Agent-based models to evaluate mechanisms behind language change: Conversational priming and other case studies

Peter Dekker (Vrije Universiteit Brussel)

In this presentation, I will discuss my PhD research project, where I use agent-based models, computer simulations of interactions between speakers, to evaluate the mechanisms behind language change. In my research, I work with case studies of real languages, to specifically study morphological change under social dynamics (such as language contact and different groups in a society). I will elaborately discuss a model of conversational priming in repetitional responses, which is developed in the context of a research project at the Universität zu Köln. Using an agent-based model, inspired by data from Lithuanian dialects, we study the hypothesis that repetitional responses in conversations foster the spread of innovations. Furthermore, I will discuss two other case studies: the relationship between language contact and morphological simplification in Alorese (Eastern Indonesia), and a neural cognitive model of learning of inflection classes in Romance languages. With these three case studies, I would like to show how agent-based models, applied to real-world data, can be used, in addition to other research methods, to shed light on the interaction between morphological change and social dynamics.