Research Tutorial



# Novel Approaches to Language Evolution and the Problem of Collaboration

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The aim of the tutorial is to establish a collaborative structure in which the roles of the participants depend exclusively on their competence. For an experiment such as this, we need to define a mission because competence is only competence in regard to a concrete task. This task is to collectively write a review paper on the question of whether the language faculty is a biological adaptation. The collaboration will include a wide array of assignments—from literature research, argument structure, the search for relevant journals, editing, distribution of tasks, the development of timetables—without any form of academic hierarchy. Though we will begin the tutorial with a prescribed research question, all participants can present alternative ideas for papers/conference submissions concerning language evolution and try to win collaborators by presenting their ideas.

**Places will be allocated in the order of registration. Email formatlabor.net@gmail.com with "Language Evolution Research Tutorial" as the subject to be considered. The tutorial is free and open.**

# The Research Question to Begin With

Humans have the capacity to communicate using language, while the ability of apes to learn a language is rather limited. What is the empirical evidence that the human language faculty includes specific biological adaptations and what are the arguments against this adaptationist account?

This question can be discussed along two lines: (1) The impact of cultural developments versus biological evolution and how they might interact in a culture-gene coevolution (Pinker & Bloom, 1990) (Számadó & Szathmáry, 2006) (Tallerman & Gibson, 2013) and (2) whether the human language faculty includes *specific* biological adaptations or is rather based on more general abilities—including a general learning ability, shared intentions, a cooperative mindset and social competences that are widely used in social interactions.

# The Aim

The aim of the tutorial is to expand our understanding of the critical research questions on language evolution described above with the final outcome of collectively writing a review paper. This aim includes the pragmatic task of developing an effective, collaborative, and integrative structure across different disciplines in which the role of the participants is highly flexible and entirely built on competence concerning the aim of the respective writing project.

# The Framework

It has been suggested that the evolution of language is one of the greatest puzzles of our time (Bickerton, 2009). Though the subject began to develop soon after the publication of Darwin's *On the Origin of Species* (1859), it has long been considered not to be a serious field of scientific inquiry. This probably began to change due to the

EVOLANG-conferences—a biennial series of symposia founded in 1996. However, the subject is still not fully integrated into the academic curriculum. One reason for this may be that research into language evolution requires interdisciplinary collaboration between scholars from many different disciplines.

One essential problem of language evolution pointed out by Bickerton and Szathmáry (2011) is that, on the one hand, linguistic communication presupposes trust and collaboration and that, on the other hand, complex forms of collaboration require some kind of symbolic culture. From this, Bickerton and Szathmáry deduce that cooperativeness and language must have the same evolutionary history and thus should be explained by a single theory describing their coevolution (cf. (Zlatev, 2014)).

## Theory and Practice

The tutorial can be seen as a collaborative experiment in which the roles should mainly depend on competence. For such an experiment we need a goal because competence is only competence facing a concrete task. The function of the goal of writing papers makes the collaborative experiment assessable. In this structure, it is in the interest of all participants to uncover the potential of those who tend to underestimate themselves or whose talents are, for any reason, overlooked. This is to say, theory and practice are mutually constitutive in this tutorial. The problem of collaboration will be both an essential part of the subject of inquiry of the tutorial (concerning language evolution) and a pragmatic task regarding the tutorial requirements—finding a way for participants to effectively collaborate among equals. The development of collaborative tools will be documented.

## Interdisciplinary Collaboration

The tutorial is open for students of philosophy, deaf studies, psychology, semiotics, biology (evolutionary theory, primatology), various schools of linguistics, cognitive science, archeology, anthropology, neuroscience, semiotics, economics (game theory), evolutionary modeling, mathematics (game theory, dynamic modeling),

physics (simulations), computer science (dynamic modeling, simulations). It is our political conviction that nobody should be excluded for institutional reasons or due to the level of one's education or academic position. Credit points can be assigned to students of the Humboldt University Berlin and in some cases other Berlin universities.

# Openness

Though we will begin the tutorial with a prescribed research question, all participants can present alternative ideas for papers/conference submissions concerning language evolution and try to win collaborators by presenting their ideas. An outline for the writing project, including a concrete structure, will be developed based on the respective contributed ideas. This system will produce concrete assignments for the participants based on the structure. The outline and content of the paper may be collectively refined during the process if needed. The tutors will support these projects on all levels. Intermediate results will be regularly presented in the tutorial. We will also discuss models of collaboration and provide technical support for the teams working collectively.

The participants of these writing projects can develop their own set of rules of collaboration, which shall be made explicit. There will most likely be variation in the success of the different working groups, which can be attributed partially to the rules of collaboration and how they are realized. We will implement a system in which the set of rules of successful groups can be adopted by other groups. The rules of collaboration and their advantages, as well as disadvantages, will be discussed continuously throughout the tutorial.

The diversity of projects may be too ambitious to be fully accomplished, especially in the first semester. However, the point is that every participant *can* present an idea for a collective writing process and that the position within projects depends merely on competence and not on institutionally defined roles.

At the same time, we will present the mentioned research question—Is language a biological adaptation?—and provide the first idea of an outline, which we will collectively develop into a structure that produces precise tasks.

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