

# About me – Dag Haug

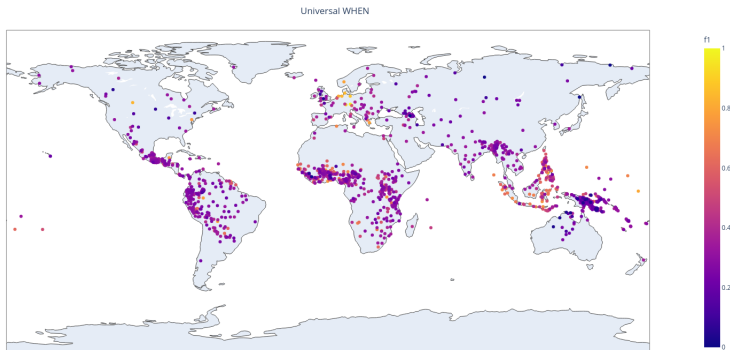
I am Professor of Linguistics and of Classics (Greek and Latin) and Director of Humit

- Fields of study
  - historical linguistics
  - lexicalist syntax (LFG and dependency grammar)
  - formal semantics
- Methods
  - theoretical analysis
  - corpus studies
  - computational modelling

On the next slides, I say a few words about my current research projects, but if our interests overlap in any way, I am happy to supervise you! As director of Humit, I can also help with using our corpora or other resources even if you have another supervisor.

# Computational typology

In computational typology, we extract typological information from parallel datasets such as the Massive Parallel Bible corpus ( $\geq 1400$  languages). The warm colors on this map are languages that have a contrast like Norwegian *da/når*. Parallel texts tell us this even about languages that do not have a grammar!



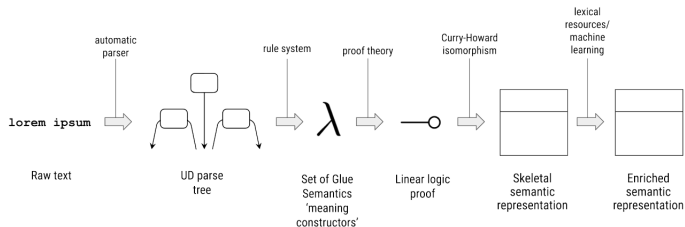
## Semantics of reciprocals

- "The girls in the class know each other" normally means that each girl in the class know all the others, but "The plates are stack on top of each other" means that each plate is stacked on top of another.
- "We each gave each other a different perspective on life" means that both of us changed the other's perspective, but if we say "We gave each other a different perspective on life", it means that we (together) found a new perspective on life.
- "John and Mary claimed they were taller than each other" means "John claimed he was taller than Mary and Mary claimed she was taller than John", but "Someone claimed John and Mary were taller than each other" only has a weird, contradictory reading

... so at least are the claims in the literature. In my research on reciprocals I test such claims on corpus evidence and explore what they tell us about reciprocity if they are true.

# Semantic parsing

Even the most sophisticated large language models like Chat-GPT do not understand language. (Don't believe me? Read this paper) In my RCN project, we try to build logical models of meaning that could be used for automated reasoning.



# Semantics for literature

Formal semantics usually deal with sentences that make claims about the world. But what about the language of literary fiction? One phenomenon I work on is *metalepsis*, as in the following example from Balzac:

- (1) While the venerable churchman is climbing the ramps of Angoulême, it is not useless to explain the network of interests into which he was going.

The text seems to claim that some past action by a character in the novel (the churchman) overlaps with a claim by the narrator at the present time of narration. How is that possible? What does it mean? What effects does such a claim have on the reader? In joint work with Daniel Altshuler, I explore such questions with the toolbox of formal semantics