Printing in a Periphery: a Quantitative Study of Finnish Knowledge Production, 1640-1828

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2016-07-22

From particular data to global perspective?

Idea: Study early modern knowledge production, all of it (1470-1830)

How? Combine library catalogues (Fennica, Kungliga, ESTC, CERL HPB database)

Important: cleaning up the data (90% of the effort!) and considering how particular data collections (Finnish National Bibliography, English Short-Title Catalogue etc.) have been formed.

How to fail: take worldcat or similar combination of datasets and analyse it as a whole without cleaning it up first.

Overcoming a national gaze by focus on knowledge production through more complex cross-national network of cities

Data: bibliographic catalogues 1640-1828
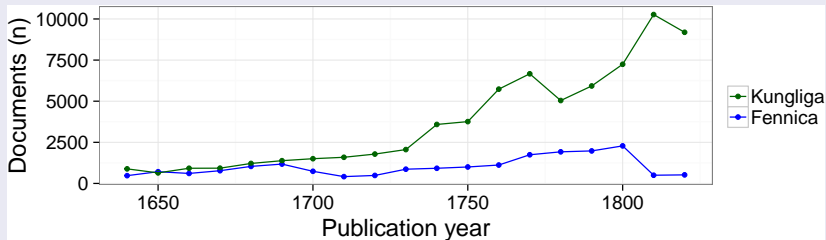
Fennica Finnish National bibliography

- ▶ 19241 documents 1640-1828

Kungliga Swedish National bibliography

- ▶ 69108 documents 1640-1828

Why this project?

- ▶ Visible roots of the diversity of "Finnishness" reflected in knowledge production, 1640-1828

Methods: Open data analytical ecosystem

Customized our dedicated R packages for bibliographic analysis combine flexibility with automation

Automated scales well with new data and unforeseen changes; a million documents cleaned up in 30 minutes

Open source fully transparent and reproducible data analytics: https://github.com/rOpenGov/fennica

Research potential greatly underestimated; world is full of metadata collections
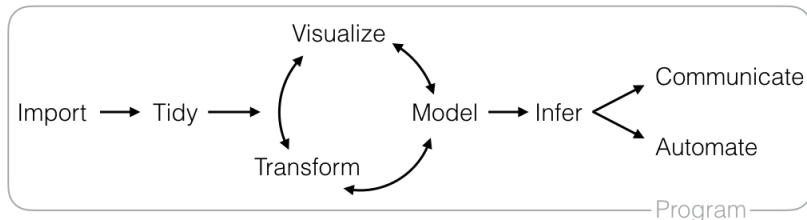
(Figure by Hadley Wickham)

Automated algorithms for data clean-up

Clean up messy entries

```r
polish_physical_extent("iii-xxiv, 118, [2] p.")$pagecount
```

```
## [1] 142
```

Enrich data (geocoordinates, gender, ..)

```r
get_country("Porvoo")
```

```
## [1] "Finland"
```

- ▶ Open source tools: parse, clean up, interpret, augment, enrich, validate, summarise, analyze, visualize, report..

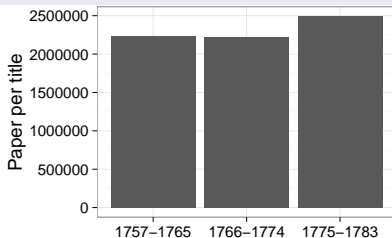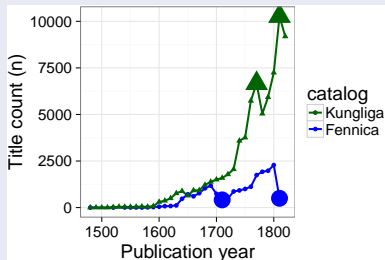1. General trends and political events

Turku as a Swedish University Town among Uppsala, Tartu and Stockholm (+ Lund & Greifswald)

1650
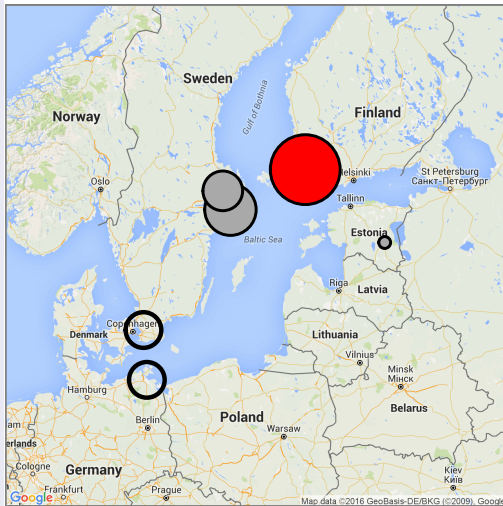
Publishing activity over time

- ► 1700-1721 Great Northern War & Fennica drop during "the Great Wrath"
- ► 1760-1770 Pamphleteering plays a crucial role during abolished censorship
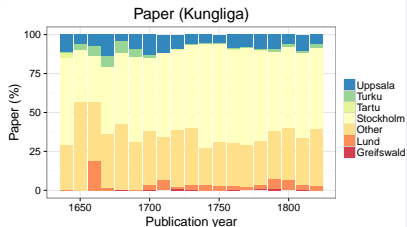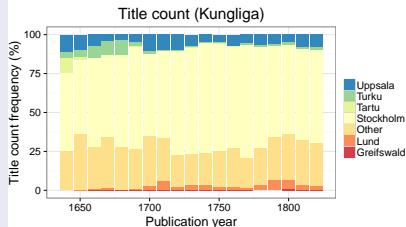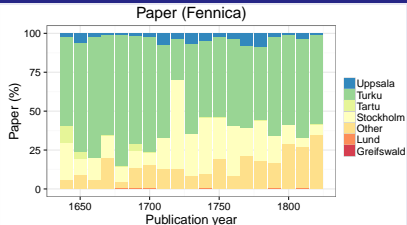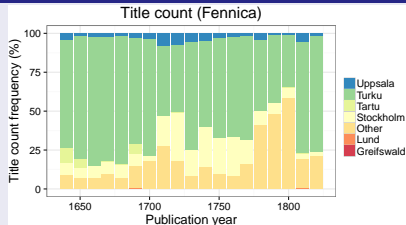- ► 1803-1815 Napoleonic wars

Swedish knowledge production & cycles of representation

An example how historical events, namely **parliamentary assemblies** in the Swedish case, have an effect on knowledge production.
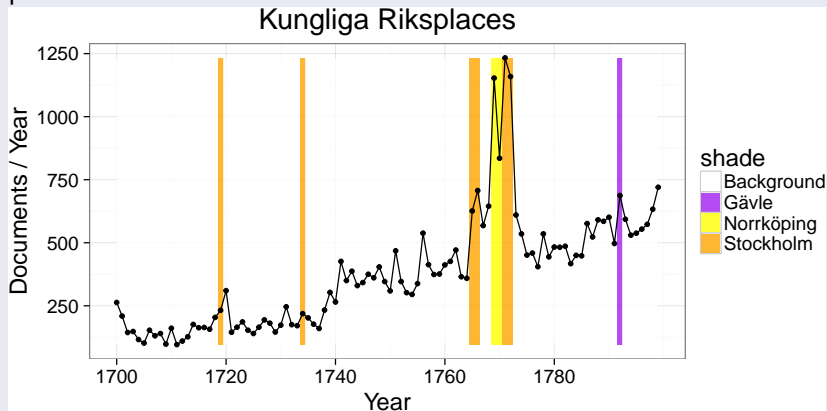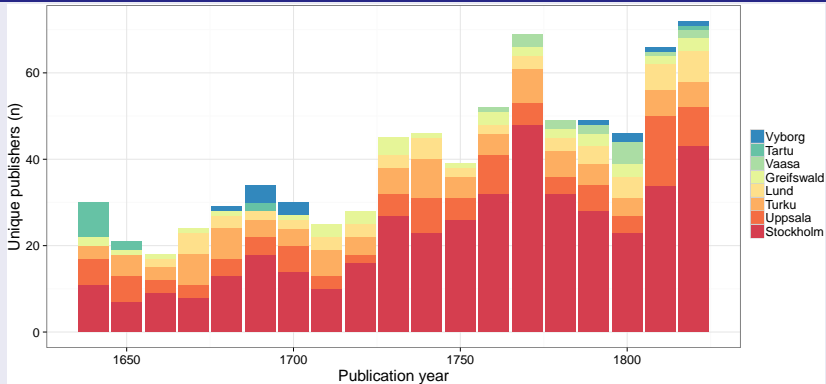
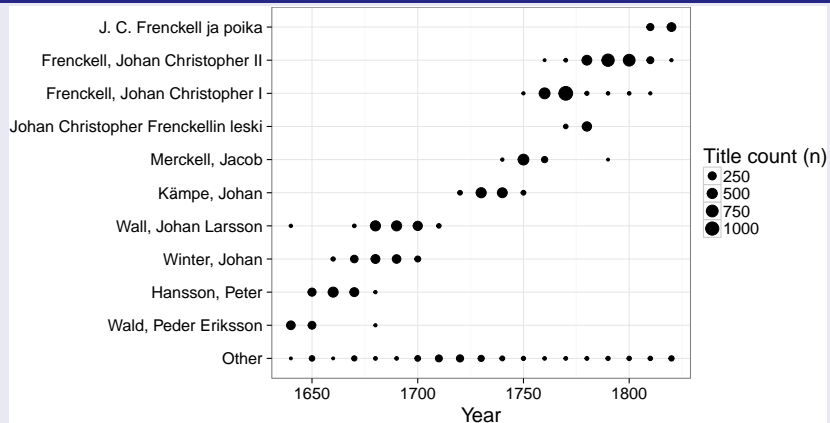2. Publishers in Sweden and Turku

Turku in Sweden: proportions for title count and paper in Swedish University towns

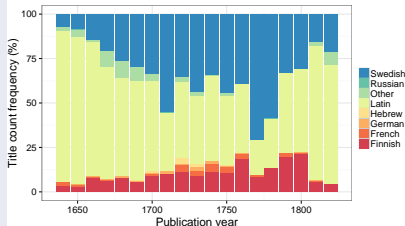Publishers in Swedish University towns (and Finland)
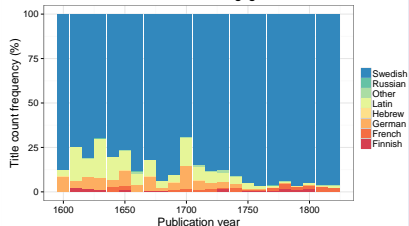
Top publishers in Turku/Fennica

3. Languages and religious texts in Finland

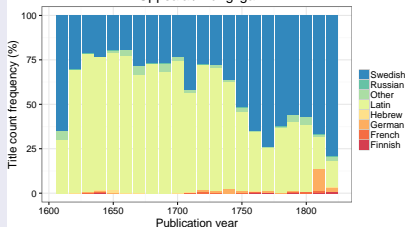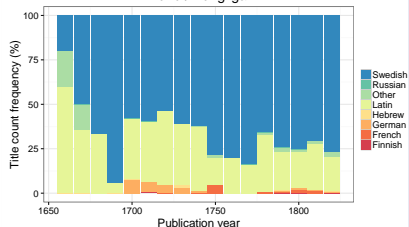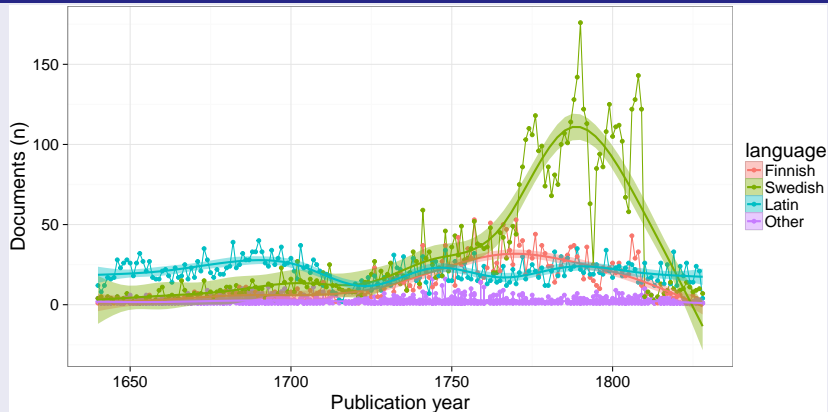# Different languages in Turku, Stockholm, Uppsala and Lund

Topic richness per language (publications in Fennica)

## Devotional literature (catechisms, hymns, prayers, etc.)

Form of literature denoting the advancement of reading in Finland in the 19th century. It has been unclear when devotional literature shows up as a relevant category.

Devotional Literature (Fennica)
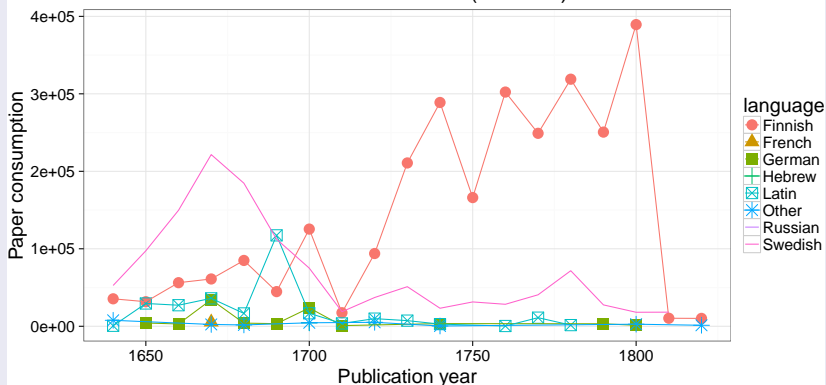
Temporary sermons in Latin and Swedish

▶ Important role in early modern knowledge production. Language of temporary sermons in contrast to devotional literature has not been analysed in Finland (and Sweden).
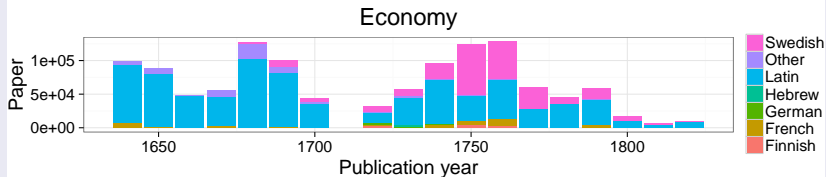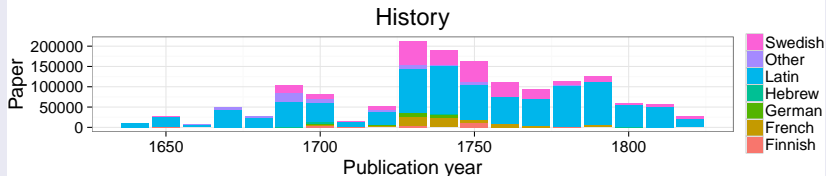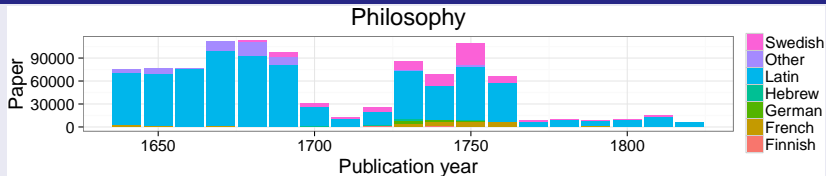

Temporary Sermons (Fennica)
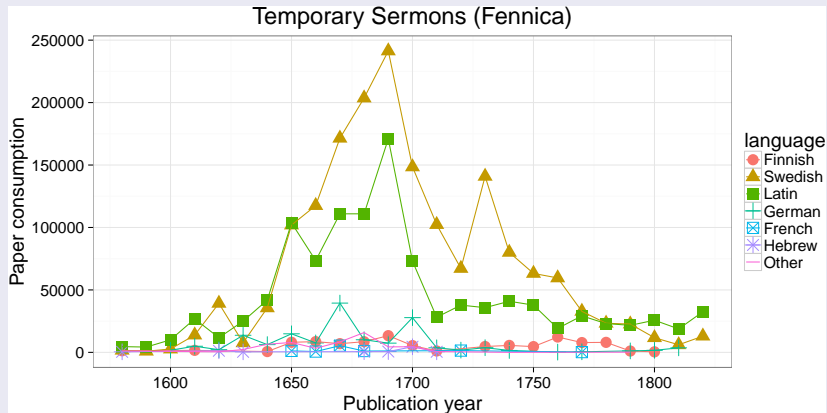
4. University curriculum and Enlightenment in Finland

Dissertation languages in Turku 1640-1828
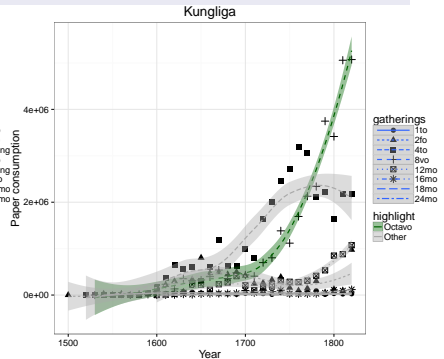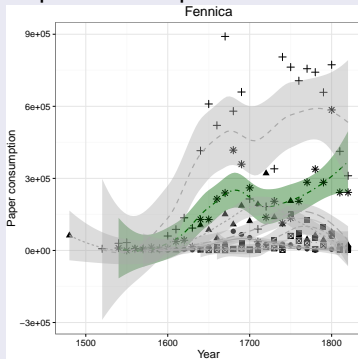

Dissertation languages (Fennica)
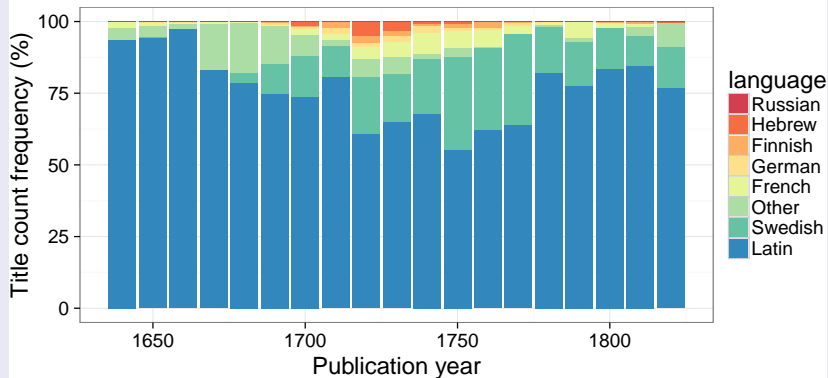
Printing by topics in different languages in Turku

Rise of the octavo sized book as vehicle of Enlightenment

Paper consumption: different document formats over time

Thanks !

Institutional support:

- ► Academy of Finland
- ► University of Helsinki
- ► Digitalia / The Regional Council of South Savo

Data providers:

- ► National Library of Finland
- ► National Library of Sweden

Code infrastructure:

- ► Github
- ► R project

For more info, see:

- ► https://github.com/rOpenGov/fennica

Duplicate publications in Fennica/Kungliga