

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

Mikko Tolonen, Jani Marjanen, Hege Roivainen, Leo Lahti

2016-07-14

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

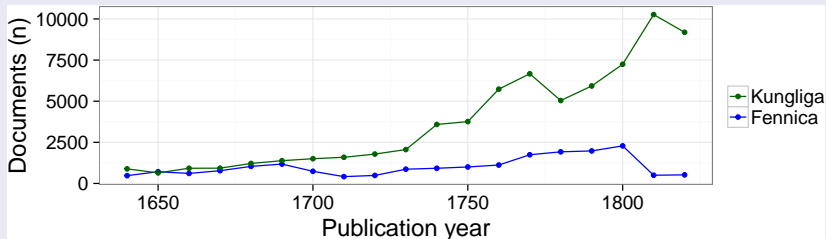
- ▶ 19241 documents 1640-1828

Kungliga Swedish National bibliography

- ▶ 69108 documents 1640-1828

Why this project?

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



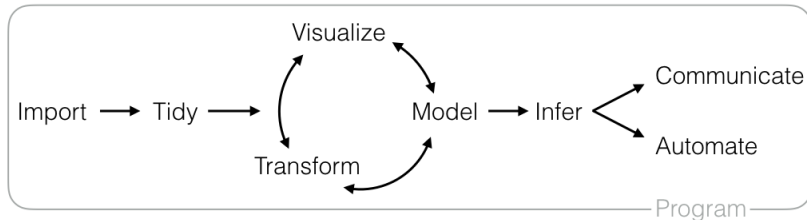
Methods: Open data analytical ecosystem

Customized dedicated R packages for bibliographic analysis combine flexibility with automation

Automated scales well with new data and unforeseen changes; a million documents ~ 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)

Preprocess & Enrich

Clean up messy entries

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

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

Augment data (geocoordinates, gender, ..)

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

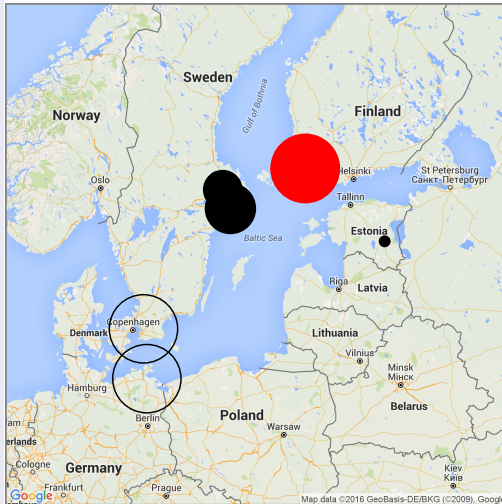
```
## [1] "Finland"
```

1. General trends and political events

[General trends & political events]

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

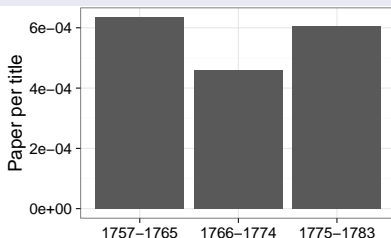
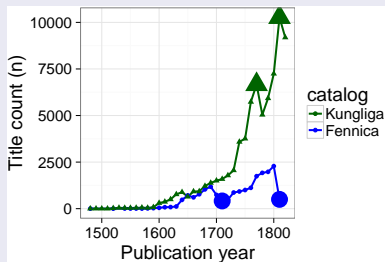
1650



[General trends & political events]

Publishing activity over time

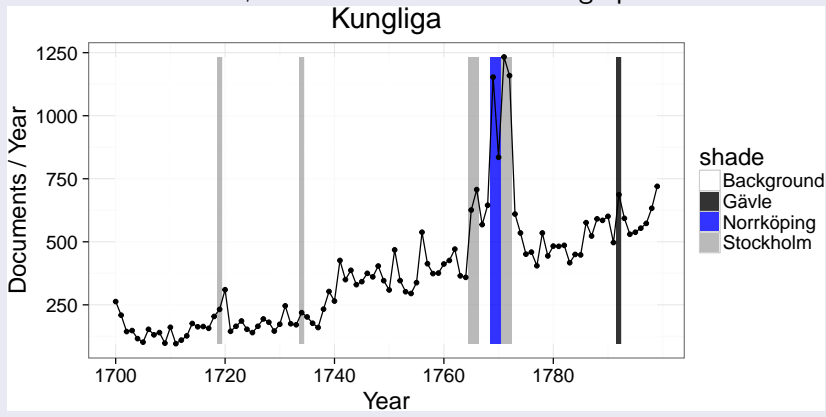
- ▶ 1700-1721 Fennica drop
- ▶ 1760-1770 Pamphleteering plays a crucial role during abolished censorship
- ▶ 1803-1815 Napoleonic wars



[General trends & political events]

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

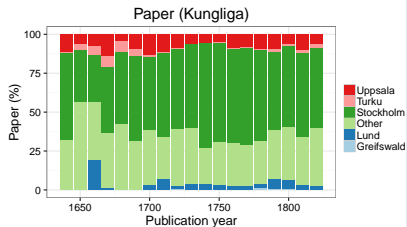
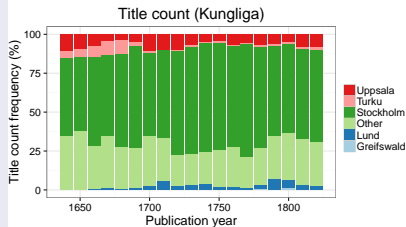
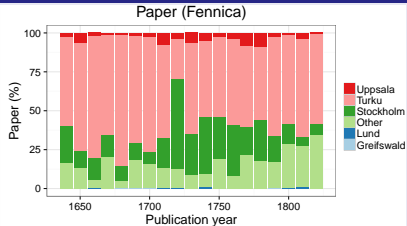
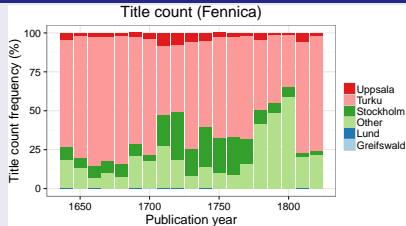
[Publishers in Sweden and Turku]

Publishers in Swedish University towns (and Finland)



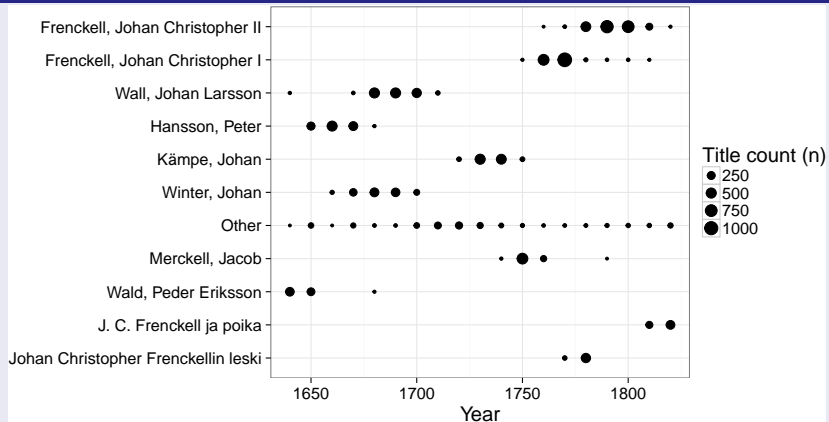
[Publishers in Sweden and Turku]

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



[Publishers in Sweden and Turku]

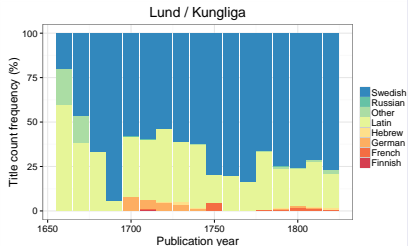
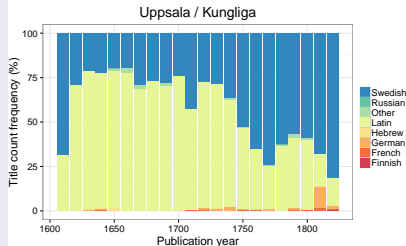
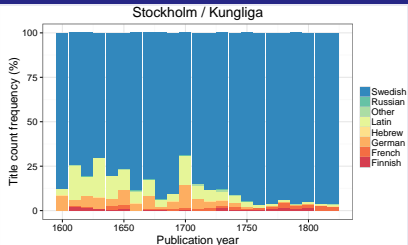
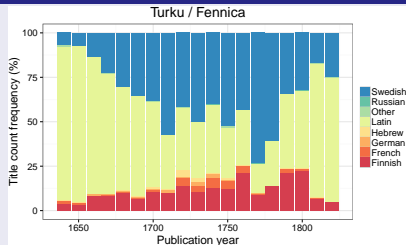
Top publishers in Turku/Fennica



3. Languages and religious texts in Finland

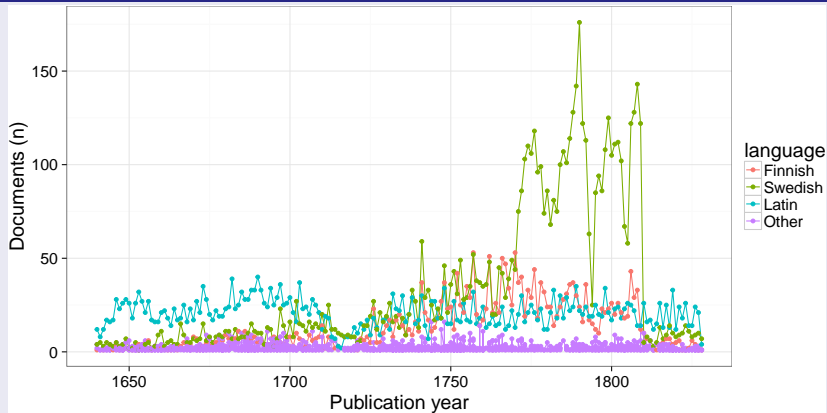
[Languages & religious texts in Finland]

Different languages in Turku, Stockholm, Lund and Uppsala



[Languages & religious texts in Finland]

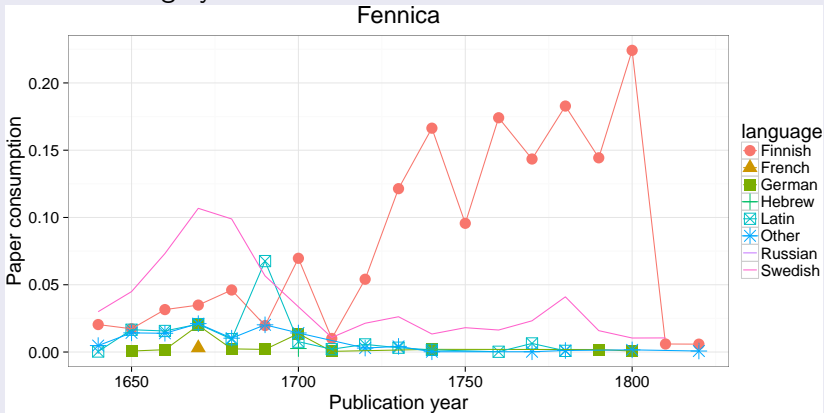
Topic richness per language (Finnish publications)



[Languages & religious texts in Finland]

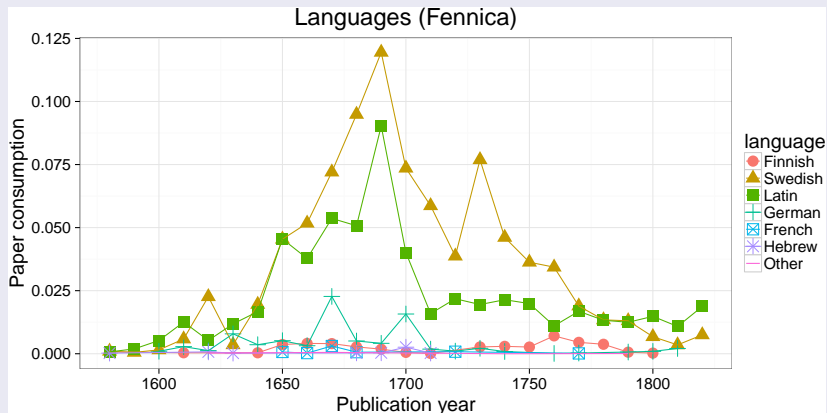
Devotional literature (catechisms, hymns, prayers, etc.)

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



Temporary sermons in Latin and Swedish

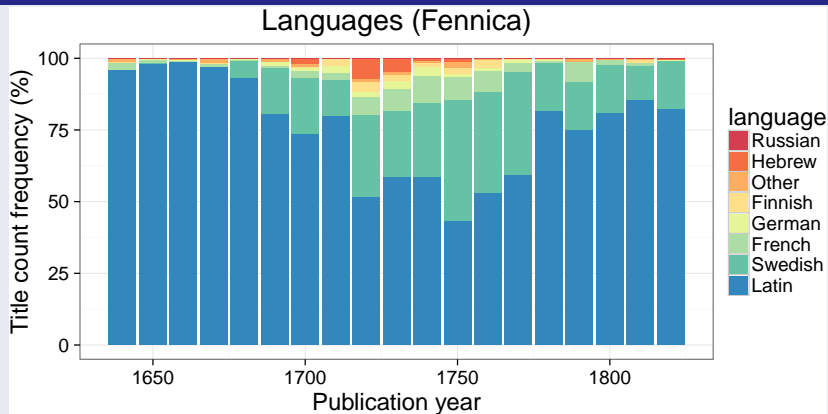
- Important role in early modern knowledge production. It has not been analysed in what language they were in Finland (and Sweden).



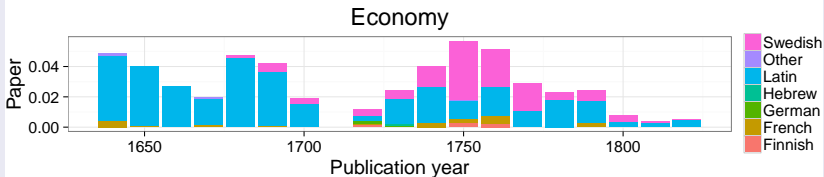
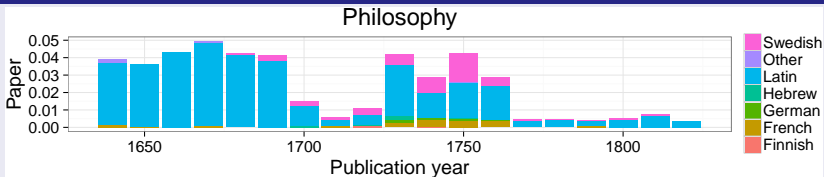
4. University curriculum and Enlightenment in Finland

[University curriculum & Enlightenment in Finland]

Dissertation languages in Turku 1640-1828



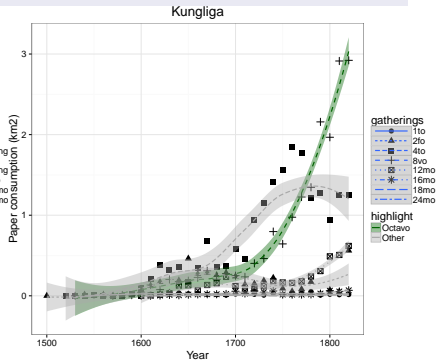
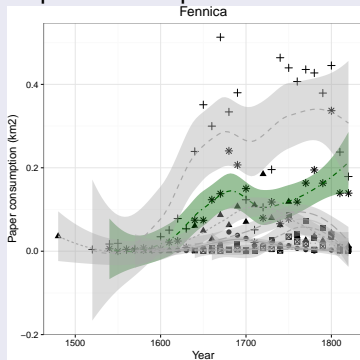
Printing by topic in different languages in Turku



[University curriculum & Enlightenment in Finland]

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

For more info, see:

- ▶ <https://github.com/rOpenGov/fennica>

Duplicate publications in Fennica/Kungliga

