Causes of ethnic segregation in a nineteenth century city
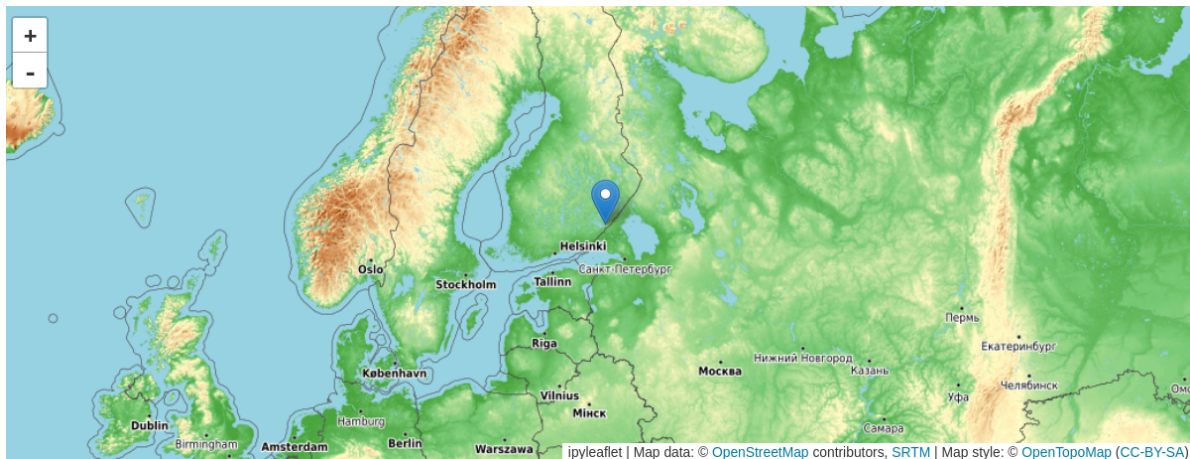
The case of Vyborg

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Introduction

Vyborg, a Karelian city

ipyleaflet | Map data: © OpenStreetMap contributors, SRTM | Map style: © OpenTopoMap (CC-BY-SA)

Vyborg, a Karelian city

- castle founded in the late 13th century
- town privileges 1403

1

TESTI

```python
import numpy as np
import matplotlib.pyplot as plt

x = np.arange(0.001, 2, 0.001)
y = np.log(x)
fig, ax = plt.subplots()
ax.plot(x, y)
plt.show()
```
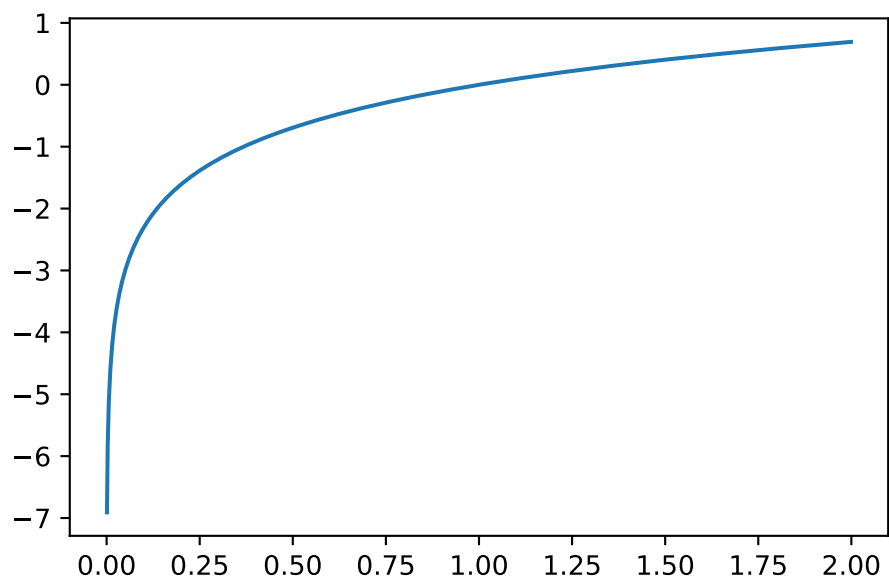

Figure 1: Kuvio 1.

Estimating the size of Russian population

- over 90% of Orthodox in Vyborg Russian
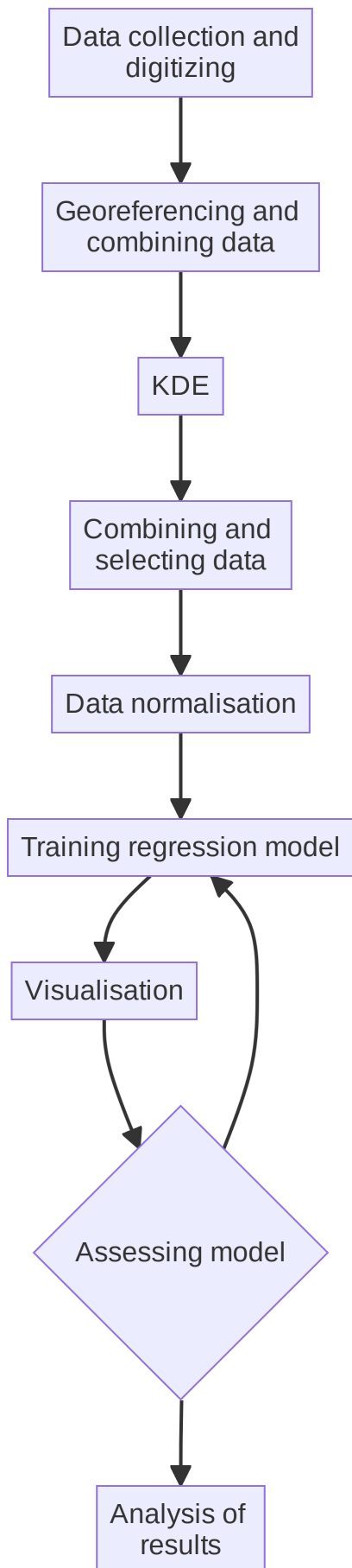
Poll tax records

Table 1: poll tax record columns in 1894

column	description
plot_number	Plot number
taxpayer_men	Men paying poll tax
taxpayer_women	Women paying poll tax
no_tax_men	Men exempt from poll tax
no_tax_women	Women exempt from poll tax
in_russia_men	Men legally residing in Russia proper
in_russia_women	Women legally residing in Russia proper
total_men	Total men
total_women	Total women
independent	Civil servants, entrepreneurs, and financially independent
white_collar	White collar workers
worker_industry	Workers in industry
worker_other	Other workers
servants	Servants
other	Other employment status
non_resident	Resident elsewhere
orthodox	Orthodox
other_christian	Non-Lutheran and non-Orthodox Christian
other_religion	Other religions
draftable	21-year-old males eligible for draft

Estimating the size of Lutheran population

$$P_{Lutheran} = (P_{total\_men} + P_{total\_women}) - (P_{Orthodox} + P_{other\_Christian} + P_{other\_religion})$$

Work flow

Data collection and digitizing

↓

Georeferencing and combining data

↓

KDE

↓

Combining and selecting data

↓

Data normalisation

↓

Training regression model

↓

Visualisation

↓

Assessing model

↓

Analysis of results

Population growth

Table 2: Population growth in key areas 1822–1880

District	1822	1880
Centre	1192	2506
St. Anna	244	117
Vyborg suburb	642	756
St Petersburg suburb	1512	2685