ENGL 306A Personal Notes

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Chapter 1: Cognitive Basis of Language

NEUROCOGNITIVE AFFINITIES

"Neurocognitive affinities" are patterns in language that we can recognize.

Types:

① Identity;

② Resemblence / similarity (ie metaphors)
- comparing things to others because they are similar

③ Correlation (ie metonymy)
- when we associate 2 things because they happened together in time/space
- eg "the Kremlin invaded Ukraine"

④ Subsets (ie meronymy / synecdoche)
- "meronymy": subsets, wholes & parts; eg fingers are part of a hand
- "synecdoche": where a part is made to describe the whole or vice versa (eg "Toronto made it into the finals")

⑤ Opposition (ie antithesis)
- when something is used in place for another thing that contrasts it
- eg "that tall person is tiny"

⑥ Repetition (ie multiplicity)
- when something is repeated multiple times
- eg "Go, go, go!"

⑦ Sequence
- when we process things based on their order
- eg before/after, etc

MODES OF MEANING

We understand about the world through neurocognitive affinities, but communicate about them through modes of meaning.

Types:

① "symbolicality": relation of convention
eg dog / perro / 犬

② "indexicality": relation of association
- this can be causal or correlational
eg the sound of dropping a book is associated with it hitting the floor

③ "iconicity": relation of resemblance
- we recognize things because they look/feel like other objects we are familiar with
- eg we know everyone in class is a human

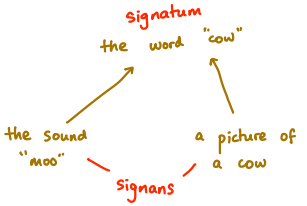
SIGNS

"Signs" consist of two components:

① the "signans", which describe the physical/sensory component of the sign. &
eg a sound/image

② the "signatum", which describes the concept or meaning the signans represent.

eg



Types of signs / dimensions of meaning:

① "Indexicality": defined by causation/correlation
eg thought of a cow ~ recording of a cow mooing

② "Iconicity": defined by resemblance
eg thought of a cow ~ picture of a cow

③ "Symbolicity": defined by convention
eg thought of a cow ~ the word "cow" in English

FIGURATION / TROPES

"Tropes" occur when something (the "source") carries the primary signification for something else (the "target") that ordinarily holds that signification.

Types:
① metaphors;
② metonymy; &
③ synecdoches.

INDEXICALITY IN LANGUAGE

"Indexicality" occurs when one element of a set/relationship (the "source") is singled out to stand for other elements (the "target")

eg "the law is here", "Toronto wins at OT"

ANALOGY IN LANGUAGE

"Analogies" occur when one element (the "source") represents another element (the "target") to which it is unrelated.

eg metaphors; ie "the sun is like an orange"

POLYSEMY

"Polysemy" is when a word has multiple meanings.

eg "pussy" — sexual organ, cat, insult

PHONAESTHEMES

"Phonaesthemes" are units of sound that are thought to carry meaning, although there is no conventional basis for that meaning.

eg "gl-" in glow, gleam, glistening connotates to "light/shine"

STRUCTURAL PRINCIPLES IN LANGUAGE

All language is founded ultimately on "contiguity"; ie there must exist physical, temporal or conceptual relations between expressions & what they reference for a communicative code to exist.

Thus, all language is symbolic in nature.

MOTIVATION

"Motivation" refers to non-arbitrary links between a form & the meaning of linguistic expressions.

INDEXICALITY

Recall indexicality is metonymic, as it is defined by correlation / causation.

EGOCENTRICISM / ME-CENTRICISM

1. "Egocentricism" refers to the tendency to use language to communicate one's own thoughts, feelings & experiences.
2. This is achieved via "deixis" (pointing words), which point to specific individuals, objects & locations.
   eg "this dog, that house"
3. We can use "proximals": ie
   ① Speaking location:
   eg here, there, near, etc
   ② Speaking time; &
   eg now, today, then, etc
   ③ Relative location to the speaker.
   eg this, that, etc
4. We can also use "pronouns":
   ① ego = 1st person
   ② ego + others = 1st person plural
   ③ hearer of ego = 2nd person
   ④ hearer of ego + others = 2nd person plural
   ⑤ not ego or hearer of ego = 3rd person
   ⑥ not ego or hearer of ego + others = 3rd person plural

ANTHROPOCENTRISM / HUMAN-CENTRISM

1. "Anthropocentrism" refers to using language to name objects according to their relation to us; ie we project ourselves onto objects.
   eg front / back of a car, since that is how we use cars

ICONICITY

Recall iconicity is "metaphorical", as it is defined by similarity & resemblance.

QUANTITY

"Quantity" refers to when the amount of language resembles the amount of events / concepts.

eg - "dinosaurs lived a long, long, long time ago"
- plurals are longer than singulars

SEQUENTIAL ORDER

1. "Sequential order" refers to when the order of language resembles the order of events / concepts.
2. In particular, the order of words / sentences usually mirrors the order of events.
   eg "don't drink and drive", "stop, drop & roll"

DISTANCE

"Distance" refers to when the closeness of linguistic elements resembles the closeness of events / concepts.

eg "greenhouse" vs "green house", "wetsuit" vs "wet suit"

CONSTRUCTIONS

"Constructions" are patterns/templates that are used to build larger units of language, like phrases or sentences.

ie the building blocks of language

Examples:

1. Fossilized expressions;
   - eg now and then, kick the bucket
2. Partially-filled fossilized expressions;
   - eg jog X's memory
3. Abstract syntactic patterns;
   - eg NPVP (active), NP be V by NP (passive)
4. Words;
5. Morphemes;
   - eg pre-, -er, -ed, etc
6. Phonemes, syllables & features;
   - eg /p/, /b/, higher/lower voice

ANALOGIC FRAMES / CONCEPTUAL METAPHORS

"Analogic frames" are cognitive structures that allow us to understand complex or abstract concepts by mapping them onto concrete & familiar experiences.

eg "time is money", "she shot me down", "he attacked my point", etc

CORRELATIONAL FRAMES / CONCEPTUAL METONYMY

"Correlational frames" are cognitive structures that allow us to understand complex or abstract concepts by replacing them with related/associated concepts.

Examples:

1. Producer for product;
   - eg "I only read Dr. Seuss"
2. Container for contained;
   - eg "that's a tasty dish"
3. Person for instrument;
   - eg "I'm parked out back"
4. Place for institution;
   - eg "Ottawa sent my rebate"

Chapter 2: Words

WORDS

A "word" is the smallest unit of language that can be uttered in a context with objective or practical meaning.

Note that words are arbitrary.

LEXICALIZATION

"Lexicalization" is the process of turning a concept/idea into a word or set of words.

eg the ringing of a phone → "ring"

WHERE WORDS COME FROM

Words can come from

① the imagination; or

eg hobbit, googol, quark, etc

② the world.

eg bang, crackle, spark

They can also come from other words; these can be distinguished via the following:

① "structural" (ie permutations of form)

- ie when a word comes from borrowing other words, combining words, or reducing words

② "onomasiological" (ie permutations of meaning)

- eg metaphors

SIMPLE VS COMPLEX WORDS

"Simple words" are those with only one morpheme.

eg "Fred", "sane", "disc"

"Complex words" are those with ≥2 morphemes.

eg "quicker", "blackbird"

SEMASIOLOGY VS ONOMASIOLOGY

"Semasiology" is concerned with the question "what does the word X mean?"

"Onomasiology" is concerned with the question "how do you express X?"

- you use the concept to "determine" the words

SEMASIOLOGY

POLYSEMY

1. "Polysemy" refers to when a single word has multiple meanings.
2. Types:
   1. Specialization - correlates with narrower sense
   2. Generalization - correlates with wider sense
   3. Metaphorization - correlates with resemblance
   4. Metonymization - correlates with correlation/contiguity

HOMONYMY

"Homonymy" refers to when two or more words have the same form (spelling and/or pronunciation) but different meanings.

eg bank (of water) vs. bank (the financial institution)

DERIVING WORDS FROM OTHERS

Words can be formed from others in several ways:

1. "Metaphorical" — a new signatum from comparison
   eg broadcast (to cast out seeds → to send out a signal)
   mouse (rodent → computer device)
2. "Metonymical" — a new signatum from physical/conceptual association
   eg horn (animal projection → instrument)
3. "Specialization" — narrowing of signatum
   eg pill (small unit of medication → birth control)
   school (learning institution → K-12)
4. "Generalization" — broadening of signatum
   eg - ship (send by boat → send by any means)
   - school (learning institution → an intellectual/creative group)

WORD CLASSES

Types:

1. "Content words": carry the semantic burden & are less important syntactically
   - nouns, verbs, adjectives, adverbs
2. "Function words": carry the syntactic work, are relatively light semantically
   - prepositions, particles, qualifiers, determiners, etc.

WORD CLASS DIAGNOSTICS

Types:

1. "Semantics": the type of signata the category involves;
2. "Morphological": the shape the signata possess; &
3. "Syntactic": the other words the class occurs with & the order in which they do.

ENGLISH NOUNS

1. Semantic: a person/place/thing.
2. Morphological: takes plural & possessive abilities.
   eg dogs, dog's
3. Syntactic: follows articles & adjectives.
   eg the green dog, a dog

ENGLISH ADJECTIVES

1. Semantic: a quality attribute/property.
2. Morphological: takes comparative/superlative suffixes.
   eg quickly, quickest
3. Syntactic: precedes nouns, follows degree words
   eg the very big boy

ENGLISH VERBS

1. Semantic: action or state.
2. Morphological: takes 4 suffixes:
   1. past tense;
      eg nodded
   2. third person singular present;
      eg nods
   3. past participle; &
      eg has nodded, had nodded
   4. present participle.
      eg is nodding, was nodding.
3. Syntactic: can follow an auxiliary verb.
   eg he can nod his head.

ENGLISH ADVERBS

1. Semantic: modifies an action/state.
2. Morphological: none (although many end in -ly)
3. Syntactic: follows a verb

eg he nods vigorously

ENGLISH PREPOSITIONS

Semantic: establishes spatial locations, relations or directions.

eg at, in, on, by, etc

ONOMASIOLOGY

SYNONYMY

"Synonymy" occurs when the signatia are different, but the signatum is the same.

- neurocognitive affinity: resemblance/similarity
- eg dog, doggo, doge, etc

PLESIONYMY

"Plesionymy" occurs when the signantia are different, & the signata are similar but not the same.

- neurocognitive affinity: resemblance/similarity
- eg the n word, the p word

ANTONYMY

"Antonymy" occurs when the signantia are different & the signata are opposite.

- neurocognitive affinity: resemblance/similarity
- eg black/white, up/down, etc

MERONYMY

"Meronymy" occurs when the signantia are different & the signata are in a super/subset relation.

- superset = hypernym, subset = hyponym
- neurocognitive affinity: meronymy
- eg for dog: hound, terrier

WHERE WORDS COME FROM - STRUCTURAL PROCESSES

Words can arise from structural processes:

① Borrowing other words;
② Combining other words/phrases; &
eg through "blends"; eg smoke + fog → smog
③ Reducing words.

BORROWING

"Borrowing" occurs when the form inevitably changes (to accomodate the borrowing language's phonology), & the meaning also shifts in various ways.

eg skunk, chocolate, etc

COMPOUNDS

1. "Compounds" are words that consist of two words combined together.

eg airplane, fire engine, etc

2. Types of combinations:
① the words are glued together;
② the words are hyphenated; or
③ the words are just stressed.

CLIPPING

1. "Clipping" occurs when words are shortened/spliced before being combined.

eg professor → prof, hamburger, etc.

2. This is often jargon, which increases efficiency

ACRONYMS / ABBREVIATIONS

1. "Acronyms/abbreviations" are examples of combining & reducing.

eg radar, scuba, etc;
CBC, USA, etc

2. Note that with clipping, the linkages are more apparent, & so the original meaning is more easily recoverable by outsiders; but with jargon & acronyms, often secret information is needed.

3. Thus, jargon is more exclusive than clipping.

CONVERSION (DOUBLE-DIPPING)

1. "Double-dipping" occurs when a word/phrase is borrowed from one language into another, and then re-borrowed back into the original language.

2. The word usually also changes form or meaning.

eg café, sushi, fiancé/fiancée, etc

PRODUCTIVITY

"Productivity" refers to the capacity of a language or specific linguistic rule to generate new words, phrases or structures.

Chapter 3: Morphology

INTRODUCTION

- "Morphology" is the study of morphemes, which are the smallest units of language.
- In particular, a morpheme is the smallest pairing of signans & a signatum.

TYPES OF MORPHEMES

- Types:
  1. Free morpheme: can stand alone as a word
     - eg write, dog, cat
  2. Bound morpheme: cannot stand alone as a word.
     - "affixes" are a type of this
     - split into prefixes, suffixes, infixes & circumfixes
     - eg -er, -ee, pre-, etc.
- Types of bound morphemes:
  1. Inflectional morphemes: added to a word to indicate grammatical information without significantly changing the meaning.
     - eg -s, -ed, -er, -est
  2. Derivational morphemes: added to a word to create a new word with a different meaning/category.
     - eg -un, dis-, re-, -able, -ly
     - eg un-break-able, dis-associate, re-try

* we often use the notation {-x} or {x-} to denote suffixes & prefixes.

MORPHOLOGICAL CONSTRUCTIONS

- "Morphological constructions" are patterns or structures that are formed by combining morphemes to create complex words.
- We use the following syntax for our "building blocks":

$$[\text{morpheme}]_{\text{word class}}$$

- We can then combine these together.

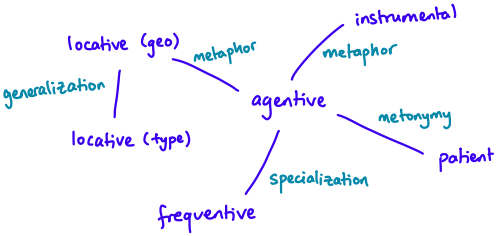
eg
- $[[x]_{adj}\ i]_N$ → "the property of x"
- $[[x]_{adj}\ ness]_N$ → "the property of x"
- $[[x]_{adj}\ dom]_N$ → "the domain of x"

(signan / signatum)

- Note morphemes may have different effects on the same or different base word.

eg {-er}
- agentive
  - eg farmer, writer, etc
- locative (geographic)
  - eg Londoner, etc
- locative (type)
  - eg foreigner, villager, etc
- instrumental
  - eg printer, toaster, etc
- patient
  - eg page-turner, reader, etc
- frequentive
  - eg chatter, mutter, etc
- other/misc
  - eg triple-decker, porker, etc

As a radial network:



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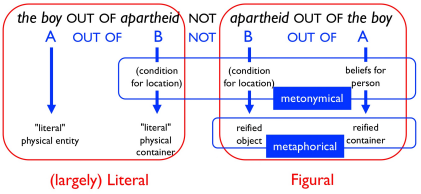
ANTIMETABOLES

"Antimetaboles" involve repeating words/phrases in reverse order or in a mirrored pattern.

eg - all for one, one for all
- ask what you can do for your country, not what your country can do for you

This includes the "A out of B, not B out of A" construction.



PARISON

"Parison" refers to repeating a grammatical structure/pattern in successive clauses/sentences for effect.

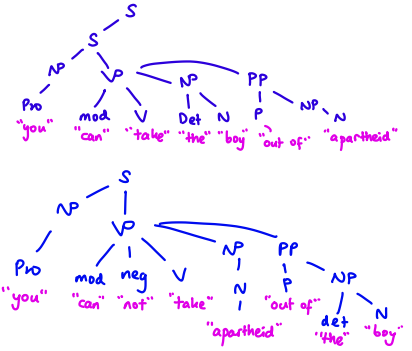
SYNTAX TREES

"Syntax trees" are graphical representations used to analyze structure of words/phrases in a sentence.

We can explore parison via a syntax tree.

eg [take [the boy]$_{NP}$ [out of [apartheid]$_{NP}$]$_{PP}$]$_{VP}$]

As a tree:



FIGURATIVE DIMENSIONS

"Figurative dimensions" refer to aspects of meaning that go beyond literal/straightforward interpretation.

eg with antimetaboles, we exploit multiplicity, identity & sequence.

This helps increase productivity & memorability of sentences.

PRODUCTIVITY IN MORPHOLOGY

"Morphemes" often imply the underlying theme behind words.

eg petro- ⇒ petrol related

ROOTS VS STEMS

"Roots" are the base elements of a word, that are usually irreducible units.

"Stems" are formed by combining a root with other morphemes (eg affixes/suffixes), and can serve as the base for successive word formation.

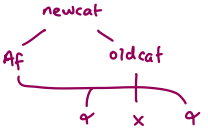
AFFIX CONSTRUCTIONS

Constructions:

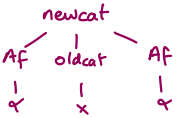
① Prefix: [Af [x]$_{oldcat}$]$_{newcat}$

② Suffix: [[x]$_{oldcat}$ Af]$_{newcat}$

③ Infix: [[y/x^i] Af [z/x^i]$_{oldcat}$]]$_{newcat}$



④ Circumfix: [Af [x]$_{oldcat}$ Af]$_{newcat}$



EXAMPLE: ENGLISH MORPHEMES

(paste ss from slides)

Chapter 4: Syntax

"Syntax" is the subfield that studies the structure, organization & rules governing the formation of sentences/phrases in a language.

NOTATION

"X → Y"	→	X "is a" Y
"XY"	→	X precedes Y
"(X)"	→	X is optional
"X*"	→	X iterates
"{X, Y}"	→	X or Y

BASIC ENGLISH PHRASE STRUCTURE SYNTAX RULES

sentence:	S → NP PredP (AdVP)*
noun phrase:	NP → (Det) (AP)* N (PP)
adjective phrase:	AP → (Deg) A
propositional phrase:	PP → P NP
predicate phrase:	PredP → (Aux) {VP, VP_{cop}} (AdVP)*
verb phrase:	VP → V (NP) (NP) (PP)
copulative verb phrase:	VP_{cop} → V_{cop} {AP, NP, PP}
adverb phrase:	AdVP → {(Deg) AdVP, PP}

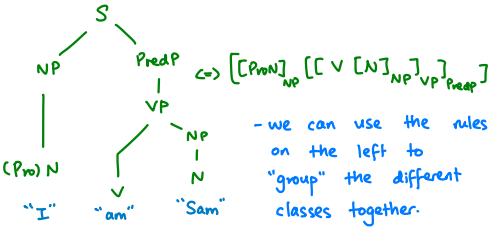
BASIC SENTENCE PATTERNS

"Basic sentence patterns" are common Syntactic arrangements used to form sentences in a language.

WORD PATTERNS

"Word patterns" refer to the systematic combinations of words within a language.

EXAMPLE: I AM SAM / SAM I AM



TYPES OF VERBS

Types:

① "Intrasive": does not require a direct object to complete its meaning
- eg "sings," "laughed", etc

② "Transitive": requires a direct object to complete its meaning
- transfers its meaning from the subject to the object
- eg "kicked", "painted"

③ "Ditransitive": requires both a direct object & an indirect object
- transfers its meaning from the subject to both direct & indirect objects
- eg "they sent me a gift"

④ "Copulative/linking": connects subject to a "subject complement"
- complement provides more information about the subject
- eg "she is a teacher"

ENGLISH BASIC SENTENCE PATTERNS

Types:

① Intrasive – V_1
- consists of a subject & intransitive verb
- eg "she dances", "they laughed"

② Transitive – V_2
- consists of a subject, transitive verb & direct object
- eg "he kicked the ball", "she ate an apple"

③ Ditransitive – V_3
- consists of a subject, ditransitive verb, a direct object & an indirect object
- eg "she gave him a book", "they sent me a gift"

④ Copulative – V_{cop}
- consists of a subject, copulative verb & a subject complement
- verb links subject to a complement that describes / identifies it
- eg "she is a teacher" "they seem happy"

⑤ Complement – V_{comp}
- consists of a subject & a complement
- complement describes / provides more info on the subject
- eg "they go to school"

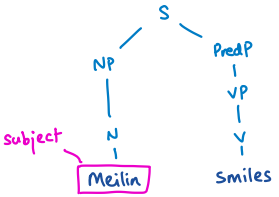
⑥ Transitive-complement – $V_{T\text{-}comp}$
- consists of a subject, transitive verb, a complement & an object
- verb transfers the action from the subject to both the direct object & the complement.
- eg "she made him happy", "he painted the wall red"

We can view all these as syntax trees.

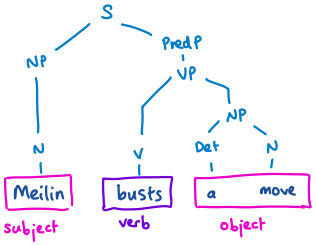
CONSTRUCTING SYNTAX TREES FROM SENTENCES

Idea: We can start by identifying the classes of the individual words, and then "combine our way up" using our syntax rules until we reach the original sentence S, and return the formed syntax tree.

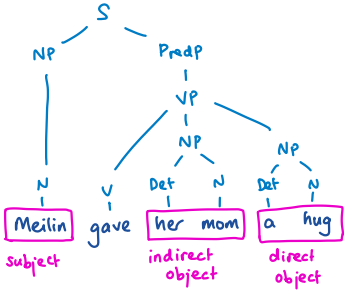
EXAMPLE: INTRANSITIVE / V_1



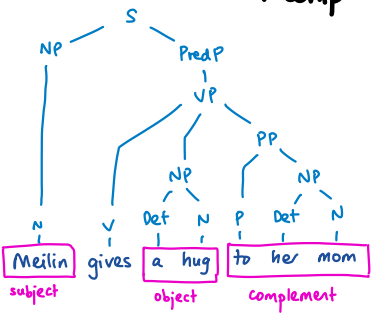
EXAMPLE: TRANSITIVE / V_2



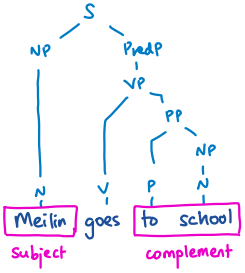
EXAMPLE: DITRANSITIVE / V_3



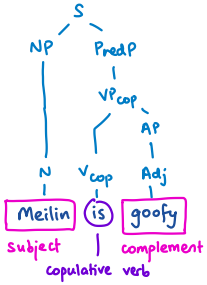
EXAMPLE: TRANSITIVE-COMPLEMENT / $V_{T\text{-}comp}$



EXAMPLE: COMPLEMENT / V_{comp}



EXAMPLE: COPULATIVE / V_{cop}



EVENT SCHEMATA

"Event schemata" are cognitive structures that represent understanding of language related to events or actions.

BEING SCHEMA

The "being" schema relates a characteristic or any other conceptual category to a given entity that does not really play a dominant role in the relationship.

The "patient" is the main participant.

An "essive" is any role that is related to a patient via a "being" link.

eg The Sahara is dangerous.
patient — essive

Meilin is in trouble

HAPPENING SCHEMA

The "happening schema" emphasizes a process taking place & the participating entity involved in it.

eg - "the weather is clearing up"
- "the dog is whining"

Subject NP / the "patient"

DOING SCHEMA

The "doing schema" refers to when one entity is seen as the source of the "energy" that is developed, and thus instigating the action.

In particular, an "agent" is causing the action deliberately (whereas it is "just" occurring in the happening schema).

- eg "Logendera eats"

EXPERIENCING SCHEMA

The "experiencing schema" describes the mental processing of the contact with the world.

In particular, the entity involved is an "Experiencer" that has said mental experience.

eg - "Bernice sees a snake"
- "He thinks he can swim"
- "He wants to pick the apple up"

Subject NP - experiencer — object NP - patient

HAVING SCHEMA

The "having schema" relates

① a human possessor to a possessed object;
eg Doreen has a nice house

② an affected entity to the cause of affection;
eg John has very bad flu

③ a whole to its parts; or
eg this table has 3 legs

④ one family member to another.
eg she has one sister

Subject NP - possessor — object NP - patient

MOVING SCHEMA

The "moving schema" is a combination of the happening or doing schema with the places where the action

① starts (source);
② passes by (path); &
③ goes to (goal).

eg - the apple fell from the tree to the grass
- I climbed from my room, up the ladder and onto the roof.

patient — source — path — goal

TRANSFERRING SCHEMA

The "transferring schema" combines
① the having schema;
② the happening/doing schema; &
③ the moving schema.

It contains 2 states:
① an initial state where one participant has something & passes it on to another participant; &
② a resultant state where the second participant has the thing passed on.

eg "Janice gave Lynn a birthday cake"

SEMANTIC ROLES: SUMMARY

Role	Definition
Agent	The entity that performs the action
Experiencer	The entity that experiences the state
Stimulus	The object creating or sponsoring an experience
Patient	The entity undergoing the action
Theme	The entity undergoing movement
Essive	An existential condition; anything predicated by the (main) verb "to be"
Source	The starting point for a movement
Beneficiary	The entity benefitting in an event
Recipient	The entity receiving an item
Possessor	The entity that is an owner
Goal	The end point for a movement
Path	The 'terrain' over which movement happens
Location	The place an event happens
Instrument	The object used to perform the action

LEXEMES

Lexemes are basic units of meaning in language that can be inflected, or combined with other words to produce different words/phrases.

Types:

① "Simple": consists of a word that cannot be subdivided into smaller units
eg cat, book
- corresponds to analogy / iconicity

② "Partially-filled": needs additional morphemes/words to complete its meaning
eg "happi-" (needs "-ness"),
"write-" (needs "-er")
- corresponds to position, sequence, antithesis, repetition

③ "Complex": consists of multiple morphemes/words combined together to yield a single unit with a specific meaning
eg "Snowflake", "red-hot"
- corresponds with identity, repetition, metonymy, metaphor

④ "Phrasal": combination of words functioning as a single unit with distinct meaning
eg "break down", "take off"
- corresponds with repetition, similarity, antithesis

⑤ "Partially-filled phrasal": partially filled, but is a "phrase" instead of morphemes
eg "not X let alone Y"
- corresponds to sequence, scalar, etc

⑥ "Cliché": overused expression that has lost its original meaning due to excessive repetition
eg "piece of cake"
- corresponds with repetition, metonymy, correlation

CAUSED MOTION CONSTRUCTION

The "caused motion construction" is a pattern in language which describes the causation of a change in the location/state of an object/entity.
eg - The audience laughed Bob off the stage
- Simkin gave the brief to Marshall

Pattens:
① Subj - Verb - Object - Complement
② Agent - Theme - Source / Path / Goal

THE WAY CONSTRUCTION

$_1$ The "Way construction" specifies the element "way" & a possessive determiner (his/her/their) in its form.

eg "Long John sashayed his way through the crowd"

$_2$ Patterns:

① Subj - Verb - [Poss - way]$_{obj}$ - Comp

② Agent - Source / Path / Goal

THE ACTIVE/PASSIVE CONSTRUCTIONS

$_1$ The "active construction" refers to when the subject is the performer of the action expressed by the verb.

eg "The cat chased the mouse".
(subject, verb, object)

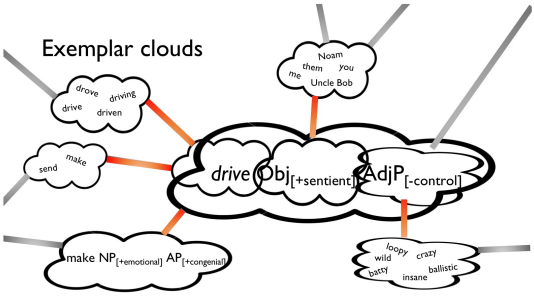
- we have an agent & a patient

$_2$ The "passive construction" refers to when the subject undergoes the action (rather than performing it).

eg "The mouse was chased by the cat".
(subject, auxiliary, verb, object)

- we still have an agent & a patient

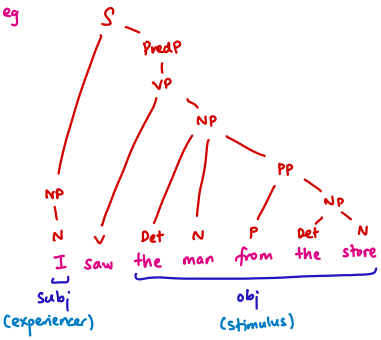
EXEMPLAR CLOUDS

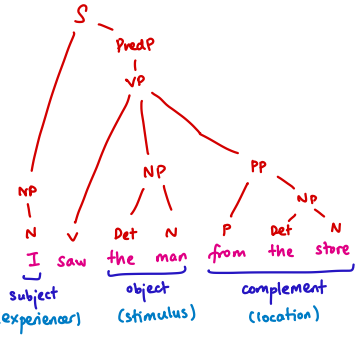


STRUCTURAL AMBIGUITY

Sometimes, sentences may be interpreted in different ways from different structural analyses.

eg





Chapter 5: Phonetics

THE ONE/MANY PROBLEM

The "one/many problem" refers to the difficulty in mapping different speech sounds produced onto a limited set of phonetic categories.

eg tough [ʌ] cough [o] plough [aw] dough [o]

- "ou" has different sounds depending on the word.

THE MANY/ONE PROBLEM

Similarly, the "many/one problem" refers to the challenge of mapping the same phonetic category to multiple phonetic realizations.

eg tough, buff, phone, fill → [f]

CONSONANTS: VOICELESS VS VOICED

1. "Voiceless" sounds are those that do not cause vibrations of vocal cords.
   - if you put your hand over your larynx, you won't feel any vibrations
2. "Voiced" sounds are those that do cause vibrations of vocal cords.
   - if you put your hand over your larynx, you will feel vibrations

ARTICULATION: SPECTRUM

We can group phonetic categories based on their articulation on a spectrum:

consonants — vowels

"chopping" sounds — glides/semi-vowels — "singing" sounds

CONSONANTS: MANNER

more "closed" airstream (ie more "chopped" sounds) ↑

obstruents
- characterized by a constriction in the vocal tract that creates a complete closure of airflow

"Stops" - made by completely blocking the airstream
(voiceless) [t] in "top"
(voiced) [d] in "dog"

"Affricates" - made by a stop followed by a fricative at the same place of articulation
(voiceless) [tʃ] as in "church"
(voiced) [dʒ] as in "judge"

"Fricatives" - made with a very narrow gap between the articulators, constricting airflow & causing friction
(voiceless) [s] as in "sit"
(voiced) [z] as in "zip"

"Nasals" - made by blocking the oral airstream, so airflow passes exclusively through the nasal cavity
(voiced) [m] as in "man", [n] as in "not", [ŋ] as in "sing"

Sonorants
- characterized by a relatively open vocal tract that results in a more resonant sound quality (ie "vowel-like")

"Approximants" - articulated with little/no friction

① "Laterals" - air flows along the sides of the tongue
[l] as in "let"

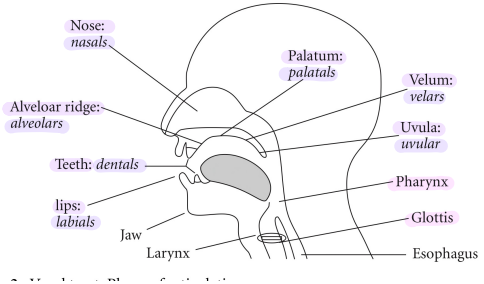
② "Glides" - unstable versions of vowels
[j] as in "yes"
[w] as in "we"

③ "Flaps" - tongue strikes the alveolar ridge once in passing
[ɾ] as in "butter", "latter", "bottle" (baɾl)

more "open" airstream (ie more vocal/resonant sounds) ↓

(vowels)

ARTICULATION: PLACE



Types:

① "Bilabial": lower lip articulates with the upper lip
- eg [p] as in "pat"
- [b] as in "bat"
- [m] as in "man"

② "Labiodental": lower lip articulates with the upper teeth
- eg [f] as in "fan"

③ "Dental": tongue tip articulates with the top teeth
- eg [θ] as in "thiS"
- [ð] as in "then"

④ "Alveolar": tongue tip articulates with the alveolar ridge
- eg [z] as in "zip"
- [d] as in "dog"
- [t] as in "top"
- [n] as in "not"
- [ɾ] as in "let"
- [s] as in "sit"

⑤ "Alveopalatal": the tongue front, excluding the tip, articulates with the back of the alveolar ridge
- eg [ʃ] as in "ship"
- [ʒ] as in "measure"
- [tʃ] as in "church"

⑥ "Palatal": tongue blade articulates with the back of the alveolar ridge
- eg [j] as in "yes"

⑦ "Velar": tongue back articulates with the velum
- eg [k] as in "cat"
- [g] as in "go"
- [ŋ] as in "sing"

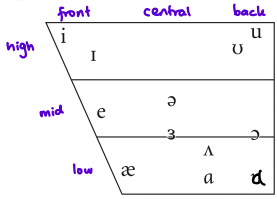
⑧ "Uvular": back of the tongue makes contact with the uvula
- eg "bon" in French [bɔ̃]

⑨ "Pharyngeal": the pharynx is narrowed / constricted
- eg [ħaleq] ("throat" in Arabic)

⑩ "Glottal": sound produced at the glottis
- eg "house" [haʊs]

ARTICULATION: VOWELS

Idea: We can represent vowels on a quadrilateral that displays where the tongue is when you say the sound.



- [i] as in "beat"
- [ɪ] as in "bit"
- [e] as in "bait"
- [ɜ] as in "bet"
- [æ] as in "bat"
- [ə] as in "but"
- [ʌ] as in "butt"
- [a] as in "bard"
- [u] as in "boot"
- [ʊ] as in "put"
- [o] as in "boat"
- [ɔ] as in "bought"
- [ɑ] as in "bot"

DIPHTHONGS

A "diphthong" is a "sequence" of 2 vowels within a single syllable.

In other words, the tongue "glides" from one vowel quality to another in the same syllable.

eg "boy": o → i
"cow": a → u
"care": e → ə

VOWELS: TENSE VS LAX

"Tense" vowels are characterized by a longer duration, and often appear in stressed syllables.
- eg [i] as in "see"
- [u] as in "food"

"Lax" vowels are characterized by a shorter duration and appear in unstressed syllables.
- eg [ɪ] as in "sit"
- [æ] as in "cat"

VOWELS: ROUND VS UNROUND

"Round" vowels are produced with rounded lips.
- eg [u] as in "food"
- [ʊ] as in "put"

"Unround" vowels are produced with neutral / unrounded lips.
- eg [i] as in "see"
- [ɪ] as in "sit"

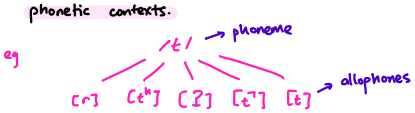
ASPIRATED CONSONANTS / [C^h]

"Aspirated consonants" are categorized by the strong burst of breath that accompanies either the release / closure of some obstruents.

ALLOPHONES VS PHONEMES

1. "Allophones" (phones) are different pronunciations or variations of a phoneme that occur in specific phonetic contexts.

eg



2. We write phonemes in slashes, & allophones in square brackets.
3. Allophones must be "related" to a phoneme.
   eg [t^h] is an allophone of /t/ (in English)
4. Phonemes are not pronounceable.
5. Phonemes are easy to hear, whereas allophones are harder to hear.

MINIMAL PAIRS

"Minimal pairs" are pairs of words that are identical in all respects except for the sounds in question.

eg pill, till, kill, bill, etc ...
lip, lit, lib, ...

COMPLEMENTARY DISTRIBUTION

We say two sounds are in "complementary distribution" when one allophone occurs exclusively in one environment / context whilst another occurs exclusively in another.

eg aspirated & unaspirated voiceless stops
- former in syllable-initial position before stressed vowel (top)
- latter in syllable-initial [s] (stop)

ALLOPHONIC PATTERNS

"Allophonic patterns" are the same alterations with classes of related sounds.

eg [$p^hɪl$] [$t^hɪl$] [$k^hɪl$]

PHONOLOGICAL RULES

1. "Phonological rules" are expressions in a formal notation for describing such alterations.
2. Format:

$$X \rightarrow Y \;/\; \text{condition}$$

This means X "converts" or "takes" the property Y if it occurs according to the condition.

3. Syntax:

V	vowel
C	consonant
X_	succeeds X
_Y	precedes Y
σ	symbol boundary
#	word boundary
[+X, -Y]	characteristic of a word; with trait X & without trait Y

eg $\begin{pmatrix} +\text{stop} \\ -\text{voice} \end{pmatrix} \rightarrow +\text{aspirated} \;/\; \sigma\_\_\_$

↳ (in English) if we encounter a voiceless stop, then it will be aspirated if it succeeds a symbol.

eg $\begin{pmatrix} +\text{stop} \\ -\text{voice} \end{pmatrix} \rightarrow -\text{release} \;/\; \_\_\_\ \#$

↳ if we encounter a voiceless stop, then it will be unreleased if it precedes a word boundary.

ENGLISH VOWEL ALLOPHONES

1. Idea: The vowel phoneme /V/ has
   ① [V:] <=> / _ + voice (lengthened)
   - + syllabic
   ② [$\tilde{V}$:] <=> / _ + nasal (nasalized)
   - + syllabic, + long
   ③ [V] <=> / elsewhere (regular)
   - + syllabic, + nasal

eg [i], [i:], [$\tilde{i}$:];
[ɪ], [ɪ:], [$\tilde{ɪ}$:], etc.

2. Phonological rules:

$$[+\text{syllabic}] \rightarrow [+\text{long}] \;/\; \_\_\_\_\_\ [+\text{voice}]$$
$$[+\text{syllabic}] \rightarrow [+\text{nasal}] \;/\; \_\_\_\_\_\ [+\text{nasal}]$$

- vowel phonemes tend to be lengthened if they precede a voiced syllable.
- vowel phonemes tend to be nasalized if they precede a nasalized syllable.

MORPHOPHONOLOGY

Idea: Phonological processes extend to morphology.

ASSIMILATION

"Assimilation" is a process where one sound causes an adjacent sound to be "more similar" to itself.

Types:

① Progressive: sound influences following sound

eg alternative pronunciations of the plural morpheme {-s};

{-s} → [+voiced] / [+voiced] ____
{-s} → [-voiced] / [-voiced] ____

eg cats (kæts)
dogs (dɔgz)

② Retrogressive: sound influences preceding sound

eg news (njuz)
newspaper (njuspeipə)

③ Place: place of articulation of a consonant spreads to a neighboring consonant

eg unbelievable {-un} → (əm)
↳ bilabial
unconscious {-un} → (əŋ)
↳ velar
unfavorable {-un} → (əm)

④ Nasal: one segment takes on nasality of neighboring segment

eg vowels often nasalize before a nasal consonant

Chapter 6: Semantics

LEXICAL MEANING

We can split meaning into
① Denotation: the literal meaning of the concept; &
② Connotation: the emotional resonance a word has that might be hidden; the implied meaning of a concept.

DENOTATION: EXTENSION VS INTENSION

The "extension" refers to the actual entities that a word applies to.
eg "PM of Canada": Justin Trudeau

The "intension" refers to the inherent or conceptual meaning of a word.
eg "PM of Canada": leader of Canada

PROPOSITIONS

The "proposition" refers to the meaning/content conveyed by a sentence.

In particular, the proposition is often a statement / assertion that has a specific semantic interpretation that is either true or false.

Often, different sentences may convey the same proposition.
eg "the cat is on the mat" (proposition)
- "the cat is on the mat"
- "on the mat, is the cat"
- "the feline referenced is on the referenced mat" etc (sentence)

We can use logic notation to formulate propositions.
eg $\exists x[C(x) \wedge [\exists y\, M(y) \wedge O(x,y)]]$
- there exists a cat
- there exists a mat
- cat is on the mat

ENTAILMENT / $\Rightarrow$

"Entailment" is a relation between the propositions X, Y such that if X is true, then Y must be true (ie $X \Rightarrow Y$).

MUTUAL ENTAILMENT / $\Leftrightarrow$

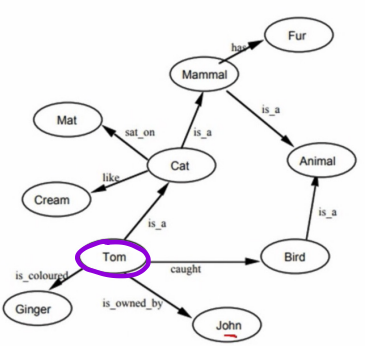
We say X & Y have "mutual entailment" if $X \Rightarrow Y$ & $Y \Rightarrow X$.

FRAME SEMANTICS

Idea: we organize word meanings into "frames", which consist of a set of interconnected concepts linked by different "inheritance" relationships.

Properties:
① Encyclopedic;
② Lexically based;
③ Networked.

eg



This allows us to relate words with different traits using an "inheritance structure".

LINGUISTIC RELATIVITY / WHORFIAN HYPOTHESIS

$_{1}$ Idea: the language we use influences the way we think and perceive the world.

$_{2}$ Versions:

① Strong: Language determines thought & can fundamentally shape & limit an individual's cognitive processes

② Weak: language influences thought & perception, but does not entirely determine it.

SEMANTIC PRIMES

$_{1}$ "Semantic primes" are a set of semantic concepts that are arguably understood innately by all people but impossible to express in simpler terms.

$_{2}$ These often map to event schemata.

Chapter 7: Pragmatics

1. "Pragmatics" deals with the study of language in context & how meaning is interpreted in communication.
2. In particular, it examines
   ① the "appropriateness" of language; &
   ② requires context (whereas semantics does not).

INTERPERSONAL VS IDEATIONAL FUNCTIONS

1. The "interpersonal function" is concerned with expressing attitudes, feelings & social roles in communication, and aims to convey the speaker's intentions.
2. The "ideational function" is concerned with communicating content, knowledge & experiences, and aims to share how we understand the world around us.
3. The interpersonal function is used in pragmatics, whereas the ideational function is used in semantics.

PHATIC COMMUNION

"Phatic communion" are utterances whose chief function is to establish/maintain contact.
eg "hi", "how are you", "nice weather", etc

SPEECH ACTS

1. "Speech acts" are the actions performed by speakers when using language to convey meaning & achieve various communicative intensions.
2. Components:
   ① "Locution" – literal meaning / denotation of the utterance
   eg "it's cold in here"
   ↳ "the temperature of the room is low"
   ② "Illocution" – intended communicative function of the utterance
   eg "can you pass the salt"
   ↳ "they are making a request for someone to pass the salt"
   ③ "Perlocution" - the effect or impact an utterance has on the listener / recipient of the speech act
   eg "I am sorry to hear that"
   ↳ might involve sympathy/gratitude

CATEGORIES OF SPEECH ACTS

Categories:

① "Constitutive" - ritualized social circumstances
- thank someone when something has been exchanged
- "expressive": thanking, praising, etc
- "declarative": naming, marrying, etc

② "Informative" - communicate / request information
- assert facts / question truth of facts
- "assertive": asserting, stating, etc
- "info questions": asking

③ "Obligative" - commit self / solicit others to do a task
- offer assistance / ask for a favor
- "directive": requesting, ordering, etc
- "commissive": promising, offering, etc

FELICITY CONDITIONS

"Felicity conditions" are essential requirements that must be met for a speech act to be considered successful / appropriate.
- ie appropriate intentions / circumstances / actions

Categories:

① "Essential": S says the right words
- S + H understand the utterance to be performative of the given act

② "Sincerity": S means what they say
- S+H understand the utterance to represent S's intentions

③ "Social & ontological": S is able to perform the act
- S & H understand the utterance to signal or confirm S's capacity to perform the act

ADJACENCY PAIRS

"Adjacency pairs" are pairs of related utterances where the second utterance is usually the expected follow-up / response to the first.

eg
- greeting - greeting
- question - answer
- offer - acceptance / rejection
- etc