

Use of OSM-Data in Survey Statistics State of the Map EU

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Karlsruhe

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Outline

- 1 How to use?
- 2 Geo use cases
- 3 Outlook

ggmap : Interfacing ggplot2 and RgoogleMaps

David Kahle

Assistant Professor
Department of Statistical Science



BAYLOR
UNIVERSITY

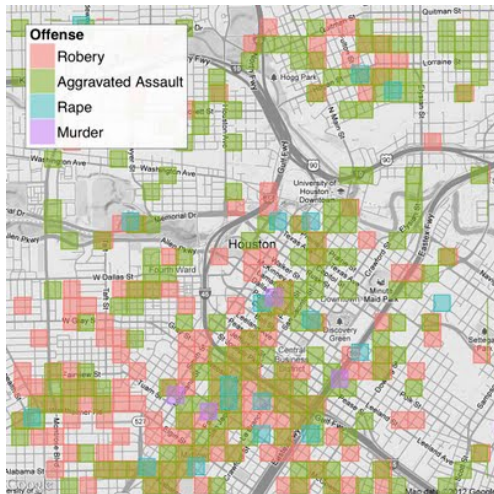
Hadley Wickham

Assistant Professor / Dobelman Family Junior Chair
Department of Statistics



RICE

*use***R!**
June 13, 2012



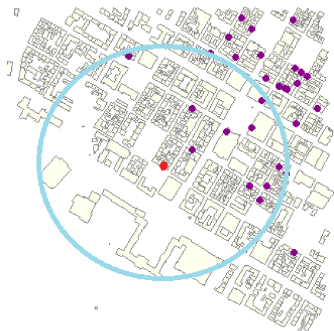
Source: <https://sites.google.com/site/davidkahle/ggmap>

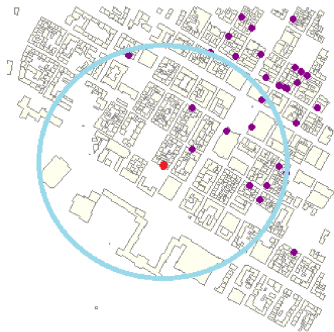
Another very interesting R-package



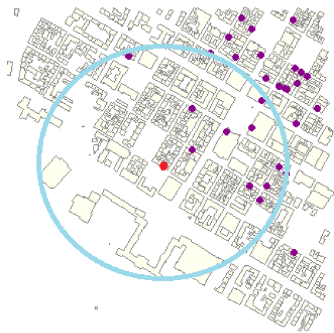
Manuel J. A. Eugster and Thomas Schlesinger (2013):
osmar - OpenStreetMap and R

How to use this?

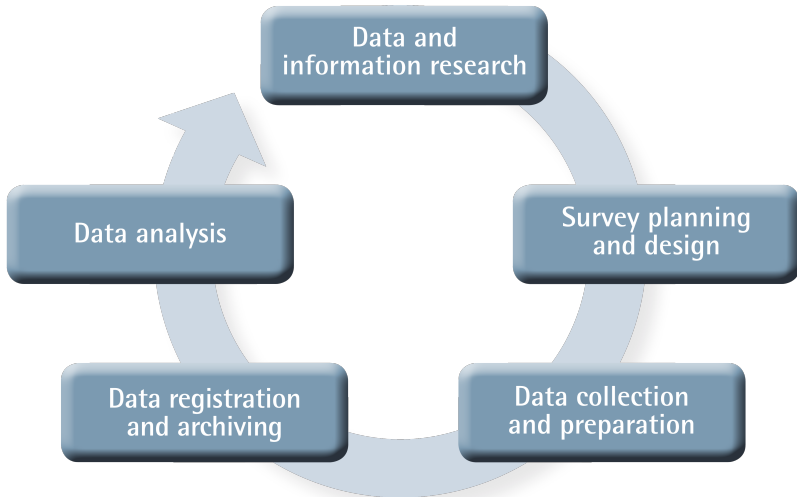


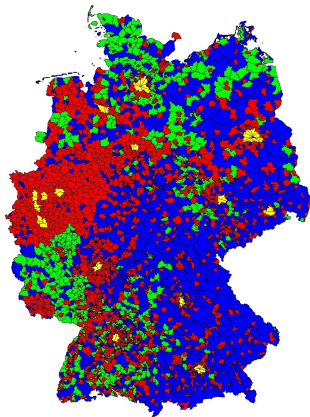


Fast Food Mannheim



Fast Food Mannheim
My office (GESIS)

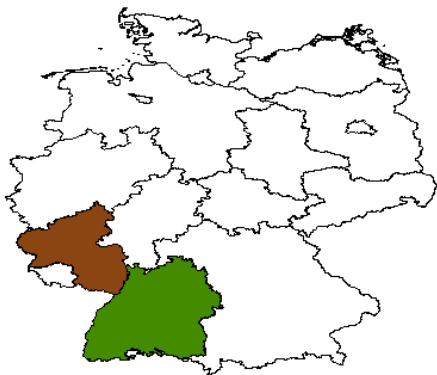


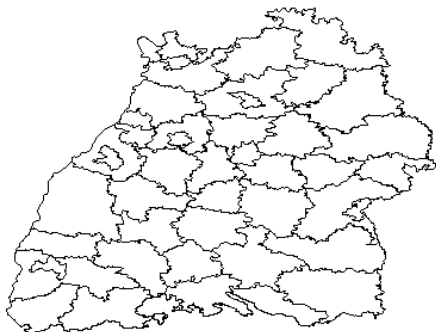


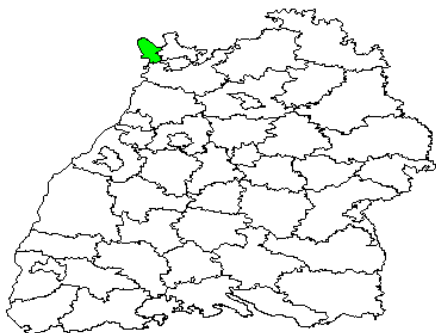
Source: Münnich, Gabler et al. (2012): Stichprobenoptimierung und Schätzung im Zensus 2011











zip code area 68239

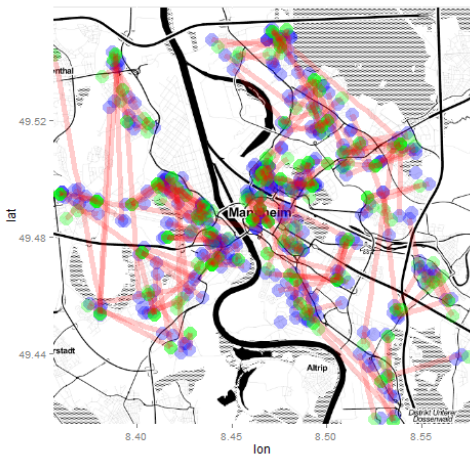


zip code area 68161

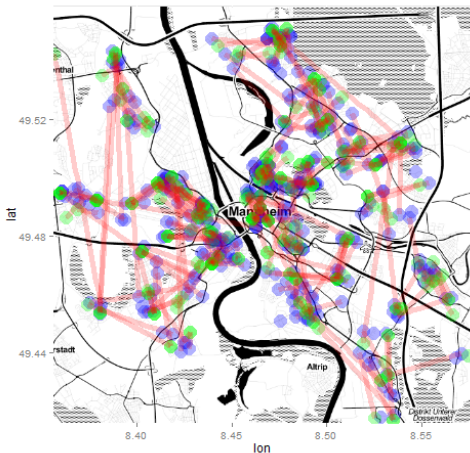


Building size





Geocoded place of living
 Geocoded Kindergarten



Geocoded place of living

Geocoded Kindergarten

Distance

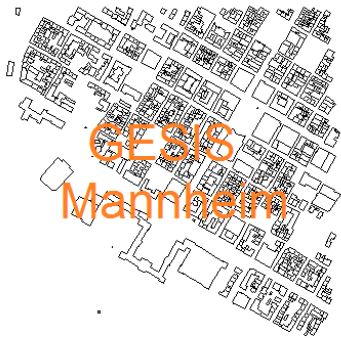
The combination of OSM data and R offers fascinating possibilities for survey statistics:

- Integration of GeoData in planning of survey-designs
- Process control - e.g. in random route methods
- Analysis of nonresponse bias
- Usage of on-site-information for analysis
e.g. Influence of climate data on response
- Visualisation with GeoData
- Publication of informations about the surroundings?

Fields of research

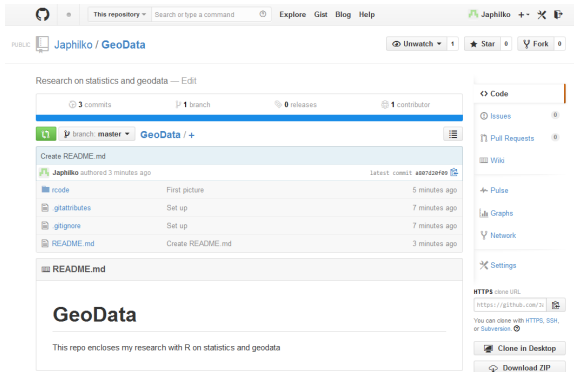
- What is the definition of the surrounding?
- How to deal with data-disclosure?
- How complete is the data?

Thank you for your attention!



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<https://github.com/Japhilko/GeoData>



The screenshot shows the GitHub interface for the repository 'Japhilko / GeoData'. At the top, there's a navigation bar with 'This repository', a search bar, and links for 'Explore', 'Gist', 'Blog', and 'Help'. The repository name 'Japhilko / GeoData' is displayed with 'PUBLIC' status, and statistics for 'Unwatch', 'Star', and 'Fork'. Below this, the repository description 'Research on statistics and geodata' is shown with 'Edit' options. A commit history table lists recent changes:

Commit	Author	Time	Latest Commit
Create README.md	Japhilko	3 minutes ago	48b720f80
rcode	Japhilko	5 minutes ago	
.gitattributes	Japhilko	7 minutes ago	
.gitignore	Japhilko	7 minutes ago	
README.md	Japhilko	3 minutes ago	

The README.md content is visible below the table:

```

GeoData

This repo encloses my research with R on statistics and geodata
    
```

On the right side, there are navigation options: Code, Issues, Pull Requests, Wiki, Pulse, Graphs, Network, and Settings. At the bottom right, there are options to clone the repository via HTTPS, SSH, or Subversion, and to download the ZIP file.