different morpheme to indicate contrast (e.g. go -> went)

Conversion - changes lexical category (e.g. empty vial (ADJ), or empty the vial (VERB))

Clipping - Shortens word or phrase (professor -> prof)

Blending - Blends together two words (breakfast + lunch = brunch)

Backformation - Creation of a word by removing affix (e.g. Editor -> Edit)

Acronyms/Initialisms - You know this.

Coinage - Outright creation of new words (Kleenex, Kodak)

Eponyms - Words created from names. (Watt, Hertz)

Derivation - Adding suffixes to them

Compounding - Merging two words (face+book = facebook)

Content words -> Nouns, Adjectives, Verbs, Adverbs

Nouns - dog, preacher, etc

Determiners - The, a, etc

Verbs - ran, running, swam

Auxiliary verbs - can, has, is, a verb used in forming the tenses, moods, and voices of other verbs

Adjectives - red, pretty, silly

Adverbs - happily, sadly

We are a SVO language, Subject, Verb, Object. e.g. Dog likes bones

Syntax is removed from meaning.

Rules have optionality and order matters. That is A -> B(C) states that C is optional, but MUST follow B

Sentence (S) is composed of subject (NP) and predicate(VP)

S -> NP VP

Top of structure tree dominates the lower ones, and things on the same level are called sisters

Constituency Tests

Test 1: Movement/Clefting

If a group of words can move together then it is a constituent

e.g. The fat cats jumped onto the table

It was _____ that _____

It was onto the table that the fat cats jumped

Test 2: Q/A, Stand Alone

If a group of words can stand alone as an answer to a question, then it is a constituent

e.g.

Q: What did the fat cats jump onto?

A: The table

Must maintain the meaning and structure of the question. Question word must be in the front

Test 3: Substitution by Proforms

If a group of words can be replaced by a pro-form and results in the same meaning, then they are constituents

e.g.

Pro-noun. They jumped onto the table

Pro-verb. The dogs jumped onto the table. The fat cats did so too.

CONSTITUENCY CAN BE DETERMINED BY PASSING ONE TEST. CAN ONLY BE REJECTED BY FAILING ALL 3.
MEANING MUST BE PRESERVED. CONSTITUENCY IS ONLY IN THE CONTEXT OF ONE PARTICULAR SENTENCE.

The bottom of the tree are lexical categories

Each dominant category is called a phrasal category

Idea of complementizer, an element that turns sentence into a complement (e.g. that, if, whether)

e.g. John said >that< George likes broccoli

Phrase Structure Rules

S -> NP (Aux) VP

NP -> (Det)(AdjP) N (PP)

NP -> NP conj NP

VP -> V (NP)(PP)(Adv)(CP)

CP -> Comp S

PP -> P NP

AdjP -> (Adv)Adj

Two types of ambiguity:

Lexical Ambiguity: Single Word having more than one meaning (homonyms)

e.g. Fred jumped from the bank (river, financial)

Structural Ambiguity: Different meanings due to arrangement of constituents

e.g. An antique desk for a lady (desk meant for lady, desk given to lady)

Head -> The central word of a phrase

Complement -> Other constituents in the phrase that complete or are essential in its meaning

-- UNDERGENERATE --

Phrase Structure rules unable to generate some grammatical sentences

To solve this problem, we use Transformations. We recognize that some sentences are related.

e.g. Will Harry meet Sally -> Harry will meet Sally

NOW THERE ARE 2 RULES:

PHRASE STRUCTURE TO GENERATE BASIC SENTENCES

TRANSFORMATIONAL RULES TO CHANGE THE BASIC STRUCTURE MADE BY PS

TRANSFORMATIONS: DO SUPPORT, MOVE WH, MOVE AUX, PASSIVE

Derivation of Will Harry Meet Sally?

Step 1: Get the deep Structure

Harry Will Meet Sally

Step 2: Aux moves to front of sentence

Will Harry Meet Sally

Step 3: Surface Structure obtained

Derivation of Does Harry Like Sally?

Step 1: Deep structure

Harry likes Sally

Step 2: Auxiliary is inserted (This is called Do-support)

Harry does like Sally

Step 3: Move Aux

Does Harry Like Sally

Derivation of Who Will Henry Meet?

Step 1: Deep structure

Harry will meet who

Step 2: Move aux, Move wh-phrase

Wh-phrase (who) and Aux (will) move to front

Step 3: Resulting phrase.

Derivation of What did Harry see?

1. Harry Saw What

2. Move Wh, Do Support, Move Aux

Harry Did See What

What Did Harry See?

YES/NO Questions: Harry Will Meet Sally. The boy who is sleeping was dreaming

Transformational Rule: Move Aux (Do Support)

1. Will Harry Meet Sally

2. Was the boy who is sleeping dreaming

RULE: The aux FOLLOWING the subject NP is moved.

WH- Questions: Who will Harry meet?

Transformational Rule: Move WH, Move AUX, (Do Support)

The WH replaces some word. e.g. Tom will eat CHICKEN for dinner -> What will Tom eat for Dinner?

The removed word is called a trace.

"Move WH", the action of moving into the Empty C position in a CP

Another Transformation: Active/passive

Active: Someone ate the apple

Passive: The apple was eaten by someone

Passive:

1. Deep Structure

Someone ate the apple

2. Delete or move subject NP to by-phrase

3. Add aux very 'Be'

4. Change verb form to past participle

5. Move complement NP to subject position

Someone ate the Apple

ate the Apple

was ate the apple

was Eaten the Apple

The apple was eaten

ex.

The children are chasing the rabbits

are chasing the rabbits

are chasing the rabbits by

are chased the rabbits by

the rabbits are chased by the children

Sue should quit her job

move aux

Should Sue quit her job

Sandy will meet who in the park
move aux, move wh
Who will sandy meet in the park

Sandy meets Harry where
do support
Sandy does meet hARRY where
move wh move aux
where does Sandy meet hARRY

-- OVERGENERATION --

* Selectional Requirement*

Some things cannot be generated. So, we introduce the idea of INTRANSITIVE verbs

e.g. The nurse slept the baby *

therefore, slept is intransitive. VP -> V (No NP complement)

By that definition, some verbs are TRANSITIVE. They NEED the complement

e.g. The cat chased *

The cat chased the dog (yes)

Similarly, there are verbs that need TWO complements. DITRANSITIVE verbs.

e.g. put.

Kim put [a valentine] [in Chris' mailbox.]

We call these requirements SELECTIONAL REQUIREMENTS

Universality:

All languages have: Phonological, Morphological, and PS rules

PS Rules have: Phrases with heads

Parameters (Where languages differ): Word Order(head-initial), and Question formation(WH-move or not move)