

HUMBOLDT-UNIVERSITÄT ZU BERLIN



Digital Approaches to Teaching Historical Languages

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How can corpus-based methods influence and support language learning?

For modern languages:

- many resources: deeply annotated L1 corpora for different registers, deeply annotated learner corpora
- many methods - vocabulary lists, grammatical and lexical tasks, all levels of grammar, measures of complexity, ...
- methods/tools/resources for teachers, methods/tools/resources for learners
- some empirical studies (not as many as we would like) on the impact and usefulness of these methods, learning strategies, individual differences (e.g. frequency effects, task-based learning, focus on form vs. focus on meaning)

→ plenary Meurers and de Kuthy; see, among many others, Alexopoulou et al. (2017), R. Ellis (2003), Granger et al. (2015), Loewen et al. (2017), Ortega (2009), and Rebuschat (2011)

Learning and teaching modern languages

- motivation
 - communication!
 - literary, historical, cultural reasons
- skills
 - comprehension
 - production
 - translation, mediation
- learners
 - high-school students
 - university students
 - scholars
 - tourists, business people, people learning the language for pleasure, ...

Historical languages

By “historical languages”, we mean languages and varieties that are (mostly) not spoken anymore.

These are typically not learned or taught for the same reasons that modern languages are learned or taught.

- cultural, literary, historical transmission, canonized knowledge
- grammatical knowledge
- language change, historical linguistics

Historical languages

skills

- reading
- translation
- grammatical analysis
- metalinguistic awareness
- only very rarely: productive skills

learners

- high-school students (Latin, Greek)
- university students (Latin Greek, other historical languages)
- scholars (Latin Greek, other historical languages)
- amateurs (Latin Greek, other historical languages)

→ plenary Anderson; see e.g. Beyer (2018), Kipf (2006), Kipf et al. (2017), Leonhardt (2009), and Wirth et al. (2006) for Latin.

Implications for teaching historical languages

- few empirical SLA studies for historical languages; results from SLA studies for modern languages not always applicable
- extreme differences in age and motivation have consequences for materials/methods
- for many historical languages: not enough (well-prepared, well-described) resources
- empirical studies on corpus-based/computer-aided teaching not easy to carry out

Many of the existing projects such as the Alpheios project (<https://alpheios.net/>) or the Perseus Digital Library (<http://www.perseus.tufts.edu/hopper/>) cater to the interested amateur or scholar.

CALLIDUS has two specific goals

- ① use corpus-based methods and materials to support lexical learning for (German) high-school students

- ② carry out empirical studies in order to assess the effects and usefulness of these methods

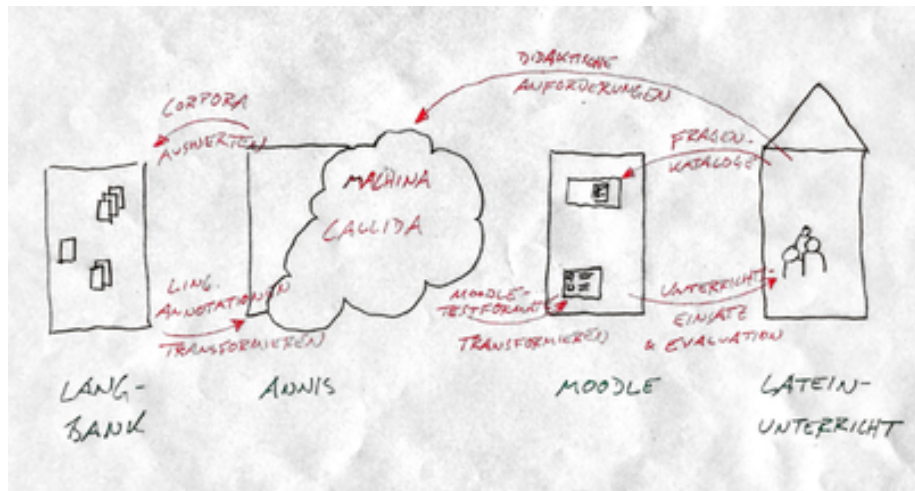
Currently, 620.000 high-school students in Germany are taking Latin, 15.000 Greek.
For more, see the CALLIDUS posters. The Machina Callida builds on the ANNIS search tool (Krause 2019, <http://corpus-tools.org/annis/>).

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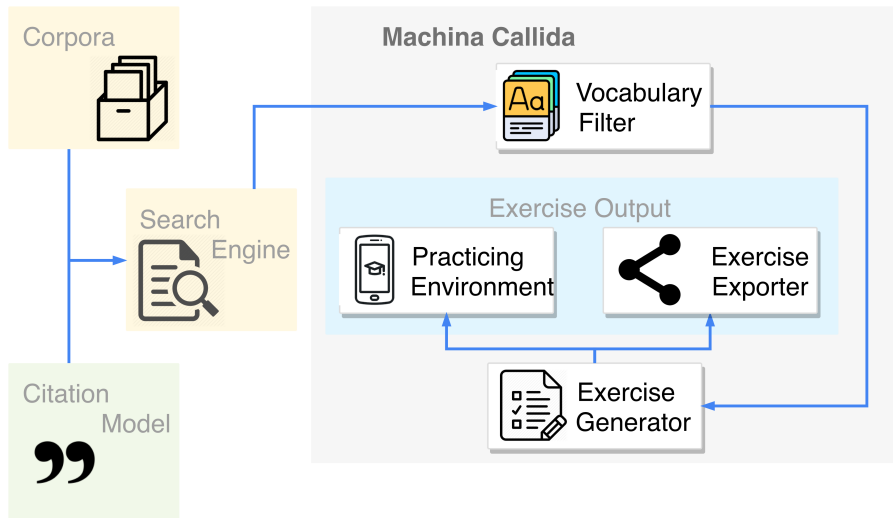
- 1 use corpus-based methods and materials to support lexical learning for (German) high-school students
 - specific settings, texts, teaching materials, number of hours
 - we plan to use the Machina Callida to extract materials from deeply annotated corpora and create materials for the teachers; not enough suitable corpora available, currently we also evaluate corpora manually in order to test types of exercises
- 2 carry out empirical studies in order to assess the effects and usefulness of these methods

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Machina Callida



Resource Workflow



CALLIDUS has two specific goals

- use corpus-based methods and materials to support lexical learning for (German) high-school students
 - materials, Machina Callida
 - work with teachers
 - focus on lexical learning because of the current unsatisfactory situation: vocabulary equations, no real understanding, no multi-word connections, frequency effects
- carry out empirical studies in order to assess the effects and usefulness of these methods
 - different grades, pre-tests, post-tests, different tasks

We look at all kinds of semantic relations, ambiguities, multi-word expressions, etc., cf. N. C. Ellis (2012), Evert (2009), Gries et al. (2004), and Wulff (2008), among many others.

Questions, points for discussion

In this conference, we will hear talks on the effects of feedback in teaching, syntax, morphology, the lexicon, graphemic phenomena, literary interpretation.

Among the methods that will be considered are different types of corpus-based exercises, correcting OCR output, parsing, translation or working with frequency data. Many contributions will argue for the necessity of visualizations.

The languages we will consider are Latin, Greek, Modern English, Early New High German, Old High German, 12 ancient Indo-European languages.

Taking into account the different languages and parameters (motivation, teaching context, resources):

- How can we transfer and apply findings and insights about learning/teaching modern languages to learning/teaching historical languages?
- How can we transfer and apply methods that have been shown to be useful for modern languages to historical languages?
- Where do we need different approaches and studies?
- Which resources and methods can be used for developing teaching materials (in schools)? What can we share?
- How can we measure effects?

thank you
gratias
danke

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<https://www.projekte.hu-berlin.de/de/callidus/>

<http://corpus-tools.org/home/>

<http://www.laudatio-repository.org/repository/>

References I

- Alexopoulou, Theodora, Marije Michel, Akira Murakami, and Detmar Meurers (2017). "Task effects on linguistic complexity and accuracy: a large-scale learner corpus analysis employing Natural Language Processing techniques". In: *Language Learning* 67.S1, pp. 167–209.
- Beyer, Andrea (2018). *Das Lateinlehrbuch aus fachdidaktischer Perspektive. Theorie – Analyse – Konzeption*. Heidelberg: Universitätsverlag Winter.
- Ellis, Nick C. (2012). "Formulaic Language and Second Language Acquisition: Zipf and the Phrasal Teddy Bear". In: *Annual Review of Applied Linguistics* 32, pp. 17–44.
- Ellis, Rod (2003). *Task-based Language Learning and Teaching*. Oxford University Press, USA.
- Evert, Stefan (2009). "Corpora and Collocations". In: *Corpus Linguistics. An International Handbook*. Ed. by Anke Lüdeling and Merja Kytö. Vol. 2. Berlin: Mouton de Gruyter, pp. 1212–1248.
- Granger, Sylviane, Gaëtanelle Gilquin, and Fanny Meunier, eds. (2015). *The Cambridge Handbook of Learner Corpus Research*. Cambridge: Cambridge University Press.
- Gries, Stefan Th. and Anatol Stefanowitsch (2004). "Extending Collostructional Analysis: A Corpus-based Perspective on 'Alternations'". In: *International Journal of Corpus Linguistics* 9.1, pp. 97–129.
- Kipf, Stefan (2006). *Altsprachlicher Unterricht in der Bundesrepublik Deutschland. Historische Entwicklung, didaktische Konzepte und methodische Grundfragen von der Nachkriegszeit bis zum Ende des 20. Jahrhunderts*. Bamberg: C. C. Buchner.
- Kipf, Stefan, Andrea Beyer, Ann-Catherine Liebsch, and Stefanie Zimmermann (2017). "Zwischen Aktualität und historischer Forschung: Entwicklungstendenzen in der Fachdidaktik Latein". In: *SEMINAR - Lehrerbildung und Schule* 4, pp. 5–18.

References II

- Krause, Thomas (2019). “ANNIS: A graph-based query system for deeply annotated text corpora”. PhD Thesis. Humboldt-Universität zu Berlin, Mathematisch-Naturwissenschaftliche Fakultät. DOI: 10.18452/19659. URL: <https://doi.org/10.18452/19659>.
- Leonhardt, Jürgen (2009). *Latein. Geschichte einer Weltsprache*. München: Beck.
- Loewen, Shawn and Masatoshi Sato, eds. (2017). *The Routledge Handbook of Instructed Second Language Acquisition*. New York: Routledge.
- Ortega, Lourdes (2009). *Understanding Second Language Acquisition*. Understanding Language Series. London: Hodder Education. ISBN: 9780340905593.
- Rebuschat, Patrick (2011). “Implicit and Explicit Knowledge in Second Language Learning, Testing and Teaching: Review”. In: *Studies in Second Language Acquisition* 33.01, pp. 131–132. ISSN: 0272-2631. URL: <https://korpling.german.hu-berlin.de/svn/bibliographie/2011>.
- Wirth, Theo, Christian Seidl, and Christian Utzinger (2006). *Sprache und Allgemeinbildung*. Zürich: Lehrmittelverlag des Kantons Zürich.
- Wulff, Stefanie (2008). *Rethinking Idiomaticity: A Usage-based Approach*. Research in Corpus and Discourse. London and New York: Continuum. URL: <https://korpling.german.hu-berlin.de/svn/bibliographie/2008>.