Leiden University Centre for Linguistics (LUCL) in SAILS

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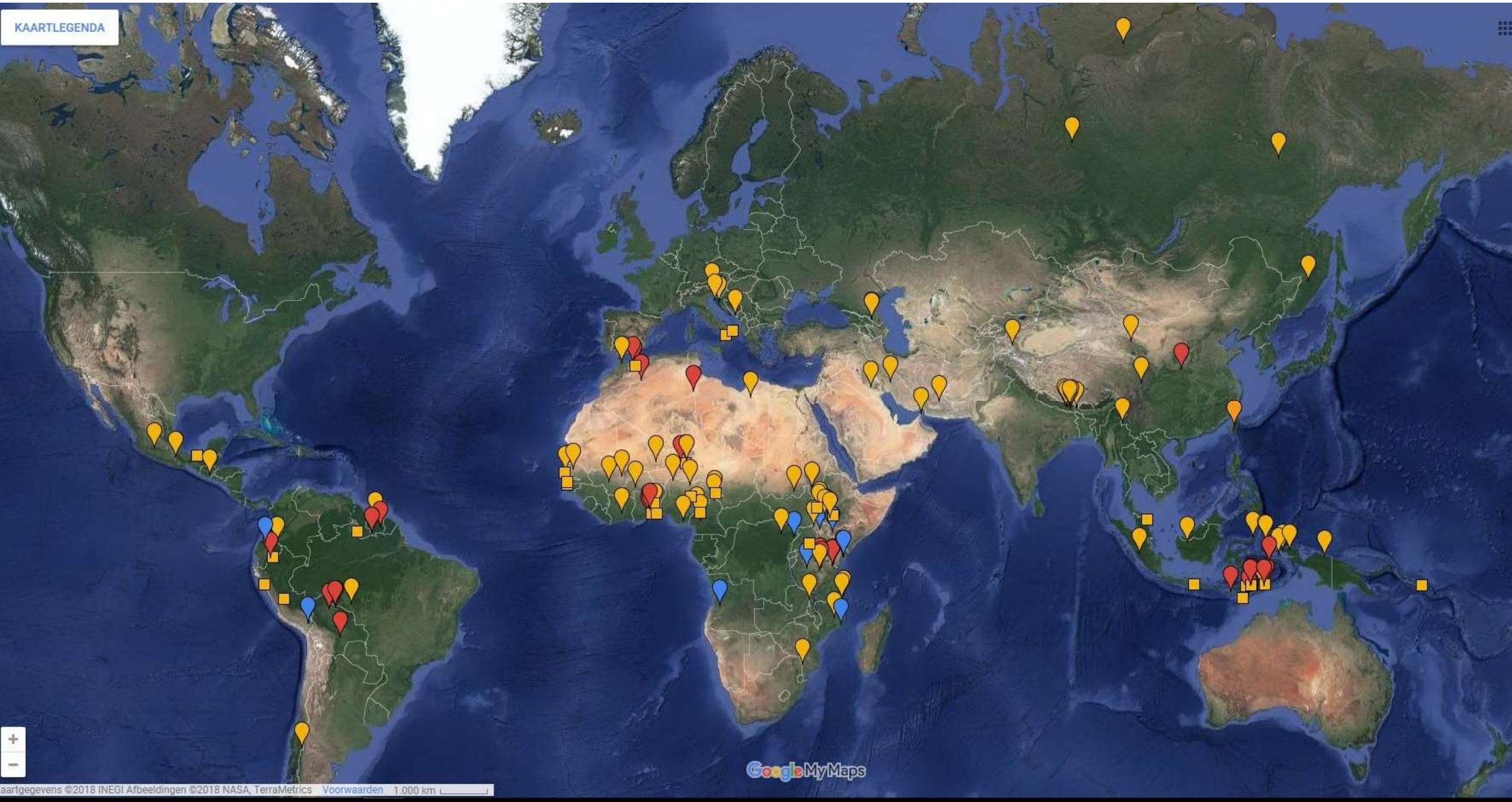
Universiteit Leiden
The Netherlands

profile LUCL

- study linguistic diversity from different perspectives
- deepen our understanding of linguistic diversity
- theory- and data-driven approaches
- wide variety of languages/language families

Vision
Mission
& Values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profile LUCL

- study linguistic diversity from different perspectives
- deepen our understanding of linguistic diversity
- theory- and data-driven approaches
- wide variety of languages/language families
- comprehensive research environment incl. excellent lab facilities
- three research programmes:
  - Theoretical and Experimental Linguistics
  - Language Use in Past and Present
  - Descriptive and Comparative Linguistics
- dynamic division, enabling cooperation and multidisciplinary research

Vision Mission & Values

Language Diversity and AI

Current research: investigating commonalities and differences between languages

Language Diversity from an AI perspective

- Modelling languages with AI: (neural) language modelling, deep generative (syntactic) models
- Analysing mixed languages and *code switching* with AI
  - Identify code switching points
  - Machine translation for interpretation

How:

- Collaboration with *Detecting Syntactic Differences Automatically (*Sjef Barbiers and Martin Kroon)
- Connect research with LUCL Experimental Linguistics Labs for experimental validation
- Collaborate with LIACS (a.o. language modelling)

Machine translation

Current research: methods and techniques for automated translation

Plan: investigate the interplay of linguistic structure and AI

- What is the role of linguistic structure (e.g. syntax) in AI-based machine translation? E.g. extending *sequence-to-sequence models* with structure
- Investigate additional linguistic (semantic, pragmatic) constraints
- Models with psychолinguistic plausibility (e.g. using insights from 2nd language acquisition).

How:

- Collaboration with *Translation* specialization in MA Linguistics
- Set up MT lab facilities with the Experimental Linguistic Labs LUCL
- Collaboration with LIACS

Thanks for your attention

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