Introduction to linguistic typology
Lecture 1

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Overview of this class

- Defining linguistic typology.
- Typology as a theory and a method of linguistic research.
- Research questions in typology and how they have changed through time.
Defining typology (Croft 2003: 1)

- **Comparing** languages with each other with respect to a given linguistic phenomenon and based on representative samples.
- **Classifying** observed crosslinguistic variation into types (phonological, morphological, syntactic, semantic, lexical, pragmatic etc.).
- **Formulating generalizations** over the distribution (what is attested/how frequently) of linguistic patterns across the languages of the world and their relationship to other patterns.
Typology: theory and method

- The study of linguistic diversity based on: 
  comparative, empirical, and functional approaches.
A bit of history: Morphological typology

- XIX century typology: F. and A. Schlegel, A. von Humboldt, A. von Schleicher
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  - isolating languages, Chinese
  - agglutinative languages, Turkish
  - inflectional languages: synthetic, Latin; analytic, French
  - incorporating languages
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**Holistic classifications**: One parameter of variation, having predictive scope on overall languages.
A bit of history: Morphological typology II

Sapir (1922)

Two parameters of variation: number of morphemes per words and degree of alteration of morphemes in combination.
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- **Number of morphemes per word**
  - analytic (one morpheme per word)
  - synthetic (a small number of morphemes per words)
  - polisynthetic (a large number of morphemes and multiple roots per word)
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- **Degree of alteration between combined morphemes**
  - isolating: no affixation
  - agglutinative: simple affixation (no alteration)
  - fusional: considerable alteration between combined morphemes
  - symbolic: suppletion
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From holistic classifications to classifications of specific features of language and the study of their mutual relationships across languages.
The Greenbergian revolution and the quest for universals

Questions, generalizations, methods
The Greenbergian revolution and the quest for universals

Greenberg (1963) on word order universals

- what is possible/impossible in human language?
- why?
The Greenbergian revolution and the quest for universals

Greenberg (1963) on word order universals

- what is possible/impossible in human language?
- why?
- Data collection based on reference grammars and corpora.
The Greenbergian revolution and the quest for universals

Greenberg (1963) on word order universals

▶ what is possible/impossible in human language?
▶ why?
▶ Data collection based on reference grammars and corpora.
▶ Two types of universals: unrestricted universals and implicational universals.
Unrestricted universals

“All languages have oral vowels” (Croft 2003: 52)
Unrestricted universals

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- Unrestricted universals state that there is a limit to linguistic variation along a given parameter. Given this parameter all languages are the same.
- They are very few.
Implicational universals

- If X then Y.
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U27 If a language is exclusively suffixing, it is postpositional: if it is exclusively prefixing, it is prepositional.

(Greenberg 1963: 57)
Implicational hierarchies

- Chains of implicational universals having scope over the same domain.
**Implicational hierarchies**

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\[
a > b > c > d \\
\text{or} \\
a < b < c < d
\]

---

**Figure 1:** IHs and monotonic increase

IH are used “to make specific and restrictive claims about possible human languages” (Corbett 2013: 190).

Very few IHs “have stood the test of time” (Corbett 2013: 190).
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|   |   |   |   |   | No  |   |   |   |   | No  |   |   |   |   | No  |   |   |   |   | No  |   |   |   |   | No  |   |   |   |   | No  |   |   |   |   | No  |   |   |   |   | No |

**Figure 1:** IHs and monotonic increase

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- Very few IHs “have stood the test of time” (Corbett 2013: 190).
⇒ Number values and their likelihood

singular  <  plural  <  dual  <  trial

U34 “No language has a trial number unless it has a dual. No language has a dual unless it has plural”.
(Greenberg 1963: 58)
Animacy Hierarchy (Haspelmath 2013; Smith-Stark 1974)
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speaker < addressee < 3rd person < kin < human < animate < inanimate (Corbett 2000; Smith-Stark 1974)

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speaker $<$ addressee $<$ 3rd person $<$ kin $<$ human $<$ animate $<$ inanimate (Corbett 2000; Smith-Stark 1974)

or

kin $<$ other humans $<$ ‘higher animals’ $<$ ‘lower animals’ $<$ discrete inanimates $<$ nondiscrete inanimates (Haspelmath 2013)
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inanimates < nondiscrete inanimates (Haseplmath 2013)

⇒ The marking of nominal plurality
Animacy-based marking of nominal plurality

(1) Nominal number marking in Bila (Atlantic-Congo, Bantu; adapted from Kutsch Lojenga 2003: 462)

a. Animate nouns (singular)
   míkí
   child
   ‘child’

b. Animate nouns (plural)
   ɓa-míkí
   PL-child
   ‘children’

c. Inanimate nouns (invariant)
   endú
   house
   ‘house(s)’
IHs and frequency

Corpus frequencies within individual languages reflect the same distributional preferences (Corbett 2013; Greenberg 1966).

(2) Relative frequencies of number inflections on nouns in Sanskrit based on Greenberg (1966)

Singular = 70.3%; Plural = 25.3%; Dual = 04.6%
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IHs and diachrony

- IHs define possible language types
- IHs describe diachronic transitions between possible language types
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- IHs describe diachronic transitions between possible language types

⇒ The grammaticalization of nominal number within individual languages is likely to reflect the Animacy Hierarchy (Haspelmath 2013).

\[
\text{kin} < \text{other humans} < \text{‘higher animals’} < \text{‘lower animals’} < \text{discrete inanimates} < \text{nondiscrete inanimates} \quad (\text{Haspelmath 2013})
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Sampling for diversity (Bakker 2011; Veselinova forthcoming)

Probability sample: testing the probability of a language to be of a specific type.

Variety sample: exploring linguistic diversity with respect to a linguistic variable about which not much is known.

Convenience sample: taking any relevant and reliable available data with respect to the variable under study.

Random sample: no stratification, no exhaustiveness, all members of a population have had a chance to be chosen = very rare in typology.
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Present-day typology

Questions, generalizations, methods
Comparing and classifying: descriptive categories and comparative concepts

Haspelmath (2010); discussion in V 20, 2 of *Linguistic Typology* (Oct 2016)
Comparing and classifying: descriptive categories and comparative concepts

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Descriptive categories: language-particular categories used in the description of a language

Comparative concepts: concepts created by comparative linguists for the purpose of language comparison.
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Comparative concepts: concepts created by comparative linguists for the purpose of language comparison.

▶ A distinction that is both theoretical and methodological
Descriptive categories vs. comparative concepts

Descriptive categories:
- language-particular
- psychologically real

Comparative concepts:
- universally applicable
- methodological tools
- no psychological reality
- no direct relevance to the description of a particular language
- can’t be right or wrong, rather better or worse suited for the task
- defined in terms of other universally applicable concepts (conceptual-semantic concepts, general formal concepts, other comparative concepts).
Example of a comparative concept: the dative

A dative case is a morphological category that has among its functions the coding of the recipient argument of a physical transfer verb (such as ‘give’, ‘lend’, ‘sell’, ‘hand’), when this is coded differently from the theme argument. (Hasselmath 2010: 666)
From a biological point of view, diversity is the most remarkable property of human language as compared to other animals' communication systems. Linguistic diversity is the result of historical and cultural evolution. It must be studied by taking into account genealogical and geographical biases. There are no sharp boundaries between possible and impossible languages, variables and types. Linguistic diversity is instead statistical, probabilistic.
Generalizing: the myth of universals
Evans & Levinson (2009)

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Generalizing: non-linguistic causes of linguistic diversity

- **Linguistic diversity in space and time (Nichols 1992)**
  - Identifying stable features in language(s); disentangling genealogical, geographical and universal determinants of linguistic diversity; turning typology into a population science.
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- **Languages as complex adaptive systems (Beckner et al. 2009)**
  - Language structures emerge from the interaction between human cognitive abilities and the socio-cultural dynamics of inter-speaker communication.
Sampling

- Sampling for diversity, but controlling for language families and areas (Dryer 1989)
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- More about it on Thursday.
Example of a family-based typological study

(Dunn et al. 2011)

- The study uses phylogenetic comparative methods to explore the co-evolution of word order features within language families.
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- The study uses phylogenetic comparative methods to explore the co-evolution of word order features within language families.
- The study suggests that Greenbergian word order correlations are family-specific rather than universal.
New methods and resources

- New methods of data collection
  - Parallel corpora
    - Parallel Bible Corpus
  - New methods of hypothesis testing
    - Experiments with miniature artificial languages
  - Jennifer Culbertson
- New methods of data management
  - The WALS revolution
  - Cross-linguistic linked data (CLLD)
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Thank you for today!
References


