

16. Jahr. Campe's Bibliothek der 1842
17. Jahr. Campe's Bibliothek der 1843
18. Jahr. Campe's Bibliothek der 1844

X. **Naturgeschichte.**

I. **Diergeschicht**
1. **Die Diergeschicht**, Band I, von
H. v. Buseck, 1806.
2. **Die Diergeschicht**, Band II, von
H. v. Buseck, 1812.
3. **Die Diergeschicht**, Band III, von
H. v. Buseck, 1813.

II. **Die Diergeschicht**, von H. v. B. 1815.

XI. **Pädagogik.**

I. **Die Pädagogik**, von J. Gottlieb Fichte, 1808.

II. **Moralphilosophie.**

1. **Moralphilosophie**, das ältesten Gesetz, Urtheile und Beweise, gewidmet, von
J. G. Fichte, 1800.
2. **Moralphilosophie**, Einleitung für
die Schule, von J. G. Fichte, 1801.
3. **Moralphilosophie**, 1802.

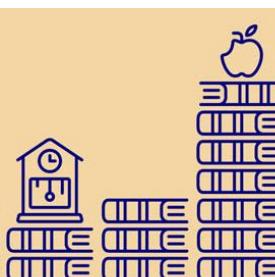
III. **Sprachkunst, Wörterbücher
und Grammatiken über die Sprache**

1. **Wörterbuch der deutschen
Sprache**, von der Akademie der
Wissenschaften zu Berlin, von
M. Stein, 1837.

The multilingual cultural history in national bibliographies: the Baltic case 1800-1940

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Krister Kruusmaa^{1, 3}
-aura Nemvalts¹

- . National Library of Estonia
 - . University of Tartu
 - . Tallinn University



Outline

Background

Case study: Estonian

Connecting bibliographies: Estonian and Latvian

Background

Social history of Estonian and Latvian

- Provinces of Estonia, Livonia, Courland in Russian Empire (1796-1918)
 - Since 13th century crusades, the Baltic German elite owned the land, led the administration, dominated the culture
 - Estonian and Latvian were rural languages with low prestige, to move up in social ranks you switched German or Russian.
- (Slow) changes in the 1800s
 - Liberation of peasants (≈ Estonians & Latvians) from serfdom in 1816/19; 1849/1856 reforms to allow land purchase, 1863 freedom of movement. Urbanization, industrial development
 - Enlighteners, estophiles & lettophiles among the Baltic German elite
 - National Awakening period (1850s-1870s)
 - Russification (1880s-1914)
- “Coming of age”:
 - Modernist movements in the early 20th century
 - Official languages of the Estonian Republic, Latvian Republic est. 1918



The “Baltic provinces” of the Russian Empire, 1860
(David Rumsey Map Collections)

Emergence of the literate community

- From mostly oral and low prestige to emerging written language communities.
 - Writers and intellectuals start to orient towards Estonian or Latvian communities
- Mass literacy
 - 1800 - 66% could read, but it was mostly used for religious schooling
 - 1840s-1850s better reading comprehension and learning to write
 - 1897 - 91% read, 77% write
- Urbanization, newspapers, legal documents - written communication becomes common



Estonian & Livonian Governorates in the Russian Empire, 1800

European context

European written traditions are long, but mostly for the elite.

19c, mass literacy in some places. Huge educational reforms.

Estonian was in Scandinavian-German educational area.

* Measure not fully comparable

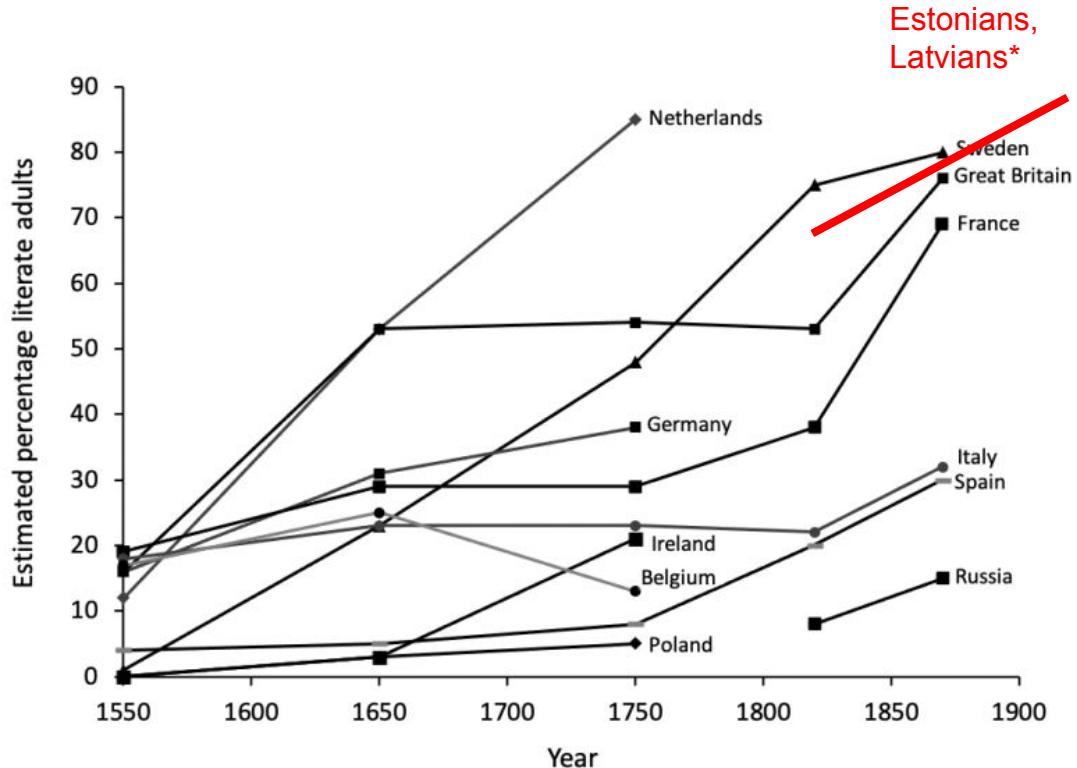


FIGURE P.1. Literacy rates for various European countries from 1550 to 1900. These estimates are based on book publishing data calibrated using more direct measures of literacy.⁸

Figure from Henrich 2020, data from Burigh & Zanden 2009

The emergence of the community

How did the Estonian language communities emerge from a German-dominated cultural area?

- Language choice, social movements, political decisions
- Demographics of literate communities
- Connections with the existing traditions of Baltic German elites

Estonian National Bibliography (ENB)

- National bibliographies collect metadata publications on a region.
 - Have recently become subjects for data analysis (Lahti et al. 2019).
 - => Window onto past communities.
- ENB = published in Estonia, in Estonian, about Estonia or Estonians.
 - Fairly good coverage, high quality metadata.
 - Preprocessing and harmonization needed for analysis.



Origins of ENB in Rosenplänter's article "Übersicht der estnischen Literatur" (1832)

ESTONIAN NATIONAL BIBLIOGRAPHY

Keyword SEARCH Extended Search

With the search results from one particular library?
Select the library by clicking search

ESTONIAN NATIONAL BIBLIOGRAPHY

SEARCH Extended Search

With the search results from one particular library?
Select the library by clicking search

The screenshot shows the search interface of the Estonian National Bibliography. It includes a main search bar, an extended search button, and a dropdown menu for selecting a library. Below the search bar, there are two additional sections: one for selecting a library and another for specifying search results from a particular library.

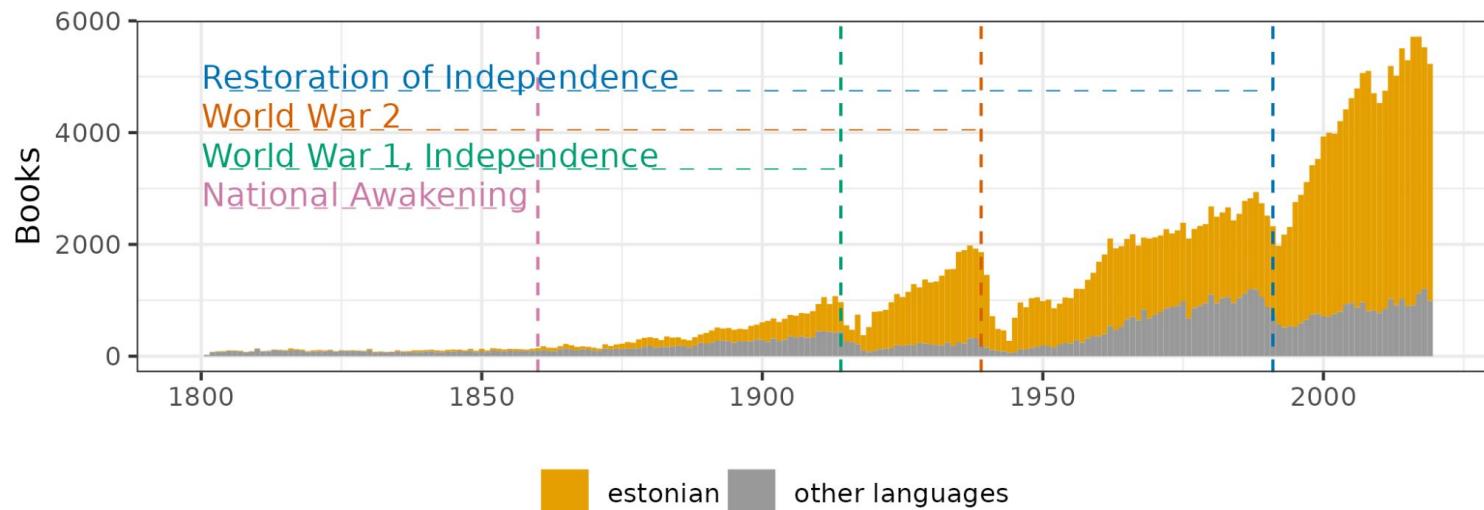
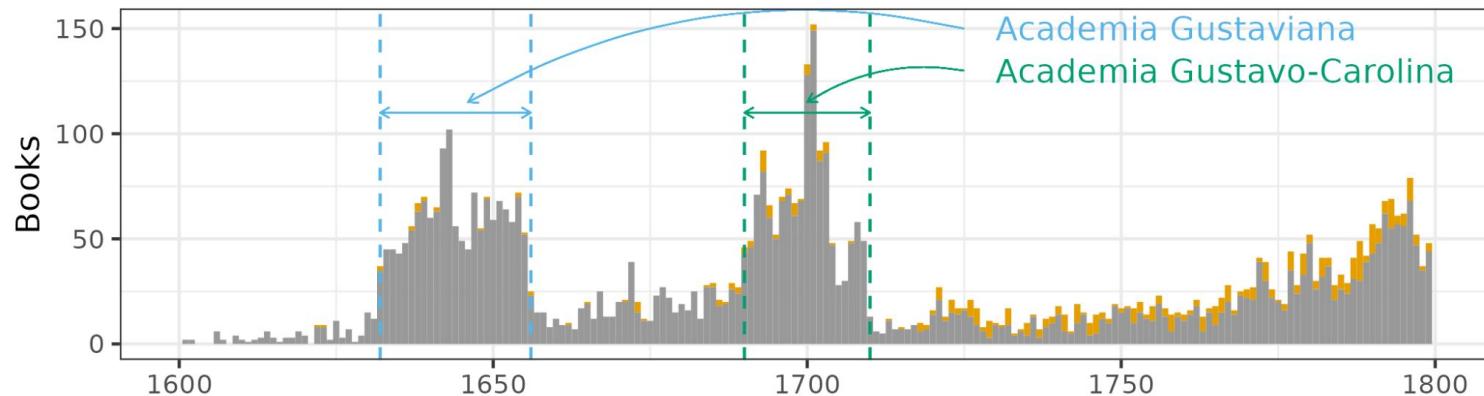
title_responsibility_statement	publication_place	publisher	publication_date
Anton Hansen Tennenre ; Illustreritud Herold Eestne	Tallinn	Eesti Raamat	1974
Mari Lise	Stockholm	Välo-Eesti & EMP	1997
Mari Lise ; [õpetaja]. (Eesti. T. Taal)	Tallinn	Eesti Raamat	1998
Pearl Buck ; eigin kõrget ülikoolik A. Härko ; [õpetaja]	Tallinn	Eesti Raamat	1994
Eesti Loodusajalugu Seits Eesti Teodori Akadeemias...	Tallinn	Välja	1993
Krist Horuse ; [Eesti] Viivik Soppeja ; [õpetaja]	Tallinn	Eesti Raamat	1995
Alariste Õpimine (eriarvamus) ; [õpetaja] koolitaja E.	Tallinn	Eesti Raamat	1993
Linda Pett	Tallinn	Välja	1993
Hannik Kull ; Jakuha sõnaraamatu üldlaule, ülekand...	Tallinn	Eesti Raamat	1993
Marina Turtkova ; Jõoserv, redaktoor ja järeltööd...	Tallinn	Eesti Raamat	1994
Interneti Raamatu Sõnaraamatu, Suur Kirjalaadi, Anti Reimets...	Meharu maae...	Eesti Raamat	1994
U. Urban	Uusikaupunki	Eesti Raamat	1994
Linda Pett	Tallinn	Eesti Raamat	1993
U. Urban	Välja	Välja	1992
Jahon ja Eesti kultuurikaitse riiklik kontrolli õigus Saaremaa ...	Tartu	Välja	1992
Jahon ja Eesti kultuurikaitse riiklik kontrolli õigus Saaremaa ...	Tartu	Välja	1994
A. H. Tennenre	Tartu	Välja	1997
Peter Brook ; [õpetaja] töökohad M. Pali ; [õpetaja]	Tallinn	Eesti Raamat	1993
Marina Turtkova	Tallinn	Välja	1993
Süduse Eesti Vabamu ; [õpetaja] Peeter Põrgu...	Koopia	Süduse-instituutti	1995
Harald Sudrogi ; [õpetaja] R. Põrgus	Tallinn	Eesti Raamat	1994



Available as .csv dump on Zenodo
<https://digilab.rara.ee/en/>

Books in ENB (1600-2020)

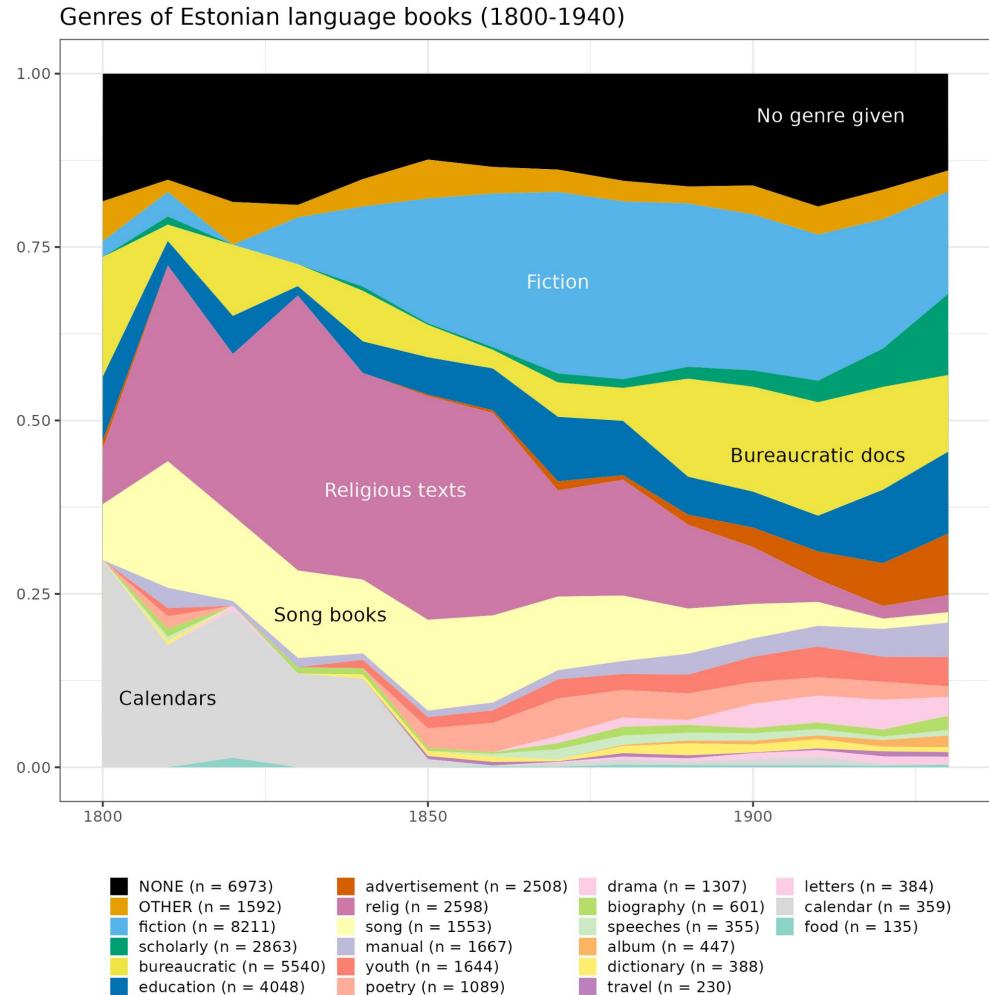
Some historical periods and events added for comparison



Case study: The Emergence of the Estonian Written Language Community 1800-1940

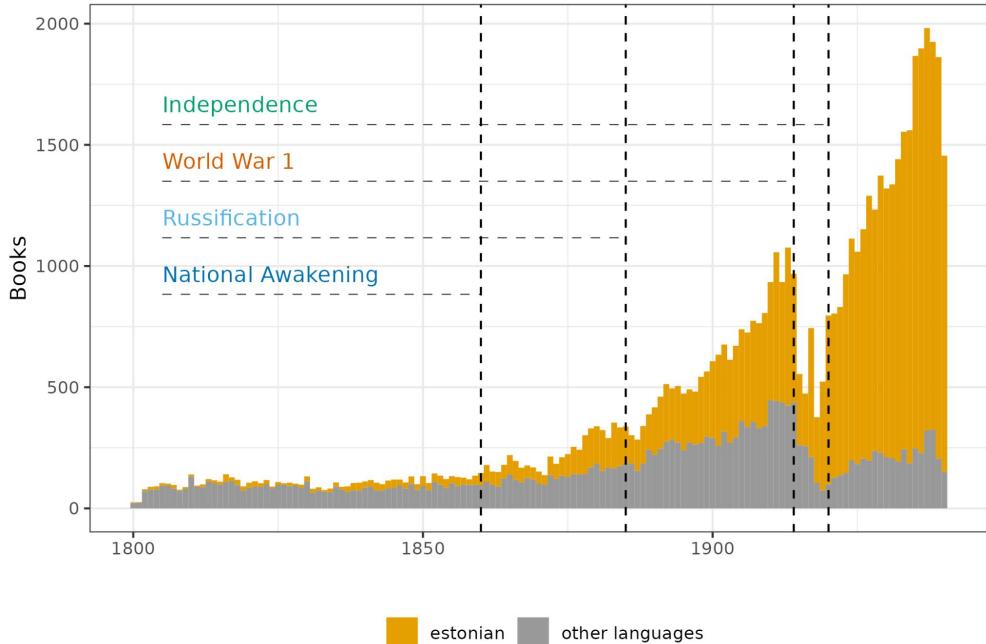
Temporal focus: 1800-1940

- 63,180 books
 - 40,256 Estonian (64%)
 - 22,924 other languages (36%)
- 19,787 unique contributor names
 - Authors, publishers, illustrators etc.
 - 7401 with birth dates (37%)
 - 718 contemporary multilingual writers for Estonian (10% of 7401)
- During 1800-1940
 - Less religious texts
 - More genre diversity
 - From collective to individual reading?

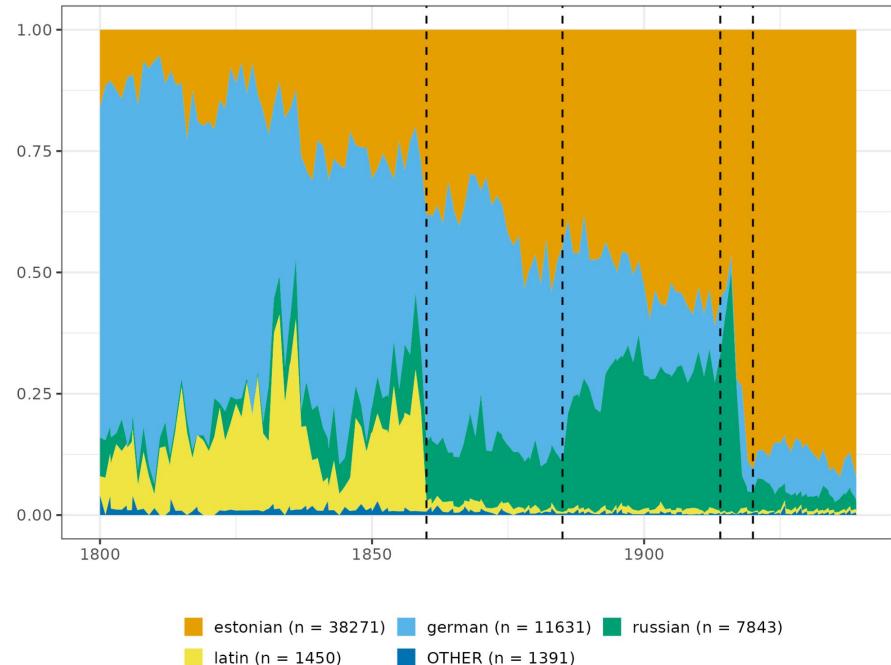


Emergence of the Estonian literary community

Number of books in Estonian and other languages (1800-1940)



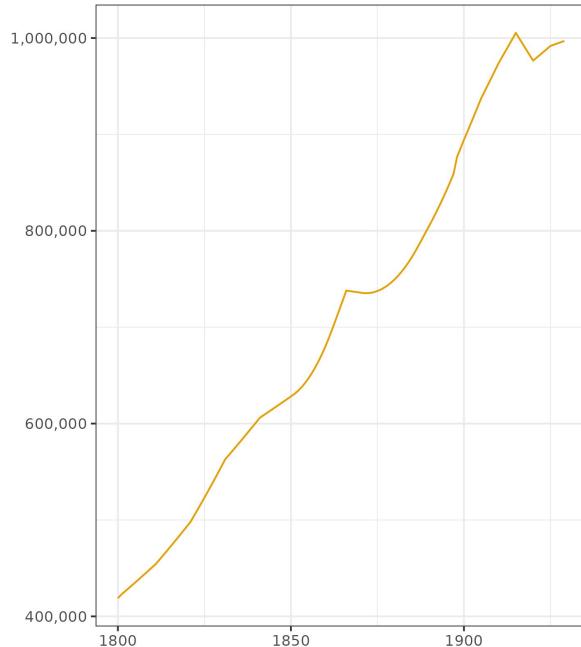
Share of language in books (1800-1940)



Population growth and publishing trends

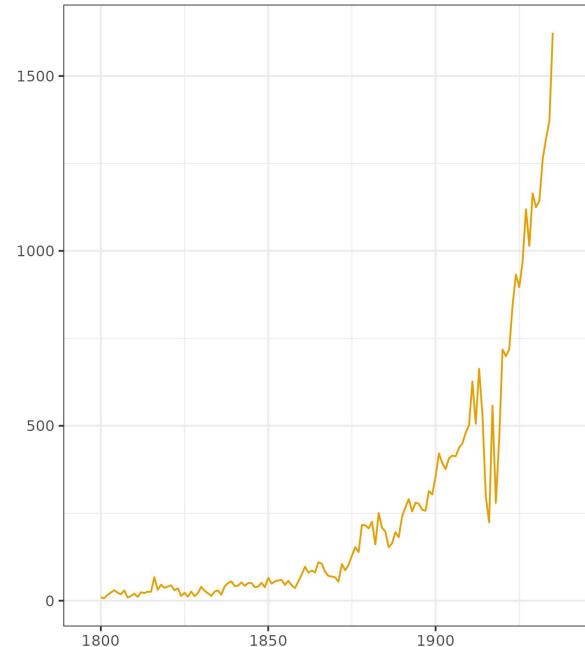
Estonian native speakers (1800-1930)

Residing in modern Estonia



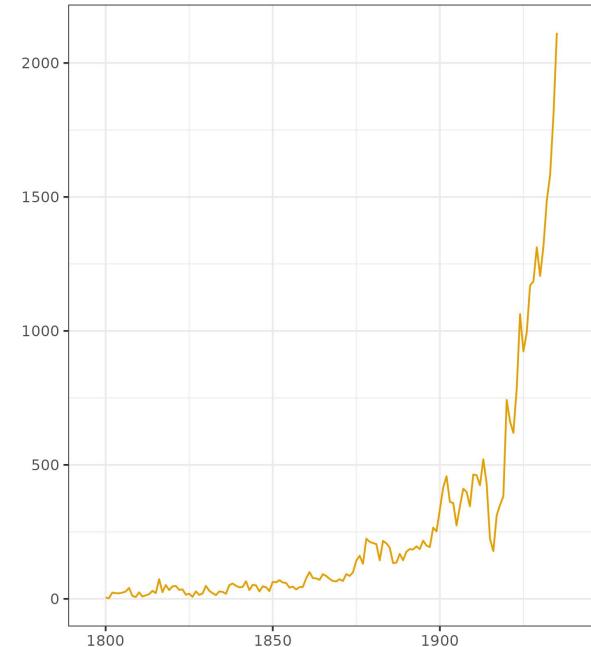
Estonian language books

Per million native speakers



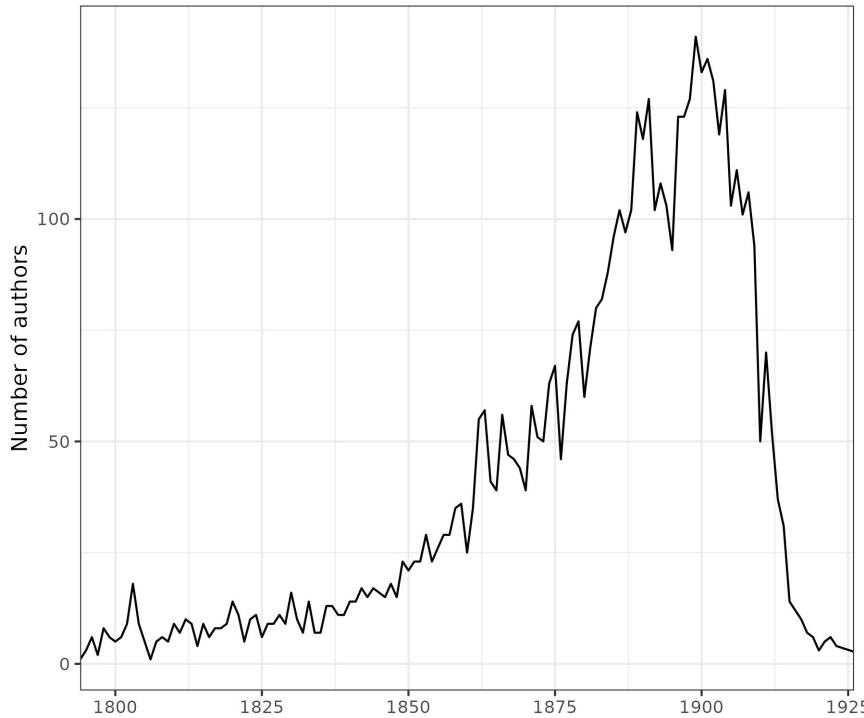
Estonian literary actors

Per million native speakers

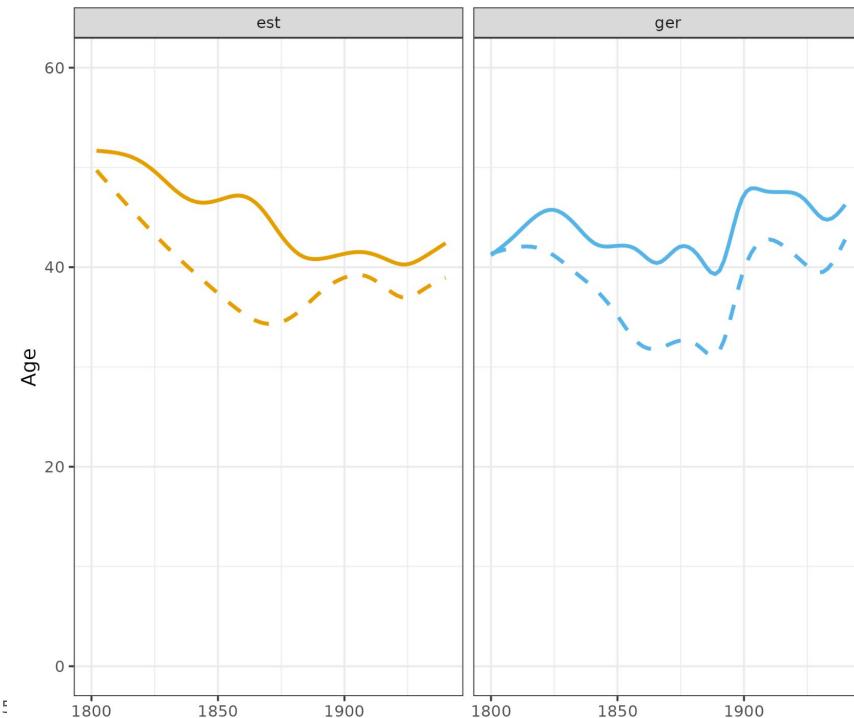


New people to written language community

Birthyears of actors active in 1800-1940



Age of an average active living contributor (1800-1940)



Language

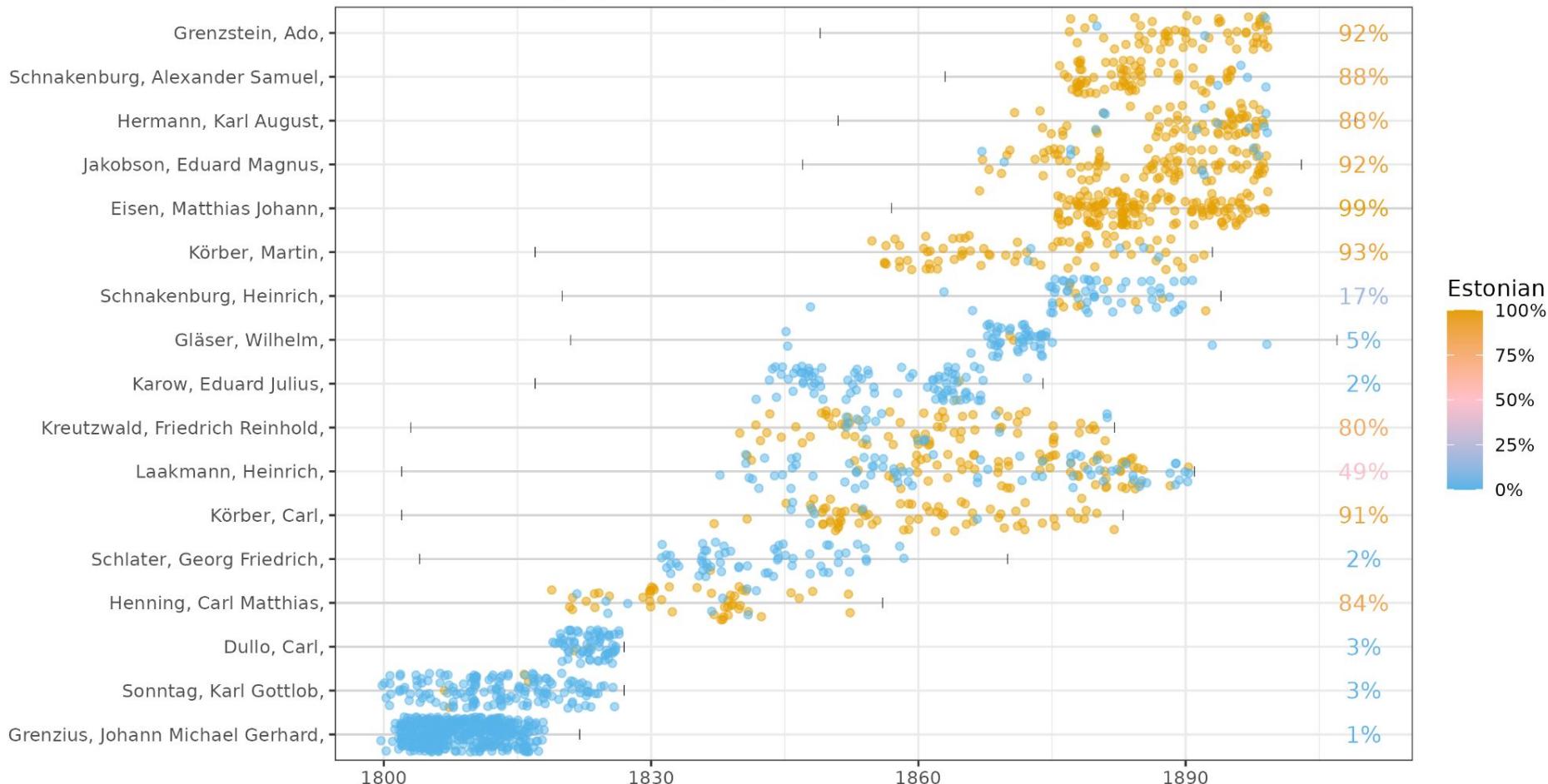
- est
- ger

Type

- 1. All books
- 2. First books

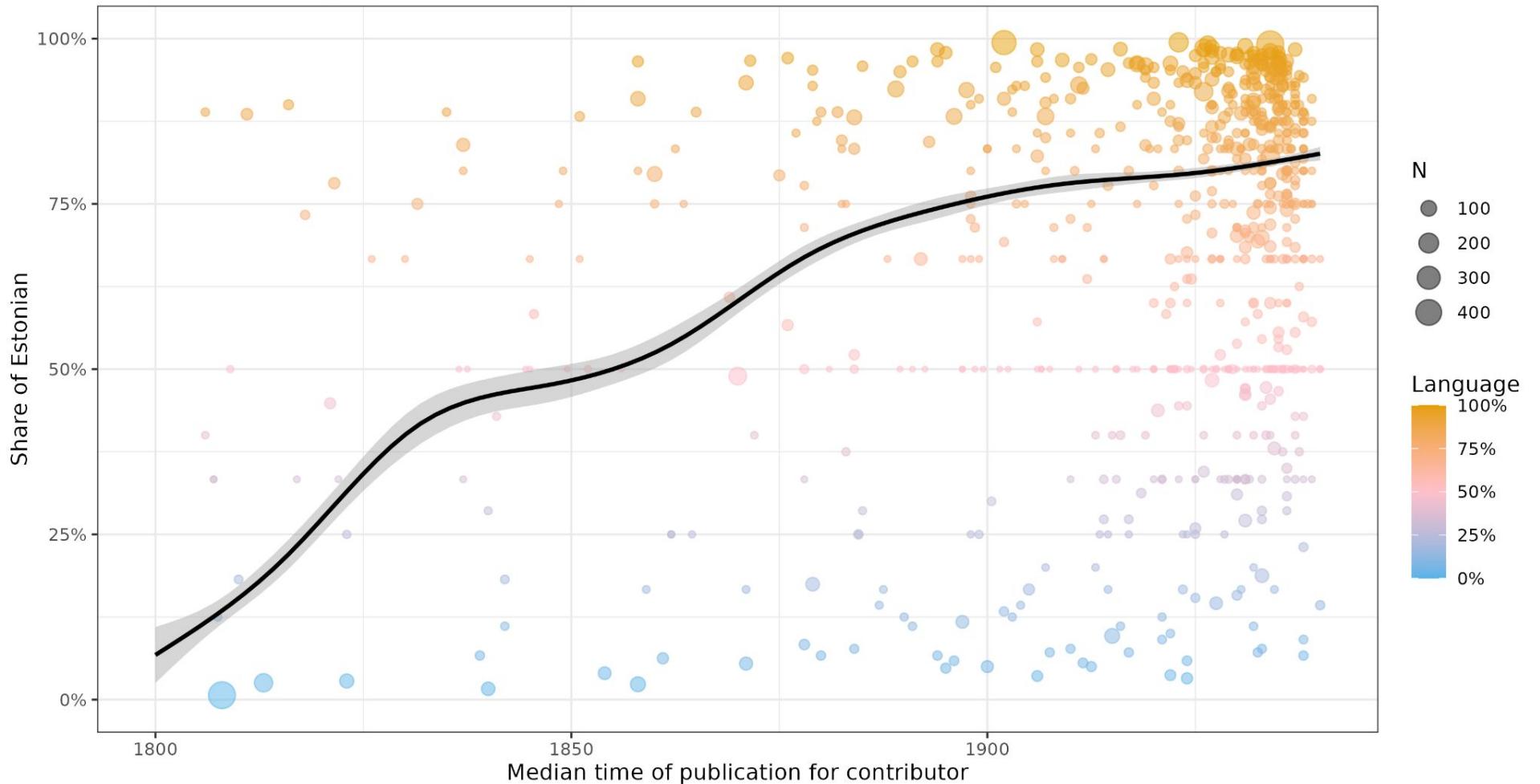
Language of books during contributor's life

Estonian/Other language multilinguals with > 50 works, lifetime share on the right



Language choice for Estonian/Other language multilinguals (n = 718)

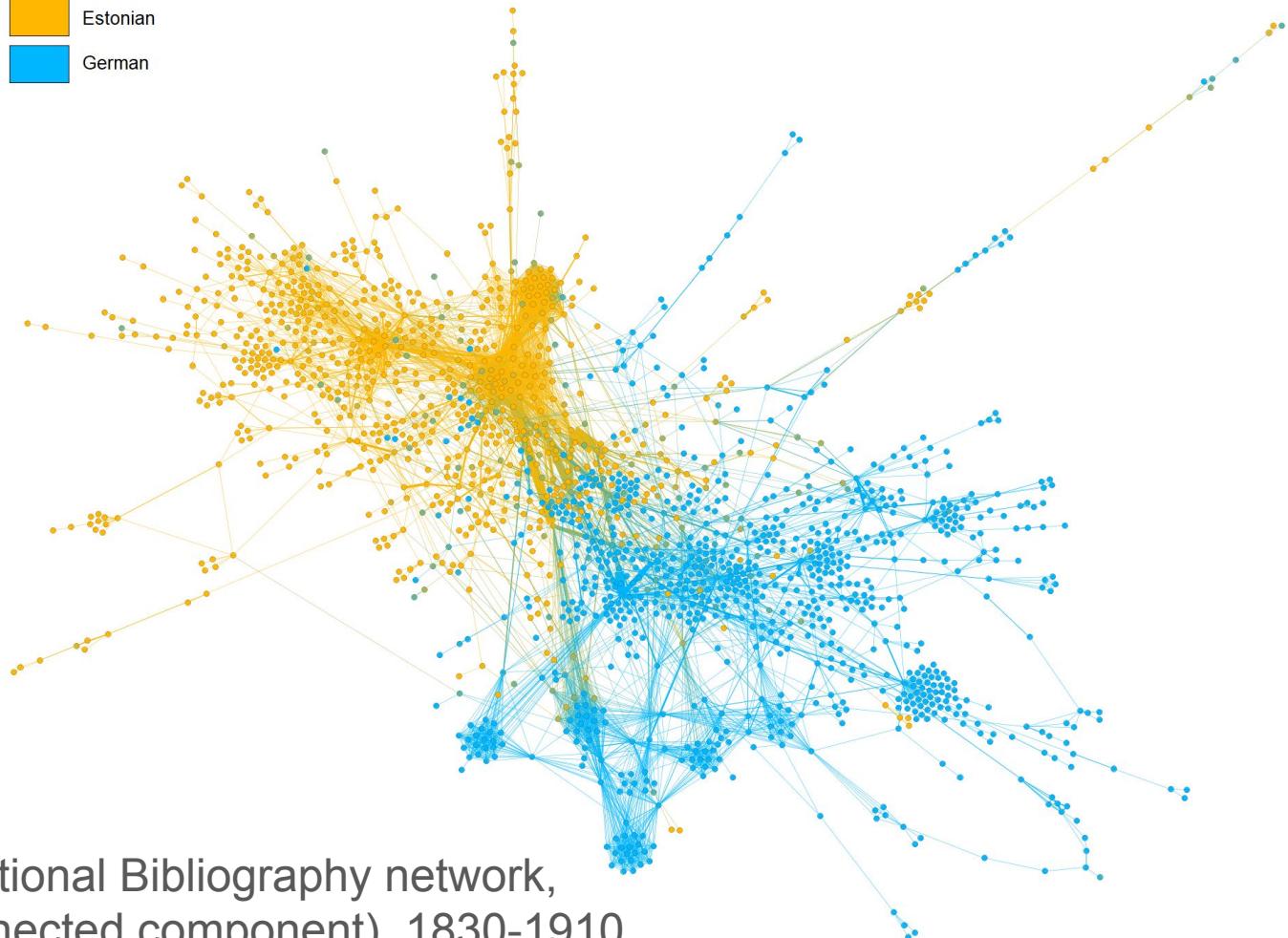
Lifetime share of language for contributor vs median time of publication



Networks

- The National Bibliography data can also be viewed as a literary network, where nodes are actors and edges are works (e.g. Hill *et al* 2019)
- Shows the relationships between authors, publishers, illustrators, editors and others
- Can be constructed diachronically and be coded to represent attributes like language

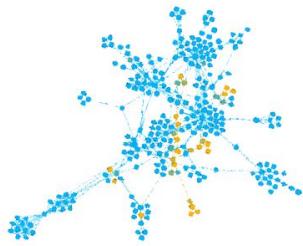
 Estonian
 German



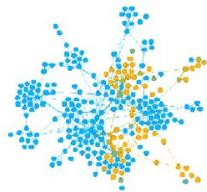
Estonian National Bibliography network,
(largest connected component), 1830-1910

Largest connected components

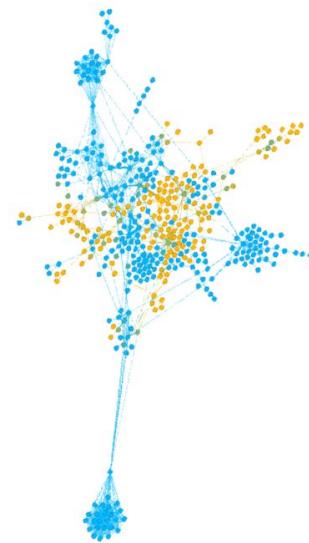
1830-1849



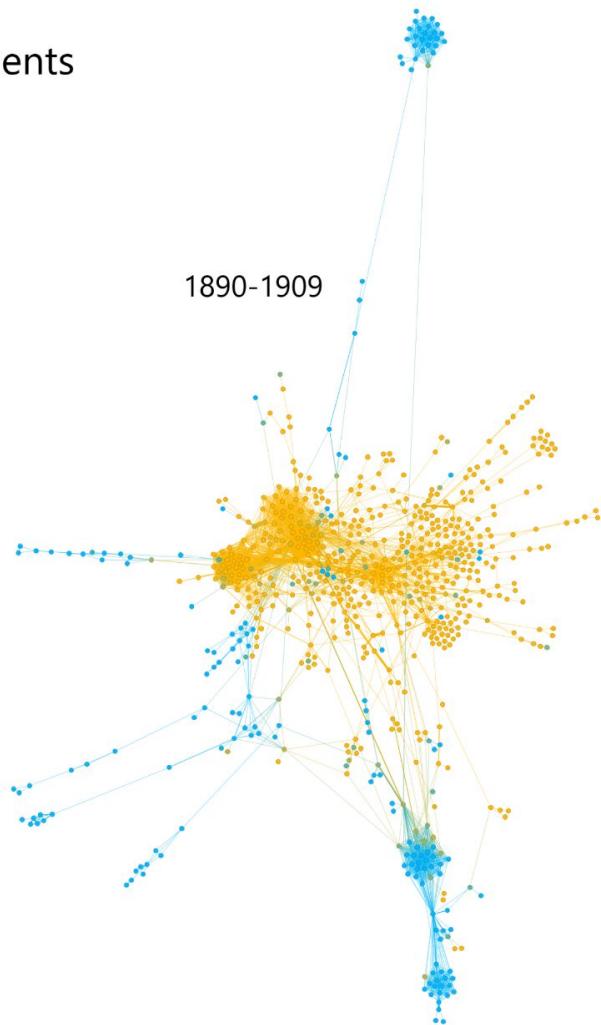
1850-1869



1870-1889



1890-1909



Comparing and connecting bibliographies

Data

Estonian National Bibliography 1800-1940

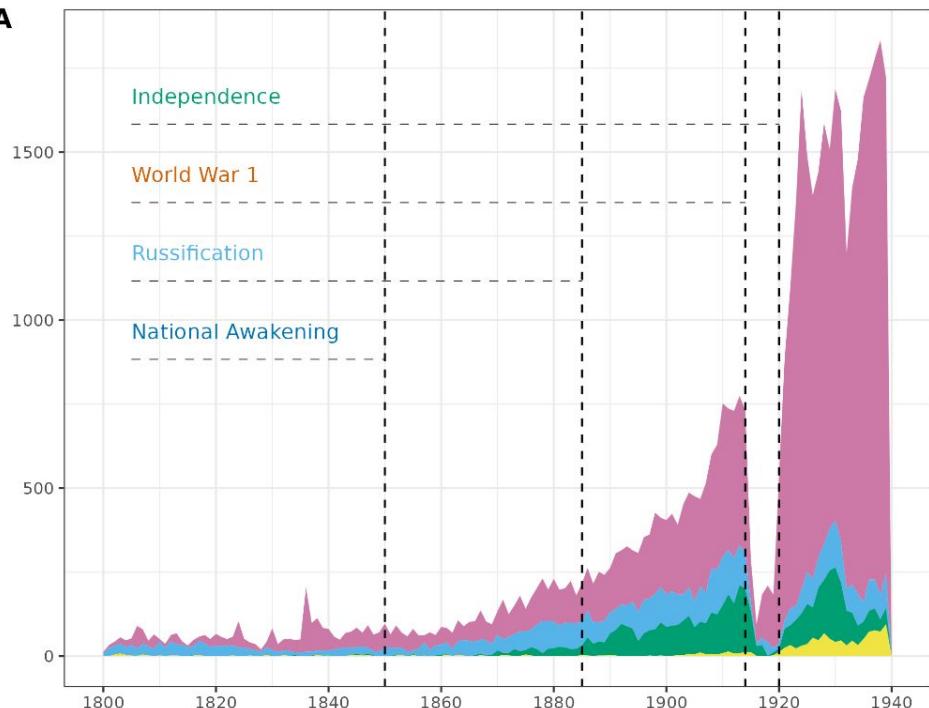
- 63,180 books
 - 40,256 Estonian (64%)
 - 22,924 other languages (36%)
- 7401 people with birth dates
- 5138 people with VIAF (69%)
 - 718 published in Estonian and another language (14%)
- 729 people in both datasets (VIAF)

Latvian National Library Catalogue (works from Latvia 1800-1940)

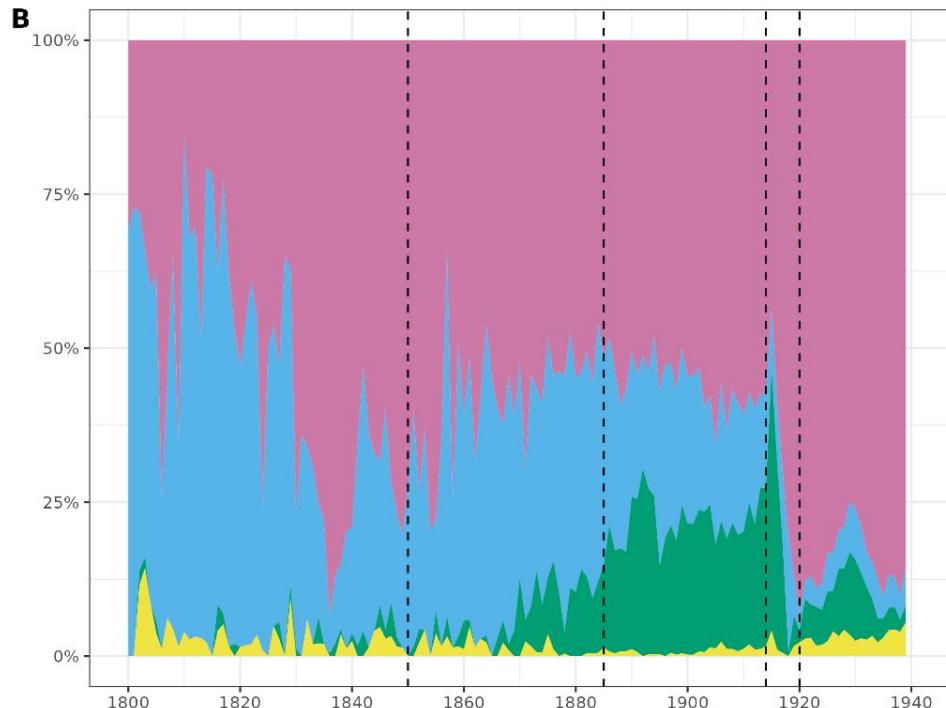
- 52,338 books
 - 38,391 Latvian (73%)
 - 13,947 other languages (27%)
- 9112 people with birthdates
- 6695 people with VIAF (73%)
 - 612 published in Latvian and another language (9%)
- 729 people in both datasets (VIAF)

Emergence of the Latvian literary community

A



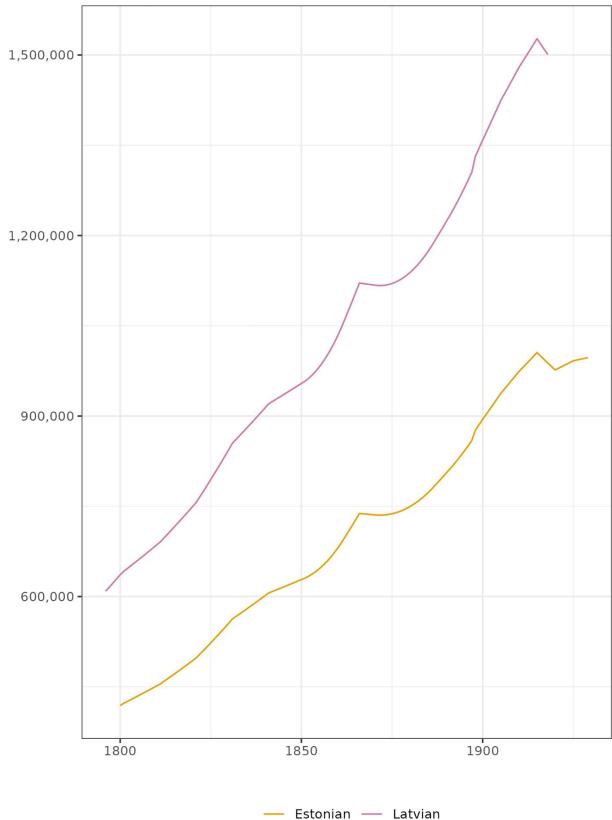
B



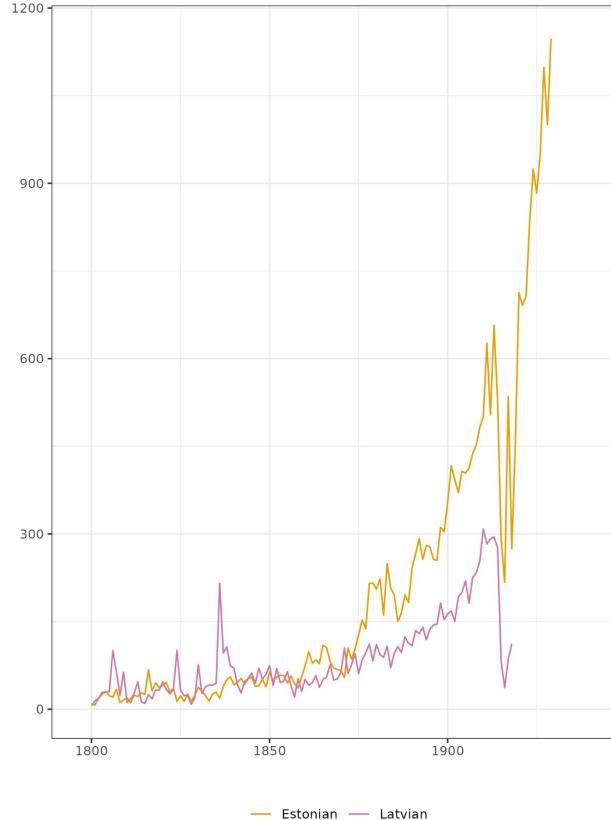
Latvian German Russian Other NA

Number and coverage of books

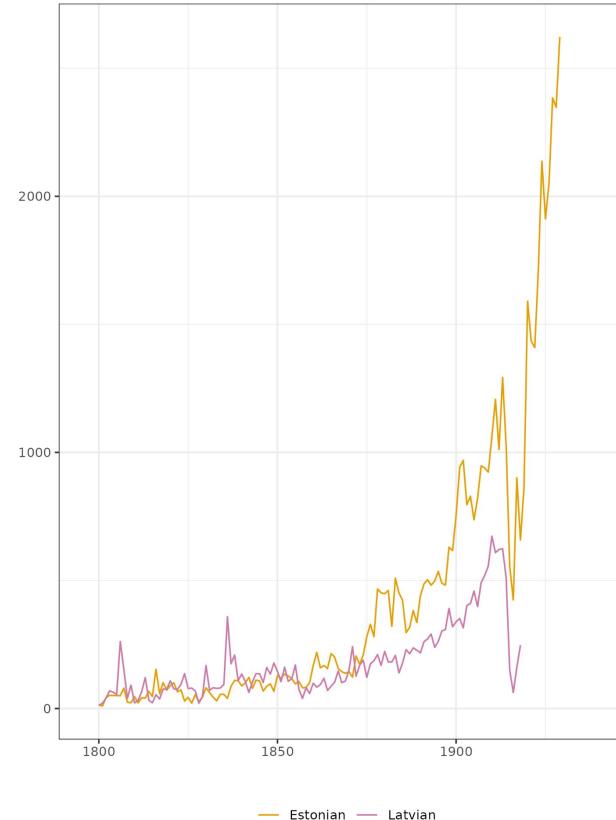
Estonian and Latvian native speakers
Residing in Baltic Gouvernates



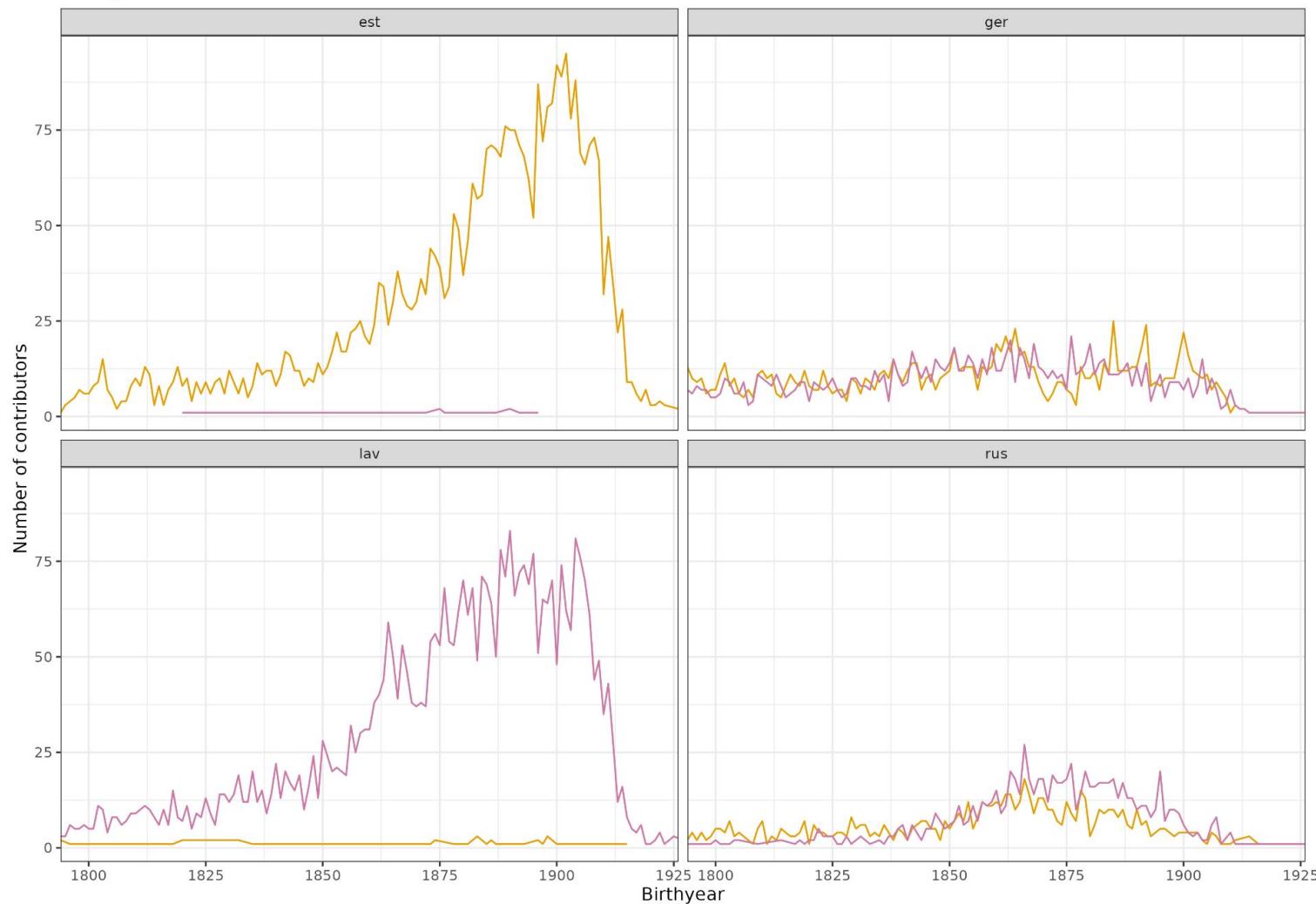
Estonian and Latvian language books
Per million native speakers



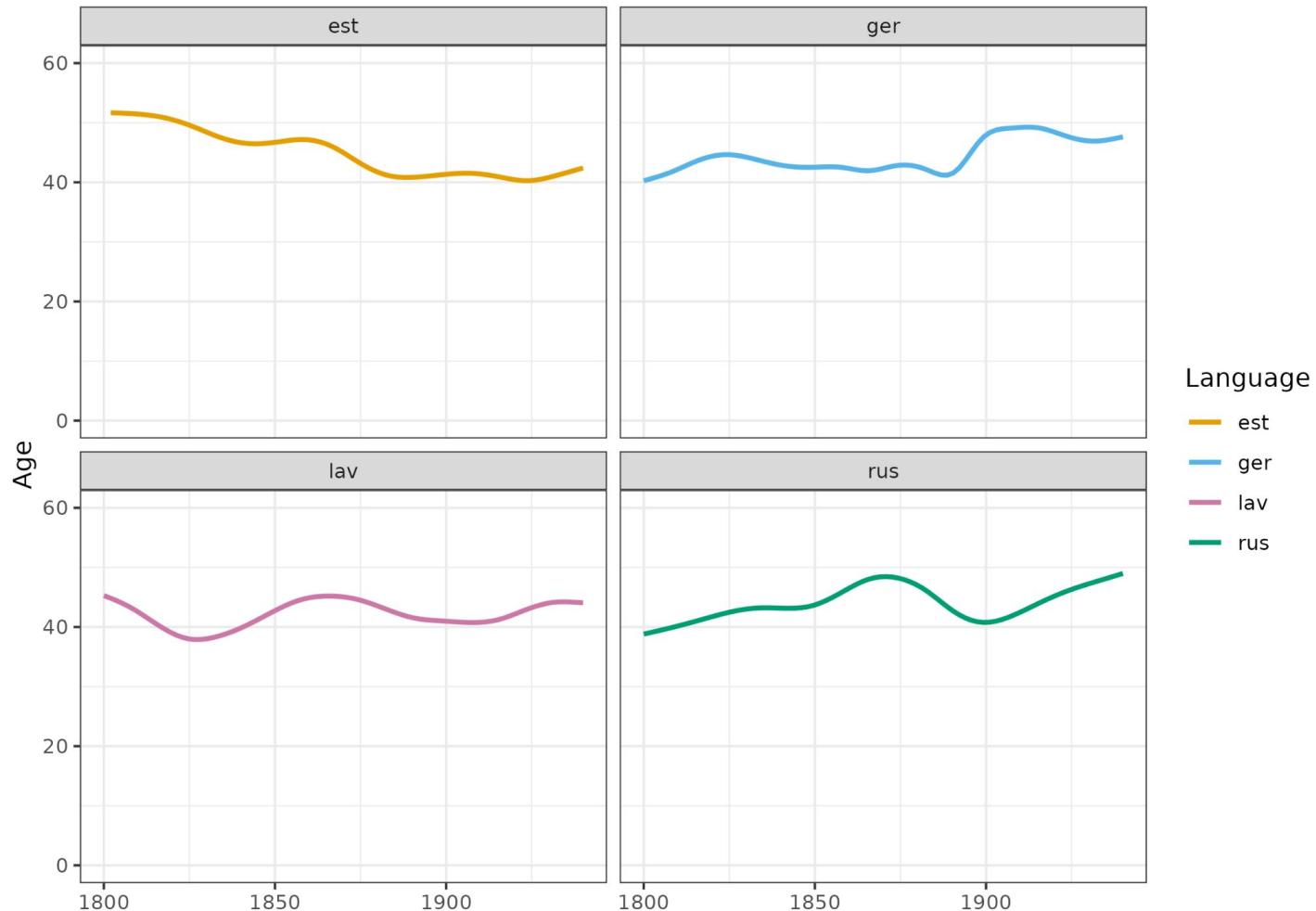
Estonian and Latvian language contributors
Per million native speakers



Birthyears of contributors active in 1800-1940

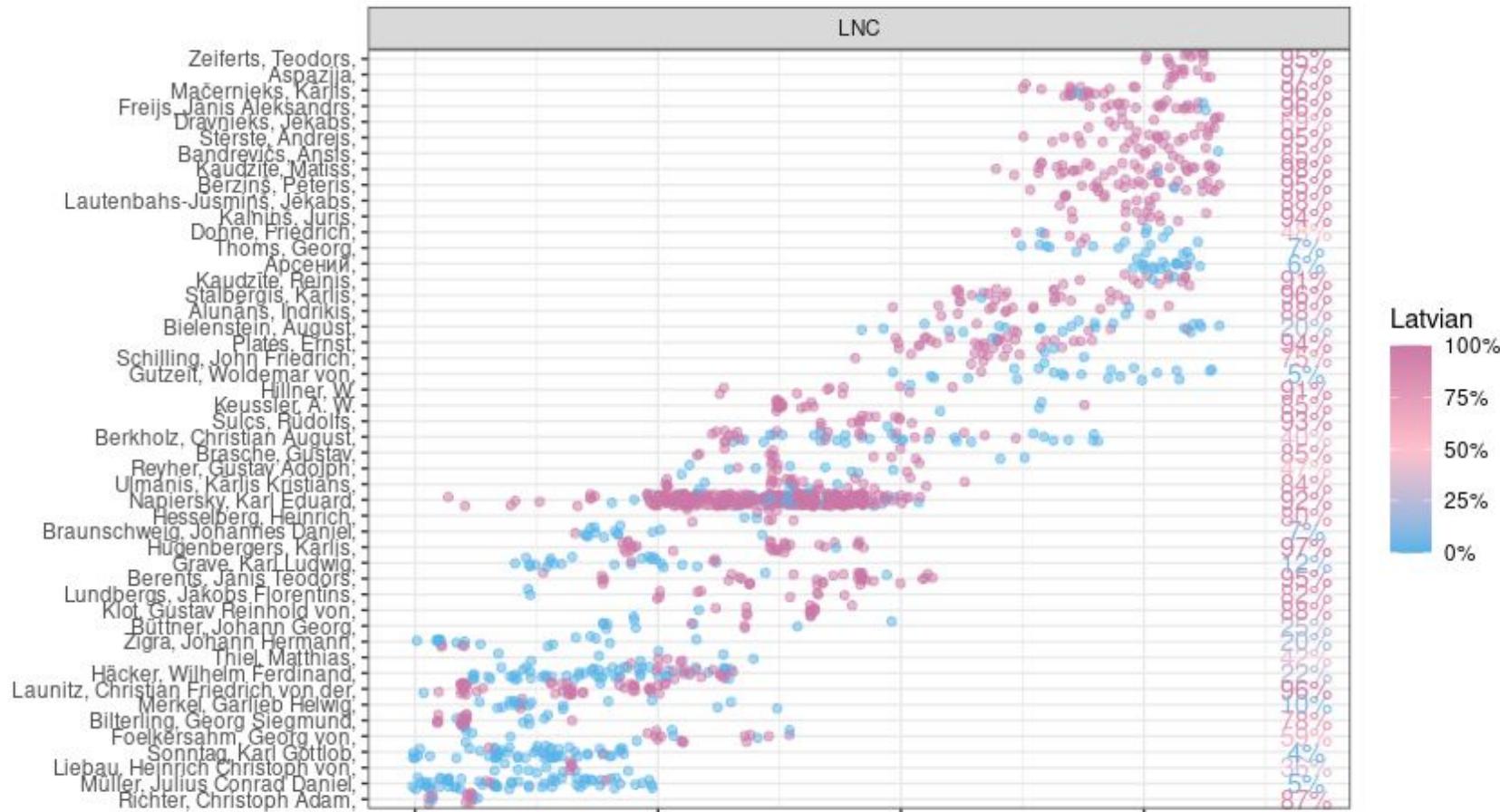


Age of an average active contributor (1800-1940)



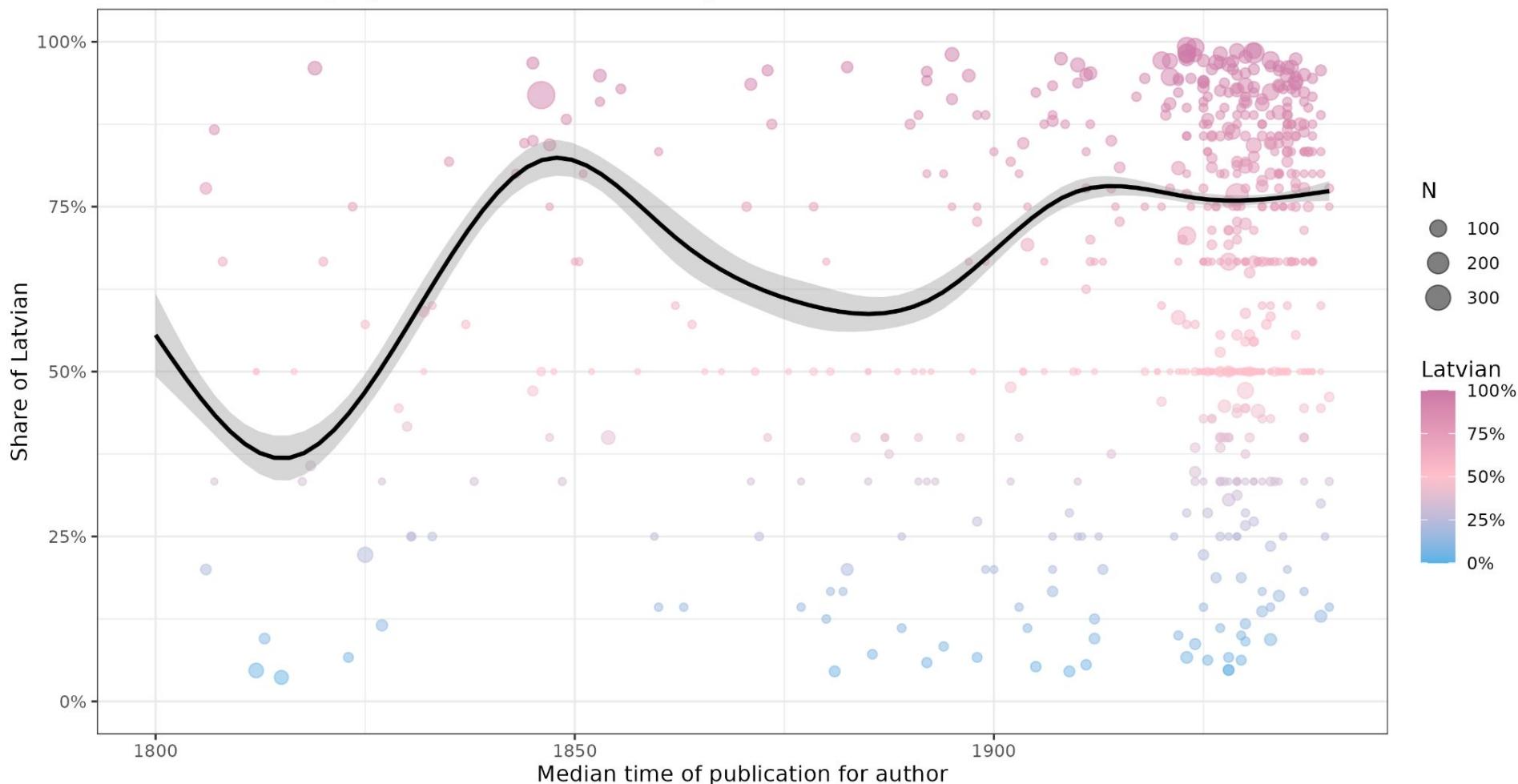
Language of books during contributor's life

Contributors with > 10 works, lifetime share on the right

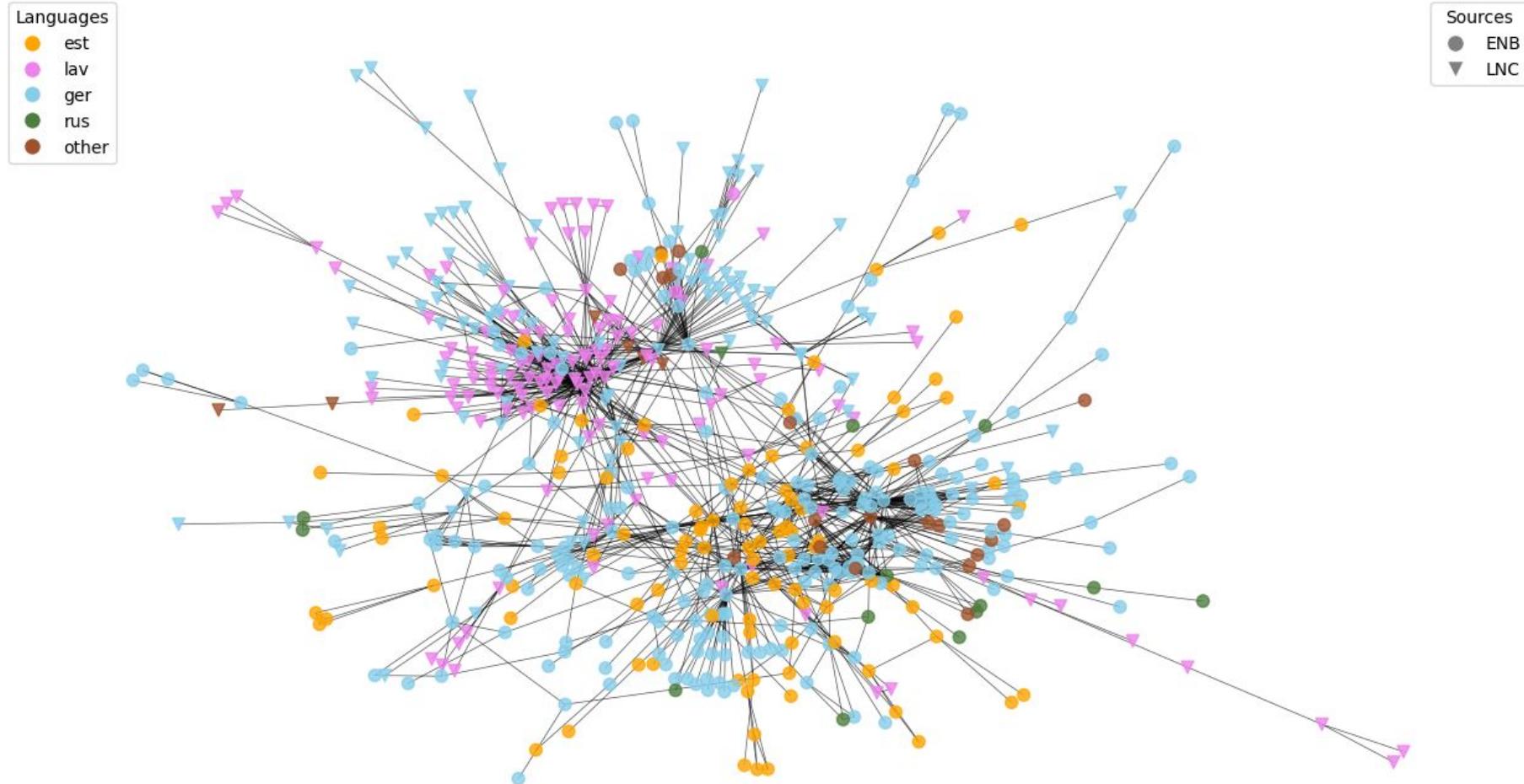


Language choice for multilingual actors (n = 612)

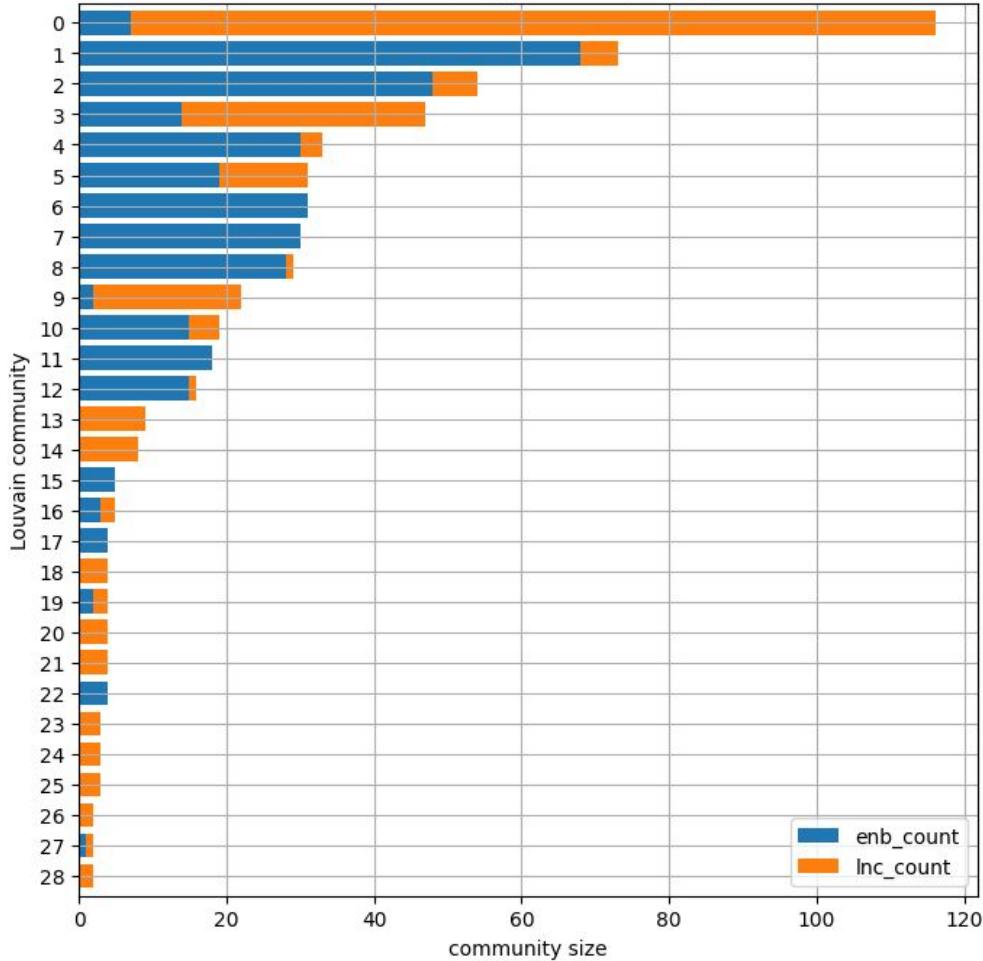
Lifetime share of language for actor vs median time of publication



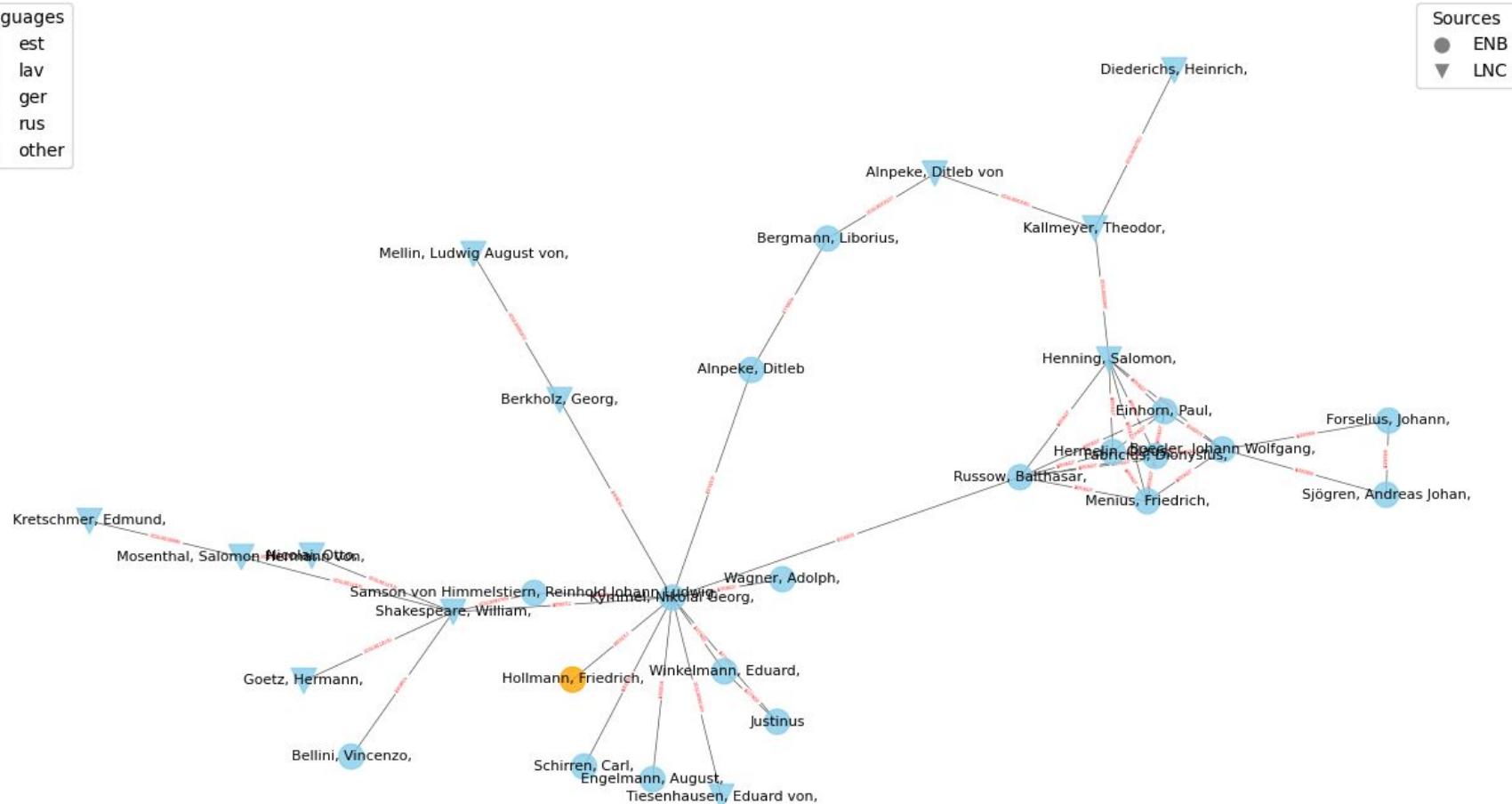
Publishing network of combined bibliographies, 1830-1880 (giant component)



Communities within the giant component, 1830-1880



- Most communities tend to be either made up of Latvian or Estonian sources
- Exceptions: 3 and 5



Discussion

- Findings
 - We can see shifts in language use as response to major historical events
 - The 19th century Estonian literary community is shaped by young new actors
 - The Estonian community initially emerges *from within* the existing Baltic German dominated network - not alongside it
- Opportunities and limitations
 - Bibliographic data in National Bibliographies and Library Catalogues allows a data-intensive study of cultural history, e.g. in the emergence of communities leading up to the formation of nation states.
 - Coverage and quality will vary, principles of composition are difficult to learn about.
 - Just counting books flattens the data. Books vary by size, print numbers, success. Also other text was written.

Contact us!

We continue to work on using bibliographic data to study cultural history.
Write to us if you have any ideas.

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