Analyzing linguistic typologies with OTWorkplace & Property Theory

UiT The Arctic University of Norway

Autumn 2018

Analyses of typological data become increasingly complex. However, Optimality Theory (OT) offers the unique possibility to calculate the crosslinguistic predictions of a formal analysis of a certain phenomenon, that is, a theory’s extensional space. The calculations of such predictions, i.e., of factorial typologies, can be a tiresome and near to impossible exercise depending on the number of constraints considered. OTWorkplace is a software, designed to work with OT analyses, which offers automated calculations of such typologies.   
The most basic understanding of crosslinguistic variation in Optimality Theory considers mutual reranking of two constraints the minimal difference between two languages and differences in constraint ranking the sole source of linguistic diversity. From outside OT, typological variation looks very different. Languages are the same or differ in displaying or lacking certain structures or with respect to certain parameters. For example, some languages do not show syllables with consonantal codas (e.g., Hawaiian), while others do (e.g., English. Yet others show a restricted range of consonants in syllable codas, compared to the inventory found in syllable onsets in the same language (e.g., Italian).  
In an oversimplifying OT analysis, one could claim that the feature of allowing or banning codas is due to the relative high ranking of the markedness constraint NOCODA with respect to faithfulness constraints. However, while we have chosen one markedness constraint, the number and nature of faithfulness constraints involved here is left unclear. Languages could avoid codas by inserting a vowel after each potential coda consonant or by deleting the consonant or by turning it into a vowel etc. or they even could avoid codas only in specific positions or ban the phonological process that eliminates codas in specific positions. This all depends on the ranking of certain faithfulness constraints (Max, Dep, Contiguity and others) with respect to NoCoda as well as other markedness constraints. Grammars can show codaless patterns in combination with manifold “coda avoidance strategies” and manifold restrictions on which syllables can have a coda and which can’t (e.g., stressed versus unstressed or wordfinal versus all others). Displaying or banning codas can thus be conceived as the two values of a property of languages, for each of which certain elementary ranking conditions have to prevail for the pattern to be generated by grammars. Whether codas are avoided by segmental changes or deletion/insertion could be another property, which further divides up the languages that don’t display codas into smaller groups. This partitioning of languages in a typology by binary properties that can be captured by elementary ranking conditions is the core idea of Property Theory, a tool for the analysis of typological variation, designed to lead to a deeper understanding of the structural relations between languages and grammars in a typology.  
The course will be divided into three parts. In one part students will be made familiar with OTWorkplace and its functions, in the second part they will be introduced to Property Theory and in the last part the students will develop their own PT analyses of some linguistic phenomenon with crosslinguistic variation (e.g., case systems, quantity sensitivity...) with the help of the lecturers and OTWorkplace.

|  |  |
| --- | --- |
| **ECTS Specify requirments for ECTS** | Phd students will have the opportunity to be awarded 5 ECTS points for attending all classes and writing a 5000 word essay on a topic relevant for the course.  The course will also be open for MA students even though they can not take it for credit. |