

Linguistic diversity in space and time

MA Theoretical Linguistics: Dynamics and Variation

MODULE Theoretical Linguistics: Dynamics and Variation

MA Translation Science and Technology

MODUL Linguistics

MSc Language Science and Technology

MODUL Linguistics

Hauptseminar 2 SWS ECTS-Punkte: 6/7/10

Mittwoch, 12-14 Uhr - R. 1.27 **Wednesdays 13.00-14.00 MS Teams**

Lecturer: Annemarie Verkerk

First class: (08-04-2020) 06-05-2020

Last class: 15-07-2020

Examination deadlines: 02-10-2020

Moodle key:

Description

This course is concerned with explanations of linguistic diversity. What are the main language families of the world and how have historical linguistics determined these family relationships? In which ways does multilinguality affect language change? What are the limits to typological diversity? How can we combine information from different linguistic subdisciplines and further non-linguistic disciplines in order to explain linguistic diversity? This course has a primary focus on methodology, specifically traditional and computer-assisted methodology of historical linguistics, corpus linguistics for diversity linguistics, and quantitative methods in typology.

Organization

Youtube lectures/Recorded lectures/Lectures over MS Teams

Discussion sessions over MS Teams

Readings and assignments available over Moodle

Student presentations over MS Teams

Requirements

For MA Theoretical Linguistics students (10CP):

- Active participation (this includes discussion sessions and weekly assignments)
- Presentation
- Term paper on a topic relevant to the course. A list will be made available, you can also think of your own topic.

Grading: the assignments are compulsory but not graded, you can miss one (if you miss any more, you'll have to hand them in at a later time). The presentation is graded and counts for 15%, the term paper is graded and counts for 85% of your final grade.

For MSc Language Science and Technology students (4/7 CP):

You have the option of taking the course for 4 CP, which requires:

- Active participation (this includes discussion sessions and weekly assignments)
- Presentation

Or you take the course for 7 CP, which requires the above plus a term paper (see above).

Grading: the assignments are compulsory and graded, you can miss one (if you miss any more, you'll have to hand them in at a later time). The grading itself is pretty simple, if I can see that you have provided an correct and/or informed answer for all the questions, you get a 1. Any assignments you miss the deadline off and hand in after the discussion session, the highest score possible will be a 2.

For 4CP, the mean grade of your assignments count for 80% of your final grade and the presentation counts for 20%.

For 7CP, the mean grade of your assignments count for 50% of your final grade, the presentation counts for 10%, and the term paper counts for 40%.

LST Students, please note the following: The registration deadline in the examination database is at the end of the lecture period, so you can decide until the end of the lecture period which version they are going to take, the 4CP or the 7CP version. Once the registration deadline has passed, **you cannot switch from the 7CP-version to the 4CP-version (or the other way round). It happens occasionally that students register for the 7CP version but then do not submit a term paper. This counts as „failure“.** I encourage you to decide on the 4CP/7CP question early so you can plan your studies accordingly.

Deadline term paper: 02-10-2020

Selected readings

Bowern, Claire, and Bethwyn Evans. 2015. *The Routledge Handbook of Historical Linguistics*. London: Routledge.

Velupillai, Viveka. 2012. *An Introduction to Linguistic Typology*. Amsterdam: Benjamins.

Course Schedule

	date	class
1	08-04-2020	Introduction to linguistic typology
2	15-04-2020	Introduction to historical linguistics
3	22-04-2020	Genealogical perspective on the languages of the world / the population history of earth
4	29-04-2020	Language birth, death, and revitalisation
5	06-05-2020	Triangulating linguistics, archaeology, and population genetics to study prehistory
6	13-05-2020	Evolutionary historical linguistics & phylogenetics
7	20-05-2020	The comparative method and linguistic reconstruction
8	27-05-2020	Computer-assisted historical linguistics
9	03-06-2020	Building phylogenetic trees
10	10-06-2020	The intersection of historical linguistics and linguistic typology
11	17-06-2020	Methodology of linguistic typology
12	24-06-2020	Phylogenetic comparative methods for linguistic typology
13	01-07-2020	Ecology of language
14	08-07-2020	Language contact, multilinguality & language typology
15	15-07-2020	Corpus-based typology

The first four classes, those from 08-04- 2020 through 29-04-2020, are non-obligatory introductions to some of the topics that come together in this course. The SoSe 2020 officially starts in the week of 04-05-2020.

1. 08-04-2020 Introduction to linguistic typology

Optional course work for this week:

Watching: “Introduction to linguistic typology”: <https://youtu.be/af2T3nTsGFI>

I would also like to point you to the class on Language Typology by the Virtual Linguistic Campus (Uni Marburg):

<https://www.youtube.com/watch?v=a6tbf4YKgs&list=PL853CF986474D4193>

Perhaps I will use some of these videos later in the course, I don't know yet. If you have no background in typology, and enjoy listening/watching linguistics videos, this would be the thing to do in preparation for this course.

Reading: Chapter 2 and 3 of: Velupillai, Viveka. 2012. *An Introduction to Linguistic Typology*. Amsterdam: Benjamins.

Assignment: 1 Organizing your knowledge.

2. 15-04-2020 Introduction to historical linguistics

Watching: “Introduction to historical linguistics in four parts”:

<https://www.youtube.com/watch?v=VAFki9X-4WQ>

<https://www.youtube.com/watch?v=OiWtvCBF6H8>

<https://www.youtube.com/watch?v=0GdQEGbkHO0>

<https://www.youtube.com/watch?v=pGF3dWxxgI>

Reading: Claire Bower and Bethwyn Evans. 2015. Editors' introduction: Foundations of the new historical linguistics. In *The Routledge Handbook of Historical Linguistics*. London: Routledge. **SKIP Section 5.**

Assignment: 2 Introduction to historical linguistics

3. 22-04-2020 Genealogical perspective on the languages of the world / the population history of earth

Watching: “Human Population Through Time”:

https://www.youtube.com/watch?v=PUwmA3Q0_OE

“Map Shows How Humans Migrated Across The Globe”:

<https://www.youtube.com/watch?v=CJdT6QcSbQ0>

“The Spread of Language in Eurasia [pt. 1] (there is no part 2 ...)”:

<https://www.youtube.com/watch?v=DwWhs36HAMU>

Reading I: Nichols, Johanna. 1997. ‘Modeling Ancient Population Structures and Movement in Linguistics’. *Annual Review of Anthropology* 26 (September): 359–84.

Reading II: Nielsen, Rasmus, Joshua M. Akey, Mattias Jakobsson, Jonathan K. Pritchard, Sarah Tishkoff, and Eske Willerslev. 2017. ‘Tracing the Peopling of the World through Genomics’. *Nature* 541 (7637): 302–10. - **You can skim through this one/focus on the Figures.**

Assignment: 3 Genealogical perspective on the languages of the world

4. 29-04-2020 Language birth, death, and revitalization

Watching: one of these documentaries on language death and revitalization:

“Voices on the Rise: Indigenous Language Revitalization in Alberta”:

<https://www.youtube.com/watch?v=-dtEujiPUE0> (episode 1)

<https://www.youtube.com/watch?v=g0UH1IhBnNk> (episode 2)

<https://www.youtube.com/watch?v=YZgJ8TZ0Zs0> (episode 3)

“Karihwanoron: Precious Things (with Kanien'kéha/Mohawk subtitles)”:

<https://www.youtube.com/watch?v=vqldHZUaF-c>

“Rising Voices / Hóthą̃n̄ipi - Revitalizing the Lakota Language”:

<https://risingvoicesfilm.com>

<https://www.youtube.com/watch?v=Wj-jackHWCw>

Reading: Mufwene, Salikoko S. 2004. ‘Language Birth and Death’. *Annual Review of Anthropology* 33 (1): 201–22.

Assignment: 4 Language birth, death, and revitalization

5. 06-05-2020 Triangulating linguistics, archaeology, and population genetics to study prehistory

Watching: “Sarah Tishkoff: Human Population Genetics and Origins”:

<https://www.youtube.com/watch?v=SCZ9T6j18gE>

“Ancient DNA and the New Science of the Human Past”:

<https://www.youtube.com/watch?v=990052wQyWM>

Reading I: Pakendorf, Brigitte. 2015. ‘Historical Linguistics and Molecular Anthropology’. In *The Routledge Handbook of Historical Linguistics*, edited by Claire Bown and Bethwyn Evans, 627–41. London: Routledge.

Reading II: Heggarty, Paul. 2015. ‘Prehistory through Language and Archaeology’. In *The Routledge Handbook of Historical Linguistics*, edited by Claire Bown and Bethwyn Evans, 598–626. London: Routledge.

Assignment: 5 Historical linguistics at the intersection of genetic, archaeological, and linguistic data

6. 13-05-2020 Evolutionary historical linguistics & phylogenetics

Reading I: Bouckaert, R, P Lemey, M Dunn, S J Greenhill, A V Alekseyenko, A J Drummond, R D Gray, M A Suchard, and Q D Atkinson. 2012. ‘Mapping the Origins and Expansion of the Indo-European Language Family’. *Science* 337 (6097): 957–960. See <https://science.sciencemag.org/content/337/6097/957/tab-figures-data> under ‘Movie S1’ for the movie that is discussed in the talk by by Pereltsvaig and Lewis (first video below).

Watching:

“Mismodeling Indo-European Origins: The Assault On Historical Linguistics”:

<https://www.youtube.com/watch?v=4jHsy4xeuoQ&t=5s> (the first 11 minutes by Martin Lewis are not strictly necessary, nor the question time which starts at 54.14)

“The Language Detectives on the Evolution of the Uto-Aztecan language family”:

https://www.youtube.com/watch?v=92IvcuQF9cg&feature=emb_title

Reading II: Bown, Claire. 2017. ‘The Indo-European Controversy and Bayesian Phylogenetic Methods’. *Diachronica* 34 (3): 421-436.

Reading III: Evans, Nicholas. 2016. ‘Typology and Coevolutionary Linguistics’. *Linguistic Typology* 20 (3): 1–16.

Assignment: 6 Evolutionary historical linguistics & phylogenetics

7. 20-05-2020 The comparative method and linguistic reconstruction

Watching: “Language Reconstruction”:

https://www.youtube.com/watch?v=0yj_TrtaS4k

Reading: Chapter 5, ‘The Comparative Method and Linguistic Reconstruction’ from Campbell, Lyle. 2004. *Historical Linguistics: An Introduction*. Edinburgh: Edinburgh University Press.

Assignment: 7 The comparative method and linguistic reconstruction

8. 27-05-2020 Computer-assisted historical linguistics

Watching: none. If you haven’t seen it yet and you have enough time, you could watch “Introduction to historical linguistics in four parts” (I assigned this as one of the optional watchings in April):

<https://www.youtube.com/watch?v=VAFki9X-4WQ>

<https://www.youtube.com/watch?v=OiWtvCBF6H8>

<https://www.youtube.com/watch?v=0GdOEGbkHO0>

<https://www.youtube.com/watch?v=pGFE3dWxxgI>

Reading: List, Johann-Mattis, Mary Walworth, Simon J Greenhill, Tiago Tresoldi, and Robert Forkel. 2018. ‘Sequence Comparison in Computational Historical Linguistics’. *Journal of Language Evolution* 12/ (4): 461–15.

Assignment: 8 Tutorial from ‘Sequence Comparison in Computational Historical Linguistics’ + more

Further materials on this topic:

“Beyond cognacy: Historical relations between words”:

https://www.youtube.com/watch?v=zT_9UF76z-k,

A short paper about EDICTOR: List, Johann-Mattis. 2017. ‘A Web-Based Interactive Tool for Creating, Inspecting, Editing, and Publishing Etymological Datasets’. In *Proceedings of the Software Demonstrations of the 15th Conference of the European Chapter of the Association for Computational Linguistics*, 9–12. Valencia, Spain: Association for Computational Linguistics.

9. 03-06-2020 Building phylogenetic trees

Watching: ‘Language phylogenies and cultural evolution’ (start from 1.20)

<https://www.youtube.com/watch?v=0gG04G5ncBs>

Reading: Dunn, Michael. 2014. ‘Language Phylogenies’. In *Routledge Handbook of Historical Linguistics*, edited by Claire Bowerman and Bethwyn Evans, 190–211. London: Routledge.

Assignment: 9 Building phylogenetic trees, tutorial from Goldstein, David M. 2020. ‘Indo-European Phylogenetics with R: A Tutorial Introduction’. *Indo-European Linguistics* 81–71. materials: <https://zenodo.org/record/3417299#.XsZliC2Q2K4>

10. 10-06-2020 The intersection of historical linguistics and linguistic typology

Watching: “How Languages Get New Structure”:

<https://www.youtube.com/watch?v=nwKIZ90Yhvc>

& “A course in Cognitive Linguistics: Color”:

<https://www.youtube.com/watch?v=ggfMQ0Zuv6o&t=32s>

If you haven’t seen it yet: “Introduction to linguistic typology”:

<https://youtu.be/af2T3nTsGFI>

Reading: Chapter 8, ‘Diachronic typology’ from Croft, William. 2004. *Typology and Universals*. Cambridge: Cambridge University Press. p. 232-279.

Assignment: 10 The intersection of historical linguistics and linguistic typology

Further materials on this topic:

“Deconstructing grammaticalization paths”:

<https://www.youtube.com/watch?v=pzi9T9y-Z7o>

Bickel, B. 2007. ‘Typology in the 21st Century: Major Current Developments’. *Linguistic Typology* 11 (1): 239–251.

Hall, C J. (1988). Integrating diachronic and processing principles in explaining the suffixing preference. In J. A. Hawkins, editor, *Explaining language universals*, pages 321–349.

Oxford: Basil Blackwell.

11. 17-06-2020 Methodology of linguistic typology

There are at least four common ways to ‘do’ typology. The traditional way: Compiling a stratified language sample in order to avoid genealogical and areal biases, and analyse results using basic statistics such as Fisher’s Exact test. The modern way: Include as many languages as possible, including languages from the same genealogical and areal units, and account for genealogical and areal biases using more appropriate statistics such as Generalized Mixed-Effect models. In this class, we focus on the latter methodology.

Watching: “Linear mixed effect models”: <https://www.youtube.com/watch?v=QCqF-2E86r0>

Reading I: Winter, Bodo. 2020. *Statistics for Linguists: An Introduction Using R*. New York: Routledge; Chapter 14, ‘Mixed Models 1: Conceptual Introduction’

Reading II: Verkerk, Annemarie (in prep). Quantitative methods in linguistic typology.

Assignment: 11 Tutorial on GLLMs for linguistic typology

Further materials on this topic:

“Generalized linear models”: <https://www.youtube.com/watch?v=X-ix97pw0xY> (long)

“Generalized linear model”: <https://www.youtube.com/watch?v=sSWGtqEhZkQ>

12. 24-06-2020 Phylogenetic comparative methods for linguistic typology

Another method to do typology and appropriately incorporate genealogical and areal biases is using phylogenetic comparative methods, which model the evolution of typological characters on the branches of a set of phylogenetic trees. The reading for this week is the first paper that applied this methodology in typology.

Watching: Mohamed Noor on the ‘Phylogenetic comparative method’:

<https://www.youtube.com/watch?v=d3YQ3tajOR0>

Reading: Dunn, Michael, Simon J Greenhill, Stephen C Levinson, and Russell D Gray. 2011. ‘Evolved Structure of Language Shows Lineage-Specific Trends in Word-Order Universals’. *Nature*, 1–4. <https://doi.org/10.1038/nature09923>. Including Supplementary Information.

Assignment: 12 Tutorial on Phylogenetic comparative methods

Further materials on this topic:

Pagel, Mark. 1994. ‘Detecting Correlated Evolution on Phylogenies: A General Method for the Comparative Analysis of Discrete Characters’. *Proc. R. Soc. Lond.* 255: 37–45.

Paradis, Emmanuel. 2014. 'An Introduction to the Phylogenetic Comparative Method'. In *Modern Phylogenetic Comparative Methods and Their Application in Evolutionary Biology: Concepts and Practice*, edited by László Zsolt Garamszegi, 1–18. Heidelberg: Springer.

“Limitations of Phylogenetic Comparative Methods”:

<https://www.youtube.com/watch?v=qyppwvGoZCY>

The next video is a lecture by Joseph (Joe) Felsenstein explaining phylogenetic comparative methods. Felsenstein is basically the founding father of this particular set of methods in evolutionary biology. It's long but it's basic. In case you watch it, remember that Dunn (2014) wrote, “In a rather unfortunate collision of terminology, these methods are called “comparative methods” in evolutionary biology (less often “The Comparative Method”, but see Harvey and Pagel 1991).” – so when Felsenstein talks about the comparative method, he's not talking about historical linguistics, but about biology.

Joe Felsenstein on “Comparative method and phylogenies”:

<https://www.youtube.com/watch?v=MkPHWmH8-pU>

13. 01-07-2020 Ecology of language

Watching:

“Newfound Global Phonetic Patterns and What They Tell Us About Language”:

<https://www.youtube.com/watch?v=xsAWTzLQPjo>

“Could your language affect your ability to save money?”:

<https://www.youtube.com/watch?v=lw3YTbubyjI>

Reading I: Ladd, D Robert, Seán G Roberts, and Dan Dediu. 2014. ‘Correlational Studies in Typological and Historical Linguistics’. *Annual Review of Linguistics* 1 (1): 140804162027000.

Reading II: 'Spurious correlations' <http://humans-who-read-grammars.blogspot.com/2017/03/spurious-correlations.html>

Assignment: 13 Ecology of language

Further materials on this topic:

“How Evolutionary Adaptation Explains Language Structures”:

<https://www.youtube.com/watch?v=c5fUOMj4FOA>

14. 08-07-2020 Language contact, multilinguality & language typology

Watching: “How many languages do multilinguals have?”

<https://www.youtube.com/watch?v=OUWXHT3Q2xY>

Reading: Thomason, Sarah. 2010. ‘Contact Explanations in Linguistics’. In *The Handbook of Language Contact*, edited by Raymond Hickey, 31–47. Chichester: Wiley-Blackwell.

Assignment: 14 Language contact, multilinguality & language typology

Further materials on this topic:

“The Birth of New Languages In Multilingual Situations“:

https://www.youtube.com/watch?v=24z_W1ty1Ts

15. 15-07-2020 Corpus-based typology

Watching: “Corpus-based linguistic typology”: <https://youtu.be/5ew6NFZ2CuA>

Reading: Levshina, Natalia. 2019. 'Token-Based Typology and Word Order Entropy: A Study Based on Universal Dependencies'. *Linguistic Typology* 23 (3): 533–72.

Assignment: 15 Corpus-based typology

Presentation papers

Week 7: 20-05-2020 The comparative method and linguistic reconstruction

Haspelmath, Martin. 2009. 'Lexical Borrowing: Concepts and Issues'. In *Loanwords in the World's Languages: A Comparative Handbook*, edited by Martin Haspelmath and Uri Tadmor, 35–54. Berlin: Walter de Gruyter.

Week 8: 27-05-2020 Computer-assisted historical linguistics

Rama, Taraka, Johann-Mattis List, Johannes Wahle, and Gerhard Jäger. 2018. 'Are Automatic Methods for Cognate Detection Good Enough for Phylogenetic Reconstruction in Historical Linguistics?' In *Proceedings of the 2018 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, Volume 2 (Short Papers)*, 1–8.

Week 9: 03-06-2020 Building phylogenetic trees

Sagart, Laurent, Guillaume Jacques, Yunfan Lai, Robin J. Ryder, Valentin Thouzeau, Simon J. Greenhill, and Johann-Mattis List. 2019. 'Dated Language Phylogenies Shed Light on the Ancestry of Sino-Tibetan'. *Proceedings of the National Academy of Sciences*, 1–6.

&

Zhang, Menghan, Shi Yan, Wuyun Pan, and Li Jin. 2019. 'Phylogenetic Evidence for Sino-Tibetan Origin in Northern China in the Late Neolithic'. *Nature* 569 (7754): 112–15.

OR

Robbeets, Martine, and Remco Bouckaert. 2018. 'Bayesian Phylolinguistics Reveals the Internal Structure of the Transeurasian Family'. *Journal of Language Evolution* 3 (2): 145–62.

Week 10: 10-06-2020 The intersection of historical linguistics and linguistic typology

Cysouw, Michael. 2005. 'Quantitative Methods in Typology = Quantitative Methoden in Der Typologie'. In *Quantitative Linguistik: Ein Internationales Handbuch*, edited by Reinhard Köhler, Gabriel Altmann, and Rajmund G. Piotrowski, 554–78. Berlin: Walter de Gruyter.

Week 11: 17-06-2020 Methodology of linguistic typology

Dik Bakker. 2010. 'Language Sampling'. In *The Oxford Handbook of Linguistic Typology*, edited by Jae Jung Song. Oxford: Oxford University Press.

Week 12: 24-06-2020 Phylogenetic comparative methods for linguistic typology

Widmer, M., Auderset, S., Nichols, J., Widmer, P., & Bickel, B. (2017). NP recursion over time: Evidence from Indo-European. *Language*, 93(4), 799–826.

Week 13: 01-07-2020 Ecology of language

Hua, X., Greenhill, S. J., Cardillo, M., Schneemann, H., & Bromham, L. (2019). The ecological drivers of variation in global language diversity. *Nature Communications*, 1–10.

Week 14: 08-07-2020 Language contact, multilinguality & language typology

Lupyan, Gary, and Rick Dale. 2010. 'Language Structure Is Partly Determined by Social Structure'. *PLoS ONE* 5 (1): e8559.

Week 15: 15-07-2020 Corpus-based typology

Seifart, Frank, Jan Strunk, Swintha Danielsen, Iren Hartmann, Brigitte Pakendorf, Søren Wichmann, Alena Witzlack-Makarevich, Nivja H de Jong, and Balthasar Bickel. 2018. 'Nouns Slow down Speech across Structurally and Culturally Diverse Languages'. *Proceedings of the National Academy of Sciences* 137 (May): 201800708–6.

Term paper

The term paper should be a literature-driven essay on a topic that we covered in class, or a related topic. Maximum of 4000 words. Try to pick/formulate a general research question, for instance:

- Can we explain language contact in terms of multilingual proficiency?
- How can automated methods for cognate reconstruction help historical linguists?
- Why does language revitalization matter?
- How can we triangulate studies in linguistics, archaeology, and population genetics to study prehistory?
- The past and future of methods for phylogenetic reconstruction in linguistics.
- Review of quantitative methods in linguistic typology
- The past and future of methods for comparative phylogenetic methods in typology.
- What are the non-linguistic determinants of language structure?
- How can we use corpora to do typology?

Evaluate the research questions using scientific literature (and your own arguments, of course) for an essay-like term-paper. There is no need to stick to the topic/paper you presented. For the topics covered here, you have some leads from the course readings, but I expect you to find & incorporate additional literature.