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 LH 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, 3rd 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
- 1st 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 3rd 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**
    - Number of vowels
    - Nasal vowels?
    - Long vowels?
  - **Consonants**
    - Average number 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 / sonortant 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
- \( \text{rectangle on IPA chart} \)
  - Exceptions (Rs, nasals, sibilants, …)

Context dependent
- \( \rightarrow / \leftarrow \) assimilation of MOA / POA, etc
- Neighboring consonants (e.g., m/n + p/t in English)
- Neighboring vowels (e.g. nasalization \( \rightarrow \) spread)
- Deletion
- Insertion
- Elision (p + p = p)
- Nasalization
- Lengthening
- Word boundaries
- Anything that modifies features or existence

/UR/ \( \rightarrow \) [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 \( \neq \) 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!)
     ➢ 1st 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 (Hildegarde von Bingen, 1153/54)
Arithmeticus 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.