# The Interaction of the Cognitive and Community Level in Language Evolution: A Usage-Based Perspective

Two central questions regarding language evolution are a) how representations of linguistic structures emerge in individuals and b) how emergent linguistic structures spread throughout communities and became conventionalised (Author 1a). The concept of "protolanguage" (Tallerman 2012) or "early languages" (Heine & Kuteva 2007) is often evoked to bridge the gap between fully complex linguistic structures and an earlier stage of structured communication. However, questions a) and b) hold for the evolution of protolanguage just as much as they do for fully complex modern language. This paper discusses theoretical models of the interaction of two important dimensions and their potential for shedding light on these two questions from a usage-based perspective: 1) the individual cognitive level, in which processes of automation and entrenchment lead to the emergence of structured linguistic representations, and 2) the community level, in which processes of ritualisation and conventionalisation lead to the diffusion and stabilisation of usage patterns within communities of practice (Schmid 2020; Author 2).

First, regarding the level of individuals, domain-general cognitive processes such as automation and analogy are central to how structures emerge, are represented, and are stored in the minds/brains of individuals. The parallelism of dialogic interaction (Du Bois 2014) invites speakers to share (ad-hoc) structures and repeat them in future usage events. Frequent repetition promotes structures to be entrenched and automated as complex constructions that, over time, emancipate from their original concrete referential uses. That is, assisted by further domain-general capacities like chunking and metaphor, more schematic representations with procedural (i.e. grammatical) functions may emerge. Entrenchment and its associated effects have been implicated in the emergence of structure in language learning (Schmid 2016), language change (Hilpert 2017) and language evolution (Author 1b, Author 1a).

Secondly, community-wide processes such as conventionalisation and ritualisation refer to the establishment, negotiation and diffusion of community-wide, regularised practices (Schmid 2020; Author 2). Processes of conventionalisation and ritualisation depend on processes of social transmission interacting with individual processes of entrenchment, and as such represent an important part of explaining how communicative structures came to be adopted both in proto(linguistic) communities. Conventionalisation also represents the foundation for cumulative culture (Tomasello 1999), which enables the cumulative accretion of changes and increasing structuration of communicative systems. This in turn enabled the gradual change from protolanguage and early languages to modern human language (Heine & Kuteva 2007).

The channel of interaction between entrenchment processes and conventionalisation processes is usage, whereby rough alignments between mental form–meaning pairings and communal linguistic norms arise. In summary then, the present paper will present the interaction of the individual cognitive dimension on the one hand, and the community level on the other, as well as their underlying mechanisms, as crucial building blocks of a usage-based approach to the evolution of language.

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