2 DOCTORAL POSITIONS (4 years) at the Department of Comparative Language Science, NCCR Evolving Language and the Center for the Interdisciplinary Study of Language Evolution (ISLE) in collaboration with Google and the NCCR Evolving Language

The Department of Comparative Language Science at the University of Zurich and the Center for the Interdisciplinary Study of Language Evolution (ISLE) invite applications for 2 4-year PhD positions: one on first language acquisition and one on historical comparative linguistics. The positions are embedded in the interdisciplinary research project 'The evolution of metaphors in ontogeny and phylogeny' funded by the Gerda Zeltner Fellowships (Department of Comparative Language Science).

The role of figurative language is an important means to extend the vocabulary and expressibility of a language. In this project we are interested in **the underlying mechanisms** that create meaning through metaphors and in processes related to **the evolution of metaphors**. To study these questions we focus on the development of metaphors in phylogeny and the use and understanding of metaphors in human ontogeny.

The project addresses this question in first language acquisition across typologically diverse languages and in transmission with a focus on the history of Indo-European across different areal contexts. The project focuses on large-scale corpus studies. The team is led by experts in first language acquisition (Sabine Stoll), historical linguistics (Paul Widmer), and Natural Language Processing & Cognitive Science (Srini Narayanan) in collaboration with several postdocs and senior researchers in the Department of Comparative Language Science, Google and the NCCR Evolving Language (https://evolvinglanguage.ch)

The successful candidates will become part of a larger interdisciplinary research team situated in the <u>Center for the Interdisciplinary Study of Language Evolution</u> and the National Center of Competence in Research (<u>NCCR) Evolving Language</u>.

The following two positions are offered:

**Position 1** will focus on the use and understanding of metaphors in **first language acquisition** in maximally diverse languages. The student will work with the ACQDIV corpora and study the expression of perception concepts in the longitudinal corpora of maximally diverse languages, in child-directed speech, child-surrounding speech and in child speech. The goal is to determine how much concrete and how much figurative language children are exposed to and how such expressions develop over time in ontogeny.

**Expectations**: a strong interest in typological variation, corpus linguistics and quantitative methods. Solid background in a scripting language is required (preferred languages R or Python). Experience in NLP and/or Machine Learning a plus. Strong interest in language acquisition research and questions of transmission in a naturalistic environment. Willingness to potentially conduct fieldwork in a remote place with little infrastructure.

**Position 2** will focus on the **evolution of metaphors and colexifications** in the history of Indo-European. While much past work has focused on ontologies of semantic change (broadening, narrowing, etc.), PhD2 will use an empirical approach in order to get a better understanding of the mechanisms underlying such changes as well as the contribution of facilitators and inhibitors of semantic change. The student will work with open-access corpora of ancient and modern varieties of Indo-European.

**Expectations:** We seek a PhD student with a strong interest in comparative historical linguistics, lexical semantics, and quantitative data analysis. The successful candidate has a solid background in qualitative data analysis, a good knowledge of, and familiarity with ancient and modern Indo-European languages in their diverse cultural and areal contexts as well as some experience with quantitative methods or the willingness to acquire the necessary skills.

Candidates are expected to have a strong commitment to interdisciplinary collaboration and teamwork. Very good communication skills in English are important.

## **Research environment:**

We offer exciting work in an interdisciplinary and international team located at the University of Zurich. Doctoral students will be embedded in the Linguistics Doctoral Program of the University of Zurich. Students will also have the opportunity to interact with Google Scientists working on modeling and language learning.

The department places great emphasis on gender balance; we particularly encourage women to apply.

## Application:

The positions are available until filled; we start reviewing applications June 1, 2021.

For consideration please compile the following documents into a single PDF labelled 'Metaphors-YourSurname-Position.pdf' (where Position is either "Position1 or Position2, e.g. Metaphors-Meyer-Postion1.pdf) and send to jobs@ivs.uzh.ch:

- a cover letter (motivation and qualifications, 2 pages max);
- curriculum vitae;
- contacts of two referees;
- writing sample (2 pages max., e.g. summary of MA thesis);
- transcripts of bachelor's and master's courses;

For questions contact <u>sabine.stoll@uzh.ch</u> or paul.widmer@uzh.ch