The recovery of NLGIS

R.L. Zijdeman [1,2] V. Tykhonov [1] J. de Vries [1]

[1]International Institute of Social History

[2]University of Stirling

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NLGis

Outline

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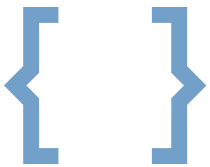
Twitter

- #nlgis
- @rlzijdeman



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NLGis

Meaning and purpose of GIS

- Geographic Information System
- Purpose
  - capture, store & manage data
  - analyze data
  - present data

Dutch GIS: Past, Present, Future

- Kaartgis / NLGIS
- HISGIS.NL (extremely detailed, but not temporal)
- NLGIS-2 (detailed and temporal)

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NLGis

Goals

- To disclose the Historical Database of Dutch Municipalities (HDNG)
- To plot data from HDNG and other sources on NLGIS' maps
- ... and to do so for a period of five years

Components

- Maps server (API)
- Data server (API)
- Tools to combine maps, data and draw maps
  - basic mapping: website
  - advanced mapping: R, QGIS & Python

Sustainability

- Modular approach: separating maps and data
- Use of main stream open source software
  - D3, Leaflet, MongoDB, Python, R
  - Used by major companies (e.g. Google, New York Times)
  - Usable by different types of audiences

Audience

Dual approach:

- No experience with GIS (website)
  - Compare regional differences in a phenomenon
  - Compare changes over time
- Advanced users (familiar with QGIS, Python, R)
  - Retrieve data from HDNG
  - Map other datasets
  - Map outcomes of (advanced) analyses

Website - Demo

Features

- HDNG data selection
- Information box
- Colours
- Upload own data

R - Demo

Features

- Functions: nlgget, nlgmap
- Main packages: jsonlite, rgdal, leafletR

Summary

Features

- easy access to HDNG
- easy access to Boonstra maps
- easy plotting facility of own and HDNG data
- easy access to code through Github

Summary

Resilience

- 5 years of support by IISH
- modular approach
- multiple outputs
- all data driven, rather than technology driven

Perspectives

Outlook

- Extend maps beyond 1997
- Write codebook for Historical Database Dutch Municipalities (HDNG)
- Allow for upload of different kinds of maps (integration with Clariah)

Connecting the dots

The dots:

- Amstedam Code in RDF ← Gemeentegeschiedenis.nl (Hic Sunt Leones!)
- Dutch Historical Census Data ← CEDAR
- Plotting historical data in R ← NLGIS
- Old school maps ← New York Library
- Interactive Plotting ← Christian Graul's LeafletR