Harald HAMMARSTRÖM

Quantitative Methods in Linguistic Typology

This course offers an introduction to the state-of-the-art of quantitative methods in linguistic typology. Large-scale databases as well as computational power is becoming increasingly available to linguists interested in the diversity of the appx 6,500 languages in the world. Quantitive analysis, when done right, allows researchers to improve on objectivity, precision, reproducibility and incrementality towards the classical objectives of linguistic typology, i.e., universals and their interaction with historical-environmental factors.

The course will consist of 8 lectures with thematic content as per the below. In the first session students will be encouraged to choose a concrete dataset of their own, to use as their running test case for techniques discussed along the course (though this is not required).
The course will be directed to linguists with some familiarity with linguistic diversity but assumes no previous training in programming or statistics.

Lecture 1: Types of linguistic data and its representation
Lecture 2: Visualization of geographically anchored typological data
Lecture 3: Methods for calculating the synchronic universal
Lecture 4: Methods for calculating the diachronic universal
Lecture 5: Methods for finding/diagnosing linguistic areas
Lecture 6: Methods for finding correlations between typological variables
Lecture 7: Approaches towards using typology for deep time history
Lecture 8: On the nature of the linguistic universal, covariation with non-linguistic data, and further open questions