From grammar induction to learning and processing

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The automation of analysis allows to make the comparison between competing hypotheses in theoretical morphology more explicit: Implementing learning algorithms that break down unanalyzed inflectional paradigms into form-meaning pairs and possibly a full grammar allows to investigate the empirical consequences of hypotheses or frameworks in detail (e.g. Anderson 1992, Halle & Marantz 1993, Stump 2001). This talk highlights different principle problems of inflectional analysis such as selecting possible forms to consider, pairing them with (possibly default) meanings, introducing and representing the linear order between markers/rules as well as their paradigmatic suppression (blocking). It presents algorithmic solutions to those problems and shows how they map to empirical predictions for language acquisition and processing.

References

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