

## OVERVIEW:

1. Introduction
2. History
3. Typology
4. Sound systems
5. Writing systems
6. Signing systems
7. Morphology
8. Syntax
9. Universals / Naturalness
10. Vocabulary Generation
11. Semantics, metaphor, glossing, translation
12. Conculture
13. Language evolution / aging / families
14. ....?

## 1. Introduction

Time: 1-2 days

References: Conlang FAQ; LJ comm.'s; CONLANG-L

Pre-HW:

1. Course sign-up form, polls

Post-HW:

1. Look through conlangs\_decal comm.
2. Read Conlang FAQ
3. Look at conlangs comm., conlang-l
4. Start thinking about own goals
5. Read manifestos, intros from reader / online.
6. Browse other online resources

❖ Intro speech (Klingon, Quenya, Lojban, Esperanto, English)

❖ Who does this?

- G B L H Ls
- Famous people (Dante)
- Powerful people (Korean, Turkish)
- Hobbyists
  - Linguists
  - Non-linguists
- Fiction writers
- Random people

❖ What are conlangs?

- “Constructed language” i.e., L created w/ intent
- Spectrum of natural ⇔ artificial

- **Goals** (vs. natlangs which have none); cont'd later
    - Criteria, prototypes, evaluation of success
  - Spectrum of scope
    - Code (Morse, Hobo Sign)
    - Relexification (Thieves' Cant, Pig Latin)
      - By algorithm
      - Slang
      - Pronunciation
    - Minimal-grammar conlang (naming language)
    - Language addition (natlang+)
      - Modularity
    - Low-grammar conlang (short phrases, sayings, citations, etc)
    - Low-vocab conlang
    - Full conlang
    - Living language (Esperanto etc.)
  - Spectrum of naturalness
    - Universals
    - Natlang, a priori, a posteriori
    - Stealth conlangs (Korean, Hebrew, Turkish, etc)
- ❖ What goes into developing a conlang?
- **GOAL**
    - Aesthetics
    - Crypto
    - Sapir-Whorf
    - World-building
    - Logic / philosophical
    - Auxiliary L
      - Local / international
    - Break/test "Universals"
    - Machine translation
      - Pivot / meta language
      - AI language internal descriptions
    - "Fixing" natlangs (not this class)
    - Proto-language extrapolation
    - Communication w/ God (glossolalia)
    - "Ideal" language
    - Learn linguistics
    - Special purpose
    - Fun!
  - *DISCUSS: Other goals?*
  - Top-down vs. bottom-up
    - Bottom-up
      - Sound system: Phonetics, phonology, phonotactics, suprasegmentals
      - Writing system: Orthography (-ies?)
      - Signing system

- Morphology, syntax
  - Vocabulary generation, semantics, pragmatics
  - Language families, “historical” change, variation (register / accent / dialect)
  - Corpus
  - Top-down
    - Amount of elaborate on goals
  - Mixing
    - For this class, top-down first to have clear goals in mind, then bottom-up, adding top-down specs as we go.
    - Don’t be afraid to revise based on new info or ideas
      - ◆ Don’t over-revise and get frozen
- ❖ Final Project
- Req’d for 3 units
  - 1. Create a language
    - Human use (no freaklangs)
    - Not clone of English or other L1
    - Original
    - Mid-way on scope spectrum – has all parts to do translation
    - IPA, etc. for formal descriptions (will go over during class)
    - Grammatical description
    - Vocabulary
    - Babel translation (NOT EASY!)
  - 2. Create language parts
    - Detailed
    - Modular
    - Equivalent work.
  - 3. Research; other proposals
    - Equivalent work; open to ideas.
- ❖ Who am I?
- Naming
  - CogSci, 3<sup>rd</sup> yr. transfer
  - Conlanger
    - Main interests: theoretical design, “ideal” language, pushing envelopes
  - Disclaimers
    - Not an Official Linguist
    - Don’t know everything about conlangs
    - Will not cover everything relevant during class
    - Make mistakes
      - Disagreement encouraged
        - ◆ Including for ODIL etc
    - Suck at remembering names
      - Name cards?
    - NO OFFICIAL WAY

- 1<sup>st</sup> time teaching
- Eccentric\
- ❖ Meta / class structure
  - Lecture / discussion / activity
  - Free to interrupt, add – take over, if know more than me
  - Creativity mandatory ☺
    - Not traditional linguistics class
      - Creation != post-hoc description
      - Not conservative (re. theory, universals)
      - No need to be like other languages (but not Wrong either)
    - Don't be afraid to change decisions
  - Class conlang?
  - Homework
    - Pre-HW
      - Readings, etc
      - Due by relevant class
      - Assumed done; will be gone over iff requested
      - Keep me informed of how well keeping up
    - Post-HW
      - Verification of understanding concepts
      - Practical language creation, by chunks
        - ◆ Only req'd for 3-unit / final project doers
      - Related info
      - Generally due 1 week after last class on topic.
    - Not graded, just checked
    - Received via LJ comments / emailing .doc/.pdf
      - In paper only if not possible online
  - Quizzes posted to LJ
    - Screened
    - Answers posted to LJ
    - Go over in class iff requested
  - LiveJournal
    - Account mandatory – free, easy, anonymous if desired
      - Problems?
    - Discussion
    - Friends-only locking = private to class
    - Lecture notes
      - Volunteer?
    - Internet resources
      - Go over syllabus list
  - Essays
    - Midterm & final essays
    - Described in syllabus
    - Due dates TBD

## ❖ Administrativa

- Class size
- Talk to me if any problems, changes, etc
- CCNs given out in 3<sup>rd</sup> week
  - Ask if req'd sooner
- Up to 2-3 units – less OK, audit OK, non-UC OK
- Recommended text: *Contemporary Linguistics* (O'Grady) or *Introduction to Language* (Fromkin)
  - Language Files / other intro ling. text OK
  - Describing Morphosyntax, etc. – good reads, optional
- Reader
- A/V recording

## ❖ General Principles

- Everything is a continuum
  - **All** categories are, to some extent, just points on continua
  - Noun ⇔ Verb, Isolating ⇔ Polysynthetic, etc.
- Tool & Purpose
  - Many, many variables
    - “These are [some of] the possibilities”
  - Many possible uses
    - Grammar, aesthetics, variation, irregularity, etc
    - Be creative
      - ◆ E.g. SOV → APS paradigm; word order is a tool
- Keep goals in mind for everything
  - “How does this apply?”
  - “What can I do with this?”
  - If naturalness is important, use Universals
  - Context!
    - “Whom is this language for / used by?”
    - Culture, borrowings, worldview, concept exposure
- Know your biases; be creative
  - “How do my native languages do this?”
  - “How do other languages do this?”
  - “What are the assumptions I'm making here?”
  - “What are other ways to do this, look at this, etc. that haven't been done before?”
- Category-based descriptions
  - Rules act on \*categories\* not exemplars as much as possible
  - Categories have certain properties (e.g. “nouns” – distributional / structural / etc)
- Variation and irregularity
  - Connotations

## ❖ Questions?

### 3. Typology

Time: 1-2 days

References: CL 349

Pre-HW:

1. Read CL 349-365

Post-HW:

1. Decide on typology
2. Decide on goals
3. Elaborate reasons for both
4. Describe conculture and/or other relevant context
5. Post to LJ – public comments
6. Research conlangs with similar goals to yours

#### ❖ Summary of linguistic qualities; used to classify languages

- Not genetic or areal
- Comprises:
  - Phonology
  - Morphology
  - Syntax
  - Etc.
- Universals
  - Absolutes
  - Probabilities
  - Implications

#### ❖ Conlang Typology (via Rick Harrison, modified)

- Primarily via source of grammar & vocab:
- A posteriori
  - Modification / revivification
    - Natlang (Latino sine Flexion - Peano)
    - A posteriori conlang (Ido – from Esperanto)
  - Combination of languages
    - Related natlangs (Esperanto – Zamenhof)
    - Unrelated natlangs (Vorlin – Harrison)
    - A posteriori conlangs
- A priori
  - Philosophical languages
    - Categorical vocabulary? (Ro – Foster)
  - Not primarily phonetic mode
    - Pasigraphy (symbol/icon) (Blissymbolics)
    - Number language
    - Pasimology (sign language)
    - Etc.
- Mixed
- Naming – foo-langs

## ❖ Phonology (contrastive)

- Vowels
  - # of vowels
  - Nasal vowels?
  - Long vowels?
- Consonants
  - ~# of consonants?
  - Voiced Cs?
- Tone
  - Register?
  - Contour?
  - Mixed?
  - Intonation
- Stress
  - Fixed
  - Free (idiosyncratic by word)
  - Grammatical
- Phonotactics
  - Onset clusters
  - Offset clusters / codas

## ❖ Morphology

- Synthesis: isolating ⇔ polysynthetic (CL 356)
  - Words = unbroken units vs. = lots of combined subunits
- Fusion: agglutinating ⇔ inflectional (fusional)
  - Polysemy of morphemes; ease of divisibility (sang vs. listened)
- Processes
  - Prefix, suffix, infix / interfix, stem modification, reduplication, suprafixation
  - Suppletion
- Head vs. dependent marking (e.g. possessive)
- Mixed
  - Most Ls
  - Use above to describe subparts of L (vs. whole)
  - Spectrum (again)

## ❖ Syntax

- SOV etc
  - Simple declarative Ss
    - Transformations make broader
  - Marks *argument structure*
- APS – AVP / SV system
  - More flexible
- “Free” word order
  - Highly marked
  - Used to indicate other things, e.g., pragmatics

#### 4. Sound Systems

Time: 1-3 days

References: LF 33, CL 15, IPA+CXS chart

Pre-HW:

1. Read up on IPA online, incl. sound examples
2. Read chart
3. Read LF/CL chapters

Post-HW:

1. Think about aesthetics, density, etc. factors
2. Create phonetic inventory and discriminating features; post, w/ reasons
3. Add phonology (allophones etc.); post
4. Add phonotactics; post
5. Add other sound-change rules; post
6. Problem set 1 – transliteration to/from IPA & CXS\
7. Problem set 2 – derive [->// rules, simple and multistep

❖ Activity (3 min): Come up w/ list of all possible sounds (small groups)

❖ Phonetics

- IPA; CXS or X-SAMPA
  - Handwriting vs. online (ASCII)
  - Required
- Consonants
  - MOA: stop, fricative, affricate, liquid, glide, ...
  - POA: bilabial, labiodental, interdental, alveolar, alveopalatal, palatal, velar, uvular, pharyngeal, glottal
    - Different for aliens?
  - Voicing: voiceless, voiced, whisper, murmur
  - Nasalization
  - Aspiration
  - Release
  - Length
    - Syllabic / sonorant vs. obstruent
- Vowels
  - High ⇔ low
  - Front ⇔ back
  - Tenseness
  - Roudness
  - Nasalization
  - Length
- Glides, diphthongs, combinations (affricates)
- [a] format
- More! (look at IPA)
  - Clicks, ejectives, ...
- Phonaesthetics?
- Onomatopoeia



- Iconicity vs. arbitrariness
  - Micro-semantics?
    - E.g. plosives = “outward”; sonorants = “continuing”, etc
  
- ❖ Sound change
  - Phonemes
    - Allophones
    - Minimal pair test
    - Define by features (broad vs. narrow descriptions)
    - Underlying Representation
    - /a/ format
  - Natural classes
    - Some MOA / POA / other featural group
    - ~ = rectangle on IPA chart
      - Exceptions (Rs, nasals, sibilants, ...)
  - Context dependent
    - → / ← assimilation of MOA / POA, etc
    - Neighboring consonants (e.g., m/n + p/t in English)
    - Neighboring vowels (e.g. nasalization → spread)
    - Deletion
    - Insertion
    - Elision (p + p = p)
    - Nasalization
    - Lengthening
    - Word boundaries
    - Anything that modifies features or existence
  - /UR/ → [SR] rules
    - Feeding
  - Within allophones or not (e.g. English aspiration rules)
  
- ❖ Syllable / word structure
  - Phonotactics
    - Allowed C(C)V(C) etc. combinations per syllable
    - Onset vs. offset / coda
    - Root part = Vs or = syllabics?
    - Different depending on context? (e.g., word boundaries)
    - Multiple structures (form 1, 2, 3...) for different purposes?
  - Onset / offset clusters
    - Onset != offset rules?
    - CV syllabaries = n/a
    - 2, 3, 4+ C clusters (separate rules?)
    - Context?
    - Define by features (e.g., “sibilant + stop onset OK”)
    - Self-bounding words?
      - Machine translation
  - Syllable boundaries

- “greedy codas”?
- Minimal – syllabic roots, nil onset/coda
- ❖ Activity: Come up with possible phoneme / allophone groups
- ❖ Activity: Come up with context-based sound change rules
- ❖ Suprasegmentals
  - Stress
    - Syllable-based
    - Meaning / intonation
    - Idiosyncratic by word
  - Tone
    - Register (H M L ...)
    - Contour (MH, HLH, ...)
    - Mixed
    - By syllable, word, sentence, segment
    - Context change
- ❖ Borrowing
  - Transliterate into closest available
  - Con’t way later
- ❖ **OVERALL IDEA** (not just sound systems)
  - 2 general types of choices to make
    - WHAT changes
    - WHY they change
      - Aesthetics
      - Meaning
      - Etc
  - Tools + design = result

## 5. Writing Systems

Time: 1-3 days

References: CL 591, Omniglot

Pre-HW:

1. Omniglot: read at least 1 description each of 3 different categories

Post-HW:

1. Look at LaTeX, Metafont, etc.
2. Choose writing system
3. Create it; post. If complex or non-phonetic, turn in what's ready by due date, continue posting as available

### ❖ Why orthography next? (...and not e.g., morphology)?

- Orthography is another mode to convey meaning
- Language = system to transmit meaning. (Controversial!)
- 1<sup>st</sup> need to go through various systems / modes
- Next up: signing!

### ❖ Spectrum 1: Purpose

- Record another mode (e.g., phonetic)
- Intrinsic meaning
  - Internal morphology?
    - Kanji radicals – phonetic, meaning-parts, etc
- Mixed

### ❖ Spectrum 2: form

- Controversial, again!
- 1D serial (Morse code)
- 2d serial (alphabets)
- Dense 2d serial (logograms)
- 2+D serial (Korean, Mayan)
- 2D full (webs, Betamaze)
- 3D (statues?)
- Static vs. dynamic?
- Color variation?
- Size variation?
- Direction
  - L->R, R->L, boustrophedon, non-linear, ...
- Contour-based ID = easier to read when fuzzy

### ❖ Phonetic alphabets

- Letter = syllable(s), consonant / vowel, ...?
- Drop some features? (e.g. short vowels)
- 1:1 or 1:M/M:1/M:M correspondence between symbol & sound?
  - If many – spelling rules?
  - For semantic/derivational use?
- Diacritics to indicate features (Vs, tone, stress, voicing, ...)

- Names for letters
- Ordering (1D, 2D, ...?)
  - Multiple orderings (Jap. a i u e o vs. i ro ha ni ho he to)
- ❖ Logographic
  - Stylized / arbitrary vs. iconographic
  - Made up of radicals?
  - Placement important?
    - w/in character
    - between characters
  - # of characters
  - Combinations
    - e.g. Blissymbolics person + forward + building = visitor
- ❖ Mixed systems
  - Logograms (\$, &, %, etc)
  - Phonetic radicals in kanji
  - Spelling to indicate more than phonetics
- ❖ Punctuation
- ❖ Number system(s)
  - Different purposes (e.g. English)
- ❖ Variation
  - Aesthetic
    - Isolated / front / medial / final / affix forms
  - Multiple orthographies
    - E.g. Japanese kanji, hiragana, katakana, romaji
    - Script vs. block etc.
  - Capital letters / other special markers/variations
    - Phrase delimiters
    - References / pronouns
    - Grammatical markers
  - Fonts
    - Degredation (e.g. handwriting) – allowable variance vs. comprehension
  - Context rules (like phonology)

## 6. Signing Systems

Time: 1 day

References:

Pre-HW:

1.

Post-HW:

1. Using a sign system?

2. If yes, decide component allowable parts (cheremes); post.

❖ Visual / Spatial vs. Acoustic / Temporal

❖ HC MOV POS OR system

➤ Handshapes

▪ ASL alphabet + variations

▪ Gang signs

▪ Etc

➤ Position

▪ Touching body parts

▪ In front of / next to body parts

▪ Farther – “neutral” spaces

▪ Pronoun use

➤ Movement

▪ # / repetition

▪ Direction

▪ Path

▪ Manner

➤ Orientation

▪ Twist, facing

▪ Key points (e.g. tip of index finger in “1”)

➤ POS HOLD system?

❖ Other features analogous to phonology, morphology, syntax (next)

➤ Context variance

➤ Allocheres / cheremes

❖ Overlapping features

❖ Alphabet (phonetic?)

❖ Iconic vs arbitrary

❖ Spatial grammar (e.g. give-repeatedly-to many)

❖ Tactile signing?

❖ WRAPUP

- Combining phonetics, phonology, signing, phonotactics to create the system of possible things to “say”
- Various variables to be accessed by other systems (e.g., meaning)
- Context change
- Allowable variance vs. contrastive
  - Accents, having a cold, etc

## **History**

Voynich – 1586 (earlier?) – hoax?:  
<http://www.crystalinks.com/voynich.html>

Lingua Ignota (Hildegard von Bingen, 1153/54)  
Arithmeticon nomenclator (anonymous Spanish Jesuit, 1653)  
Wilkins' (1641)  
Dalgarno's (1661)  
Beck's "Universal Character" (1657)  
Johnston's "Synthetic Language" (1641)

- timeline (langmaker stats, etc); growth of Internet; growth of conlanging in 90s-00s
- Lingua Ignota, Bala-i-balan, Dalgarno's Universal Language, Solresol, Volapuk
- V. manuscript
- phil. langs
- > Loglan/Lojban, ...
- IALs
- > Esperanto, Ido, ...
- artlangs
- > Quenya, Klingon, ...
- "secret" conlangs
- > English, French (prescriptive)
- > Korean, Turkish, Amerindian (writing systems)
- > Hebrew, etc. (revived)
- > Morse, Semaphore, SEE, etc. (created)
- > Pig Latin, Thieves' Cant, Leonardo, etc. (codes)

Pre-HW:  
- find 1 NON famous conlang, read up on it online

Post-HW:  
- start thinking about what type of language is personally attractive & why

## **Morphology**

### **Vocab Generation**

### **Syntax**

### **Other Stuff**

### **Credit:**

Lots of inspiration taken from David Peterson - mock syllabus, letter, HW1, & email.  
Almost all of this is my own writeup.