Pre-Midterm

Syntax

Syntax

• putting words together to create sentences

Phonology

Phonology

• combining phonemes (sounds) to make words

Properties of Human Language

Properties of Human Language

- duality of patterning
- · arbitrariness of the sign
- discrete
- productivity
- reflexive
- recursive
- displacement
- · cultural learning

Arbitrariness of the Sign

Arbitrariness of the Sign

• sounds unconnected to meaning

Exceptions to Arbitrariness of the Sign?

Exceptions to Arbitrariness of the Sign?

- onomatopoeia
- sound symbolism

Onomatopoeia

Onomatopoeia

• words that sound like what they are

Sound Symbolism

Sound Symbolism

- kiki, buba
- · we know what each one looks like

Duality of Patterning

Duality of Patterning

• phonology + syntax

Discrete

Discrete

- discrete units
- not a continuous scale
- tone in conversation can be continuous but since writing exists, we can infer it is not essential

Productivity

Productivity

- discrete infinity
- we can make infinite possible combinations of words

Reflexive

Reflexive

• use language to talk about itself

Recursive

Recursive

• sentences can contain sentences

Displacement

Displacement

• talk about abstract things, not here

Cultural Learning

Cultural Learning

• learn language from culture around you

Signed Languages

Signed Languages

- not different from other language
- same features as other human language
- not word-for-word translations of languages around them
 - verbal aspect
 - classifiers
 - word order

Humans vs Apes Vocal Tract

Humans vs Apes Vocal Tract

Humans

- shorter tongue
- lower larynx
- tongue can move more freely, can chocker more easily

Apes

- larger tongue
- higher larynx

In General, Animal Language Lacks...

In General, Animal Language Lacks...

- true productivity
- discrete combinatorial system

Bee Language

Bee Language

- waggle dance
- two continuous scales
 - direction
 - duration

Bird Language

Bird Language

- three stages of learning
- learn from parents
- discrete units -> phonology but no syntax

Ape Communication

Ape Communication

- aggression
- submission

Vervet Monkeys

Vervet Monkeys

- alarm calls for predators
- lexicon...
 - but no syntax or phonology

Who Can Learn Simple Algebraic Rules?

Who Can Learn Simple Algebraic Rules?

- rhesus monkeys
- rats

Who Can Learn Finite State Grammars?

Who Can Learn Finite State Grammars?

- tamarins
- birds

Who Can Learn Regular Grammars?

Who Can Learn Regular Grammars?

- humans
- tamarins

Who Can Learn Context Free Grammars?

Who Can Learn Context Free Grammars?

• only humans

Language Family

Language Family

- descended from a common ancestor
- systematic differences between sounds

Cognates

Cognates

- words with common ancestor between languages
- the horizontal relationships in a language tree

Proto-Languages

Proto-Languages

- common ancestor languages
- can be reconstructed with comparative method
- earliest possible language was 50,000 years ago
- earliest known language was 5,000 years ago

Comparative Method

Comparative Method

- feature-by-feature comparison of two languages
- study language development
- reconstruct proto-languages

Dialect Maps

Dialect Maps

- maps of language features
- isoglosses

Isoglosses

Isoglosses

• boundaries on dialect maps

Canadian Shift

Canadian Shift

- cot and caught merge
- bet moves down
- pat move back

Northern Cities Shift

Northern Cities Shift

- bet moves up
- pat moves forward

On a Dialect Map The Older Feature Is...

On a Dialect Map The Older Feature Is...

- large
- disconnected

On a Dialect Map The Younger Feature Is...

On a Dialect Map The Younger Feature Is...

- smaller
- united

AAVE

AAVE

- habitual be
- negative concord
- copula absence

Habitual Be

Habitual Be

- she be runnin'
- she has the habit of running

Negative Concord

Negative Concord

• ain't nobody seen him

Copula Absence

Copula Absence

• he in trouble!

Register

Register

- based on social context
- formal, informal

Informal Register

Informal Register

- flapping
- unstressed vowel deletion
- contractions

Flapping

Flapping

• tt becomes dd

Prescriptive Rules

Prescriptive Rules

- one of the variants is prescribed
- this becomes the formal register

Gender Differences

Gender Differences

- girls overestimate their use of standard variants
- boys underestimate their use of standard variants
- girls are farther along in language change than men
- girls use non-standard variants with peers
- boys use non-standard variants with interviewers

Phonemes

Phonemes

- unit of phonetics
- discrete sound

Allophone

Allophone

• different pronunciations for phonemes

Minimal Pair

Minimal Pair

• words that differ by one sound

Presupposition

Presupposition

- implicit assumption from an utterance
- Jim no longer walks on the beach -> Jim used to walk on the beach

Implicature

Implicature

- stronger implication from an utterance
- the *frame* is good -> but the painting is bad

Grice's Maxims

Grice's Maxims

- speakers are good
- act in good faith
- cooperative
- assume others are cooperative
- quantity, quality, reverence

Syntactic Bootstrapping

Syntactic Bootstrapping

• children use syntax to learn words

Phonological Bootstrapping

Phonological Bootstrapping

• children learn word boundary from probability two phonemes are next to each other

Word Segmentation

Word Segmentation

- probability two sounds next to each other
- this is how phonological bootstrapping works

Parental Feedback

Parental Feedback

- children don't need it for their native language
- Simon learned ASL better than his parents
- Trackton study

Assumptions Guiding Word Learning

Assumptions Guiding Word Learning

- whole object assumption
- taxonomic assumption
- mutual exclusivity assumption

Whole Object Assumption

Whole Object Assumption

• words refer to whole objects

Taxonomic Assumption

Taxonomic Assumption

• words refer to the same class of objects

Mutual Exclusivity Assumption

Mutual Exclusivity Assumption

• there is a 1-to-1 mapping of words to objects

Pidgin

Pidgin

- comes from a substrate and a lexifier (superstrate) meeting
- crude communication system
- not a real language

Creole

Creole

- develops from a pidgin
- children assign implicit grammatical rules to pidgin and develop it

Substrate

Substrate

- lower socio-political status language
- gets overtaken by the superstrate

Superstrate

Superstrate

- lexifier
- higher socio-political status language
- · overtakes substrate
- contributes most of its grammar and lexicon

Language Bioprogram Hypothesis

Language Bioprogram Hypothesis

- children faced with pidgins impose structure upon them
- universal human grammar
- turn pidgins into creoles

Critical Period Hypothesis

Critical Period Hypothesis

- period in childhood when language acquisition is easier
- start slowly, progress further than adults

Post-Midterm

Properties of Signed Languages

Properties of Signed Languages

- same design features of human language
- distinct from languages around them
 - word order
 - suprasegmental pronouns in ASL

Sign Language Parameters

Sign Language Parameters

- place
- movement
- handshape
- orientation
- non-manual markers

Can You Sign Two Things At Once?

Can You Sign Two Things At Once?

- no
- passive hand either does same as dominant hand or stays still

Iconicty

Iconicty

- signs look like things they represent
- exception to arbitrariness of the sign
- this is more common in sign language

Assimilation

Assimilation

• signs take on parameters of neighboring signs

Affixation

Affixation

- suffixes and prefixes
- these exist in sign language too

Natural Form vs Artificial Form

Natural Form vs Artificial Form

Natural Form

- same sense as language
- · we have a natural sense for correct or incorrect
- hard to prescribe overt rules to it
- stress, syllables, iambic pentameter

Artificial Form

- · artificial rules
- increasing first letter by one each time, etc.

Textsetting

Textsetting

- isochronic
- putting syllables are regular intervals

Meter

Meter

- recurring pattern of stresses / accents
- provides a pulse or beat

Metrical Template

Metrical Template

- like iambic pentameter
- WSWSWSWSWS

Closed-Class Words

Closed-Class Words

- one syllable
- unstressed
- articles, general functioning words

Open-Class Words

Open-Class Words

- one syllable
- stressed
- words that accept new types, like nouns, verbs, adjectives, adverbs

Core English Metrical Constraint

Core English Metrical Constraint

- WSWSWSWS
- perfect lines match perfectly with stressed and unstressed
- but most lines are not perfect (6.8% in Shakespeare's sonnets)
- only weak can go on weak except:
 - first weak OR
 - one syllable strong

Metrical Tension

Metrical Tension

- when template does not align with text
- fugues

Metrical Counterpoint

Metrical Counterpoint

- dependent harmony
- independent rhythm
- African music

Sung Vs Written Structure

Sung Vs Written Structure

- · sung is less rigid
- written guided by metrical templates (like iambic pentameter)

Musical Grammatical Judgements

Musical Grammatical Judgements

- listeners have an idea of what is correct
- musical idiom
- not so much for extremely irregular patterns
 - artificial vs natural

Properties Shared By Music and Language

Properties Shared By Music and Language

- grouping / constituency
- headedness
- rhythm
- recursion
- syntax
- phonology
- discreteness

Music Grouping / Constituency

Music Grouping / Constituency

- constituents are grouped together
- dum di di dum | di | dum di di dum di
 - which boundary is correct?

Music Headedness

Music Headedness

- part of the "phrase" whose removal turns it into gibberish
- the first "dum" in the above example

Music Rhythm

Music Rhythm

- strong and weak alternation
- prosody -> rhythm in poetry

Music Recursion

Music Recursion

• constituents inside constituents

Music Syntax

Music Syntax

• proper ordering of notes in a scale

Music Phonology

Music Phonology

- pitches -> phonemes
- unlike in speech, these repeat every doubled frequency

Discreteness

Discreteness

• but unlike in language, pitch is also discrete

Difference Between Music and Language

Difference Between Music and Language

- tonality
- equivalence for pitch multiples of two
- finite set of pitches
- musical idioms (conventional sequences build and resolve tension)
- simultaneity

Sapir-Whorf Hypothesis

Sapir-Whorf Hypothesis

- language shapes thought
- the way you speak determines how you think
- OR the way you speak *influences* the way you think
- OR language is merely a part of culture

Language and Color

Language and Color

- shades of blue in Russian vs English
- Russians have two distinct categories, so they did better
- under linguistic load, both did the same

Language and Time

Language and Time

- moving forward through time or time moving past you
- meeting on Wednesday pushed forward two days
 - people said either Monday or Friday
 - people who had been travelling or waiting in line said Friday
- horizontal vs vertical representations of time
 - · age when you started learning a language affects this

Language and Space

Language and Space

- relative vs absolute positioning
 - relative -> forward, back, left, right
 - absolute -> North, South, East, West
- speakers use language to encode memory
- so there was a difference between English (relative) and Guugu Yimhidiir (absolute)

Endangerment Causes

Endangerment Causes

- colonial interactions
- missionary work
- disruptions
- educational policy (residential schools)
- lack of official recognition

Loss Causes

Loss Causes

- almost no record of it
- last native speaker dies
- shift to different languages

Goal of Language Documentation

Goal of Language Documentation

- benefit communities and scholars
- work with endangered communities
- ideally one-to-one correspondence between letters and phonemes
 - not always possible
- · dictionary-making

Common Ethical Issues

Common Ethical Issues

- might only benefit researcher
- might cause socio-political harm to language community
- privacy issues with data
- language can have spiritual value

Prepositional Model

Prepositional Model

- research with speakers rather than on speakers
- research for speakers rather than for linguists
- research by speakers *and* linguists