

# GIS in Archaeology

## 03 - Making Maps

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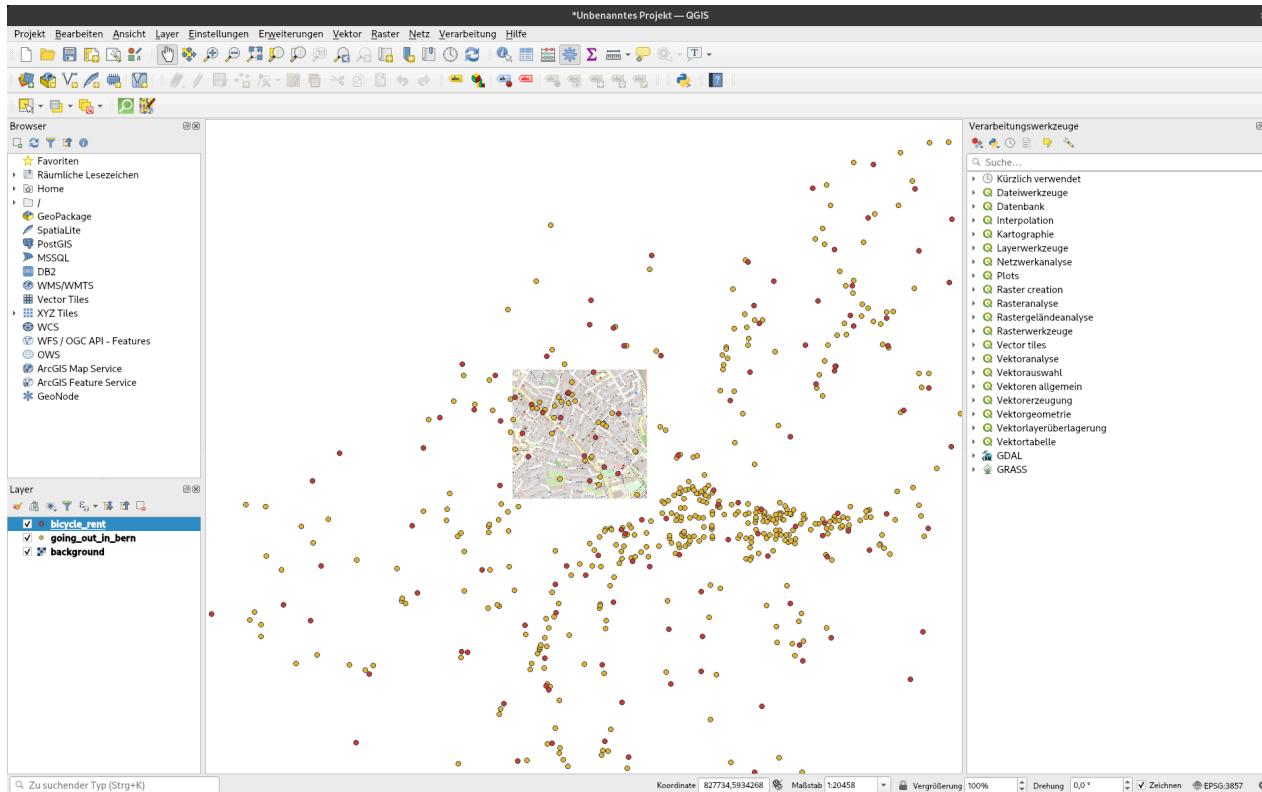
based on [Datapolitan-Training/qgis-training](#)

You can download a [pdf of this presentation](#).

# Let's Get Started

1. [Click this link](#) and download the 'going\_out\_in\_bern' data to your desktop
2. [Click this link](#) and download the csv data to your desktop
3. [Click this link](#) and download the background map also to your desktop
4. Open QGIS
5. Start a new project and Add all layers

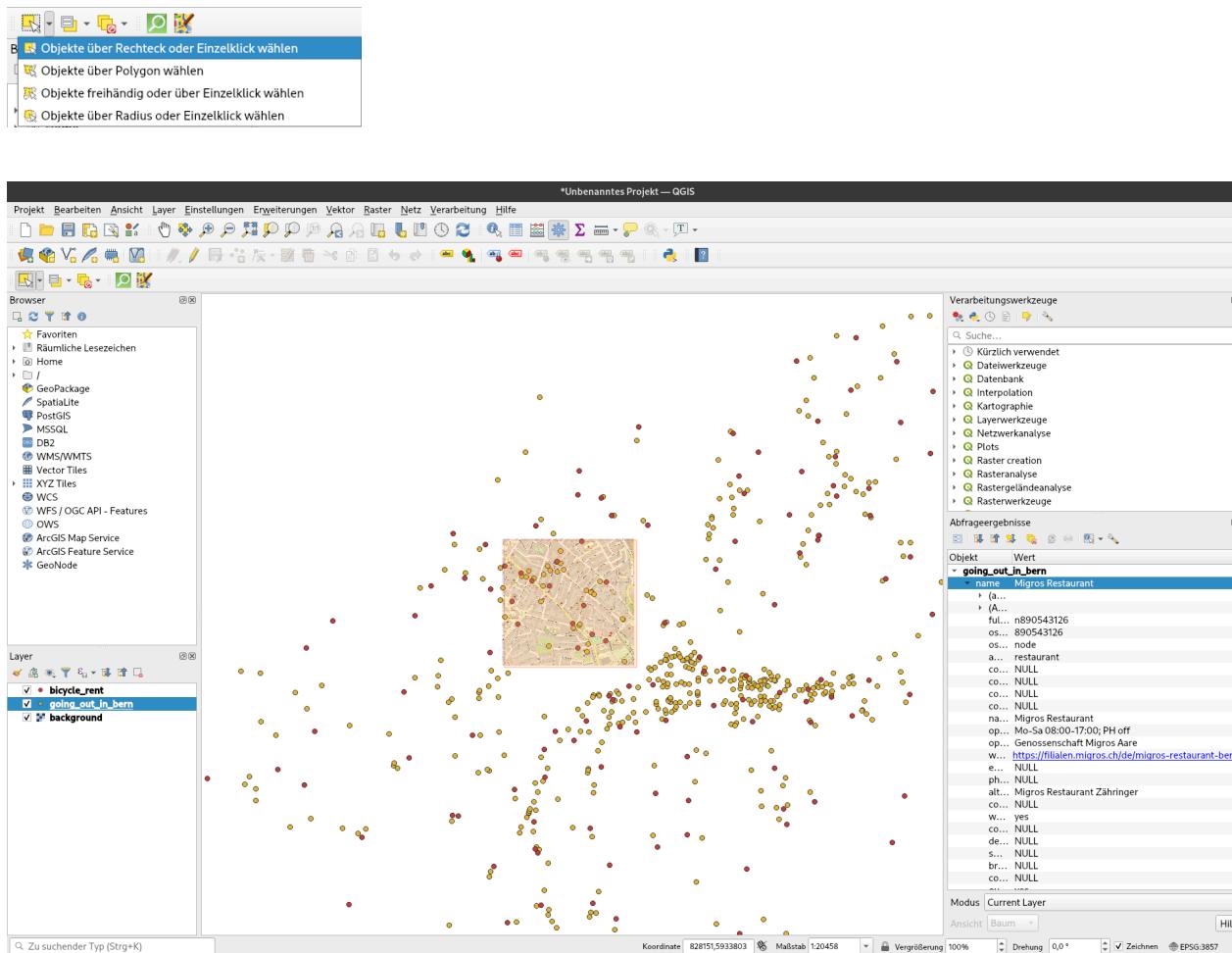
# Selecting Points



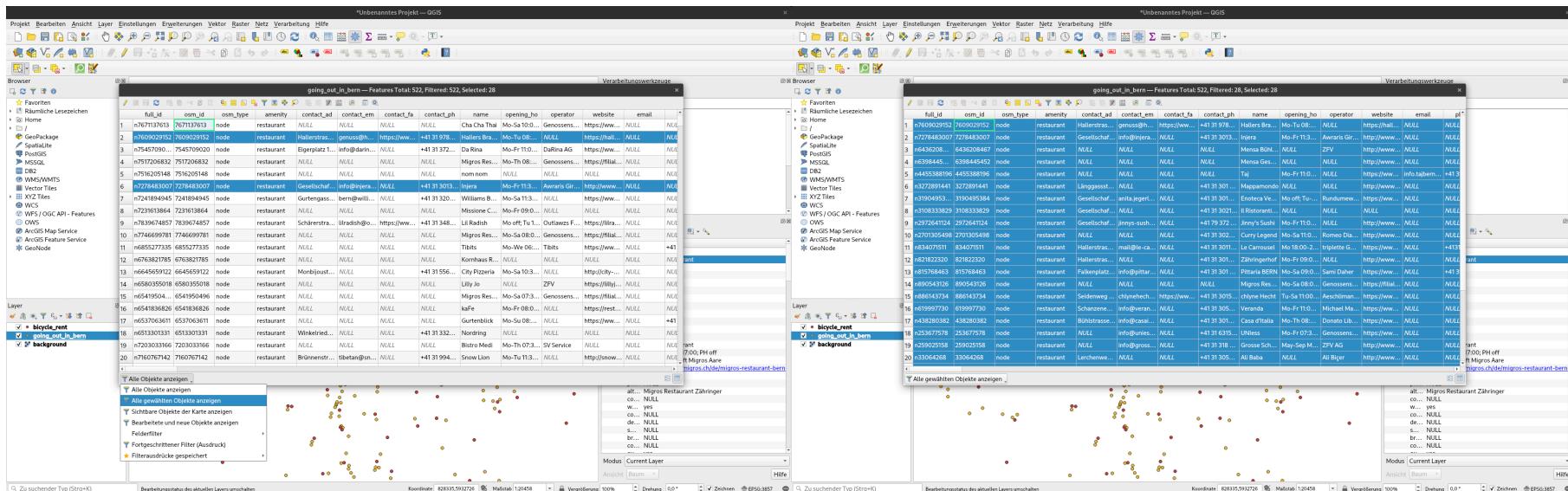
# Selecting Points



# Selecting Points



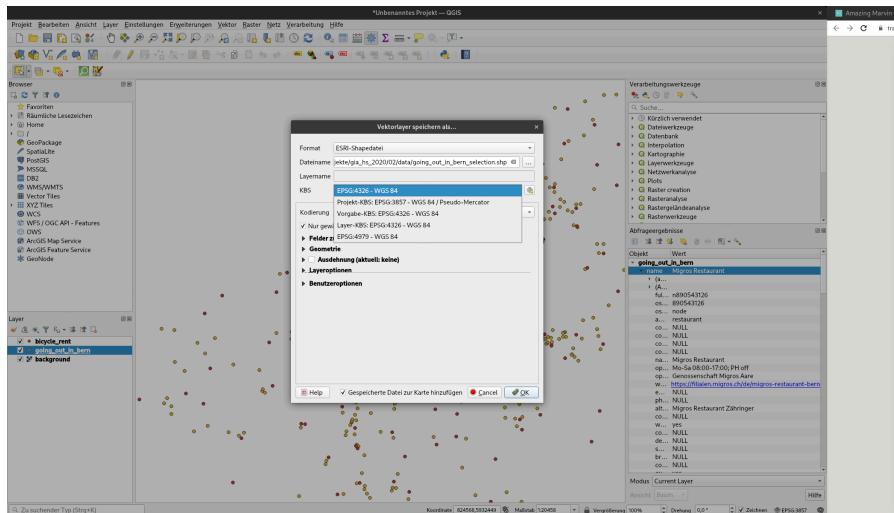
# Selecting Points - Attribute Table



# Selecting Points - Saving Selection

# Selecting Points - Saving Selection

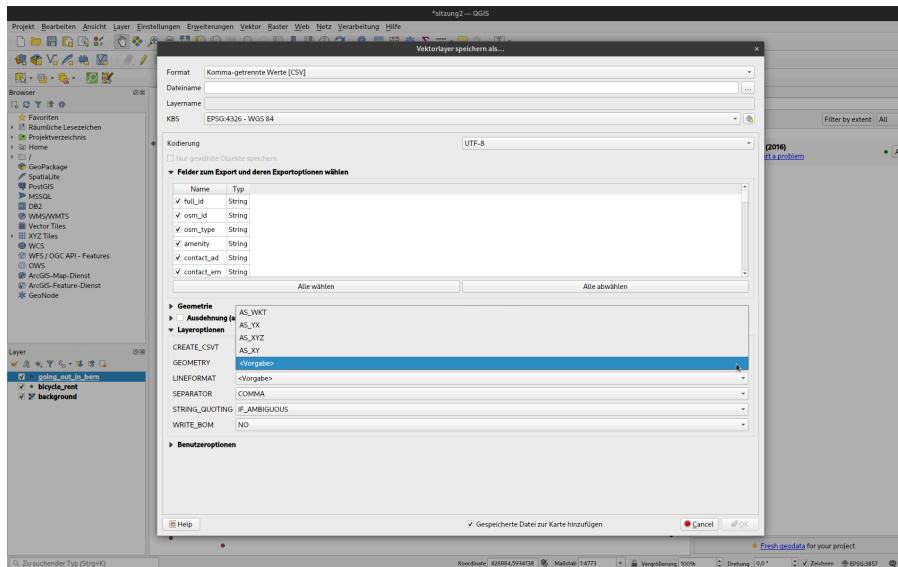
- If we wanted to reproject the data into a different CRS, we could do that here



- Pick the new projection in the CRS field (like when we imported the CSV)
- You can also export your CSV file as shape file - making further adding to the map easier

# Selecting Points - Saving Selection as CSV

- If we wanted analyse our data using eg. statistical software, we also can export as csv.

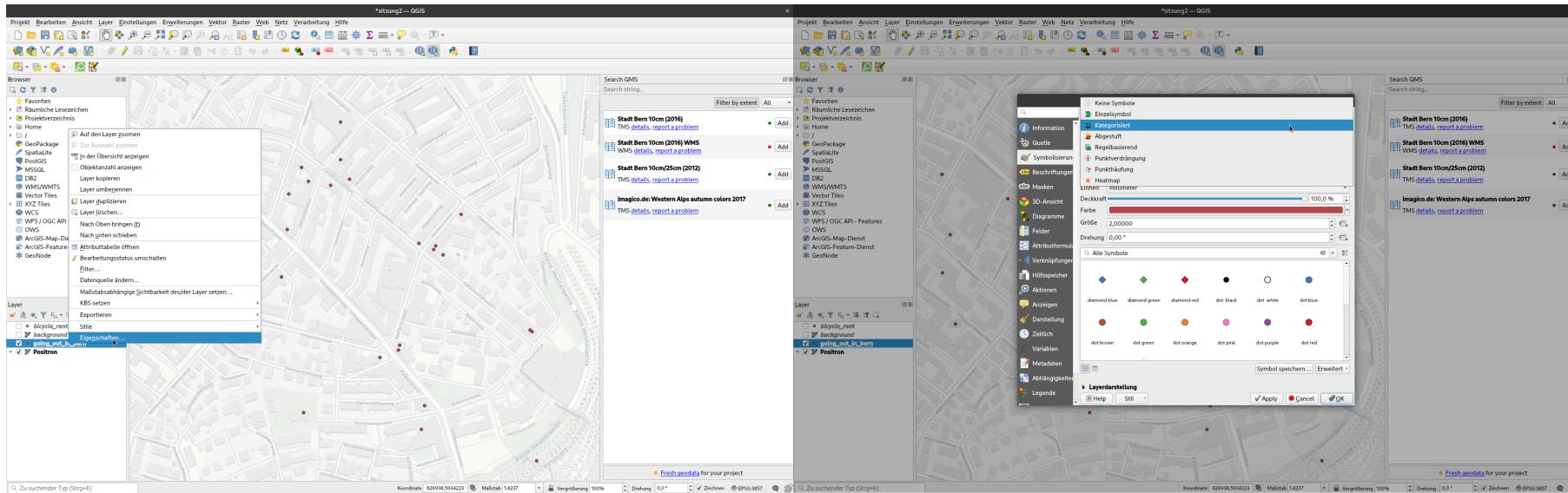


- If you like to export the coordinates, you can select that at 'Layer options'

# Styling points according to data

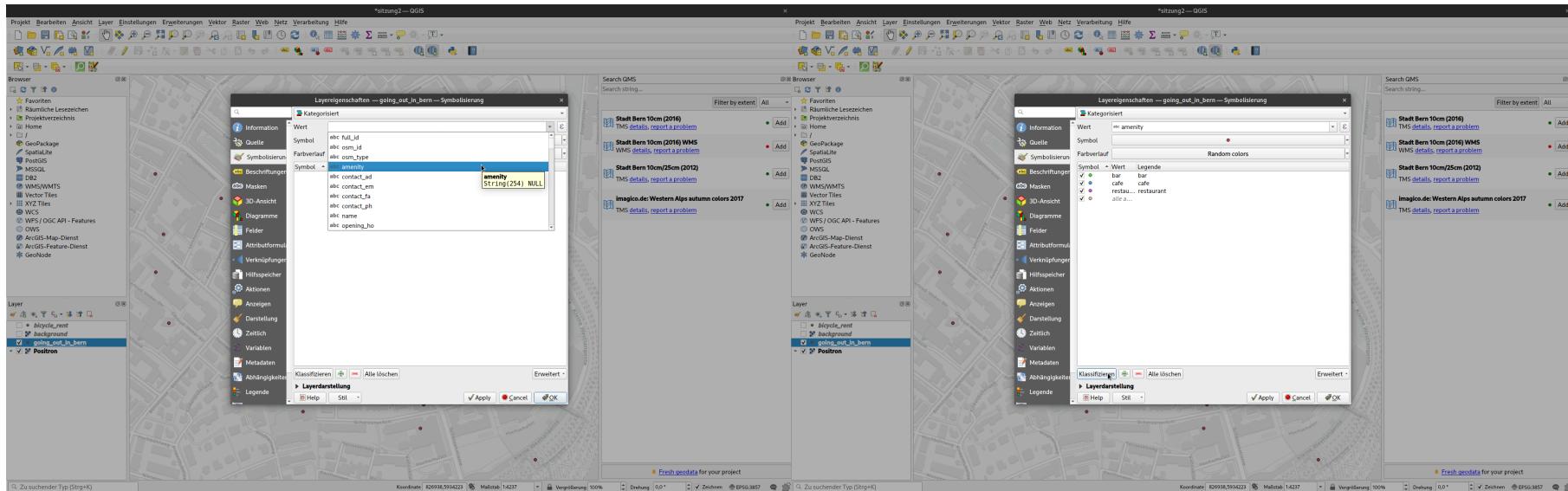
- can be used to map different categories within a vector dataset
- is available for all kinds of vector data

# Styling points according to data



- Select Properties
- Go to Symbology and change 'Single Symbol' to 'Categorised'

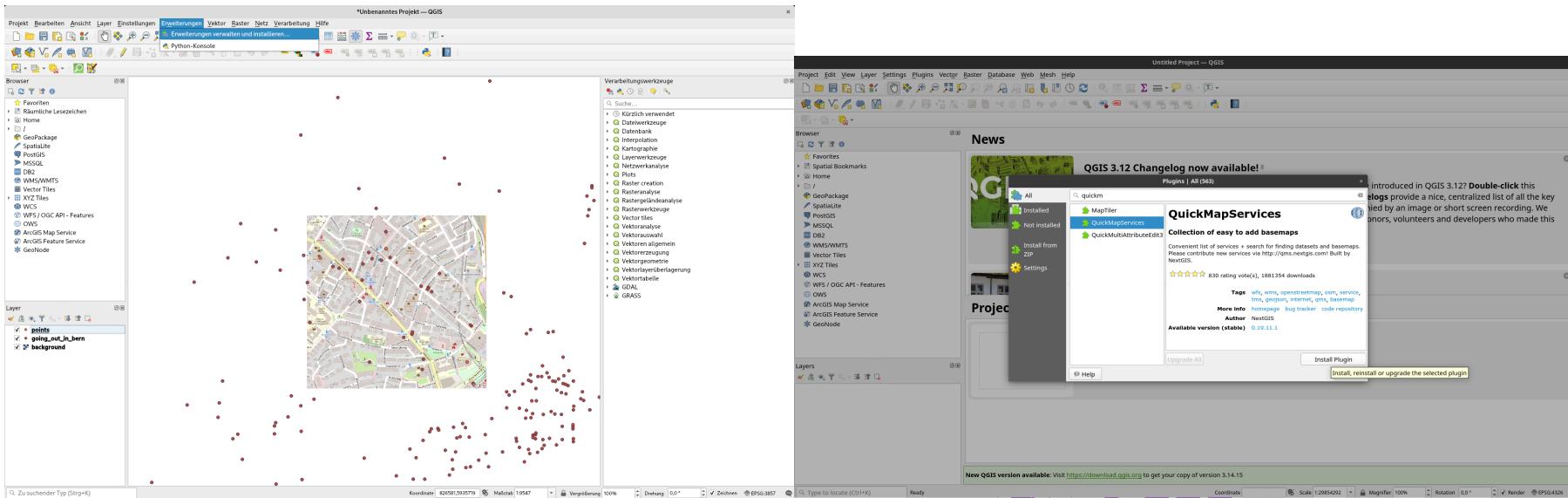
# Styling points according to data



- Select the data (column) that represents your categories
- Select 'Classify'
- Enjoy the result
- You can the colors according to your needs

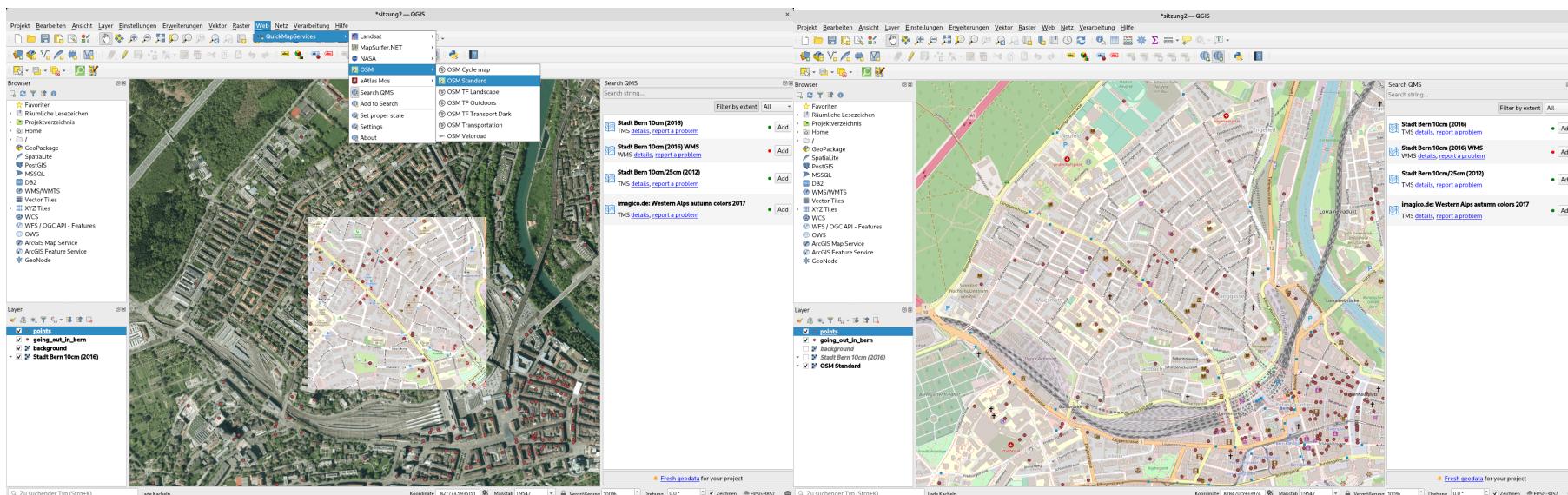
# Installing Plugins

- QGIS has many third party functionality available
- We will use some of them in the course
- let's get some Background with QuickMapServices

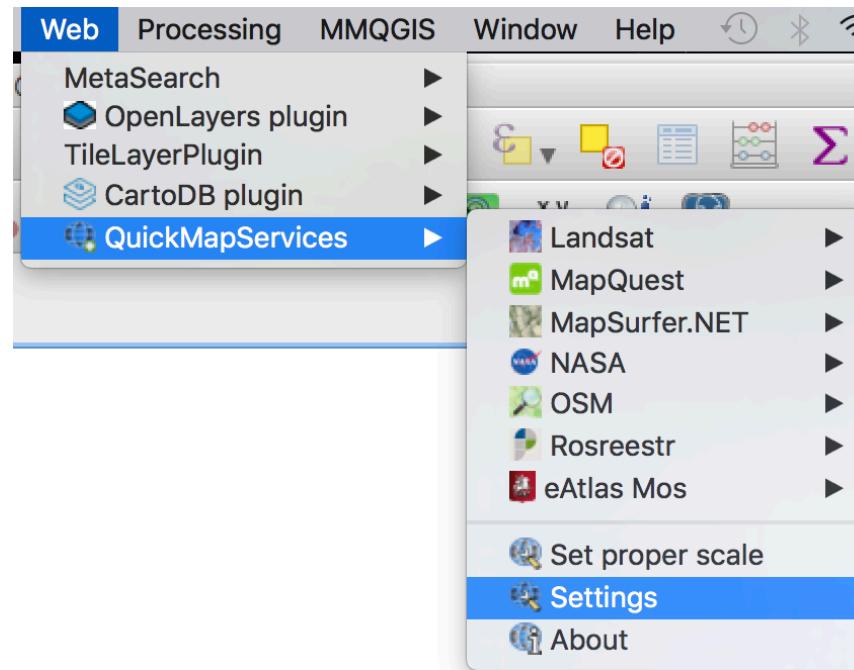


# Basemaps (QuickMapServices)

- Satellite imagery
- Map services
- ...
- Fast and easy way to get background maps



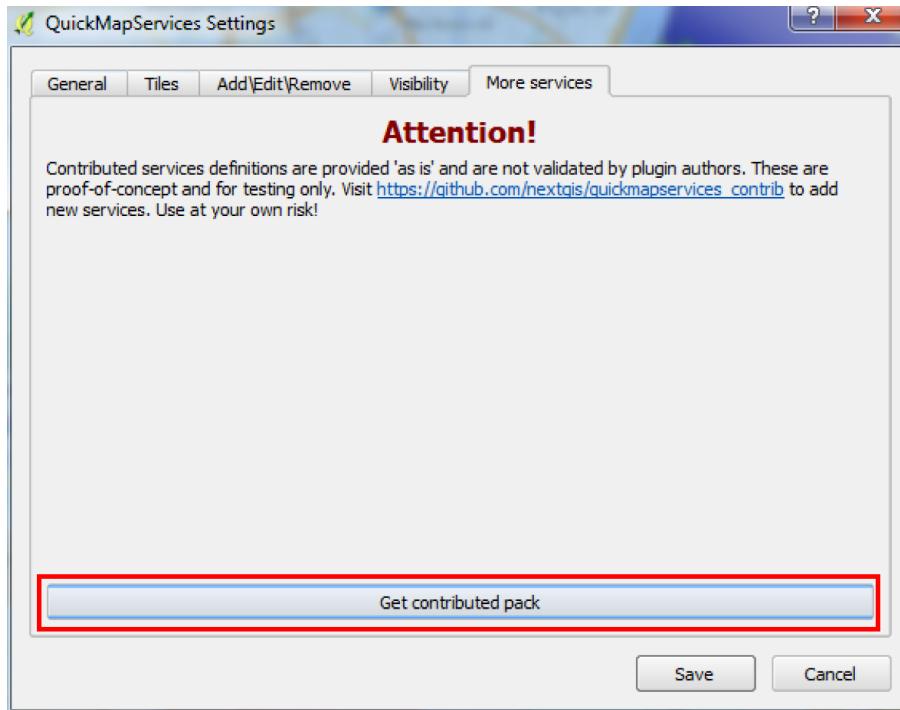
# Setting Up QuickMapServices Plugin



- Go to the Settings Menu

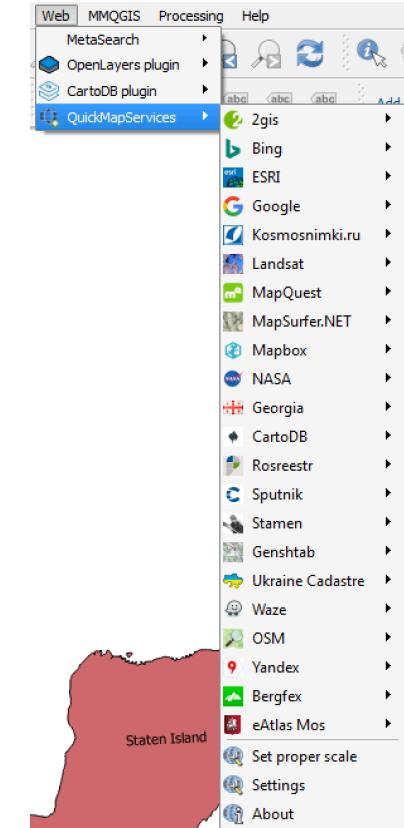
# Setting Up QuickMapServices Plugin

- Get the contributed packs



# Setting Up QuickMapServices Plugin

- Revel in all the beautiful base maps



# Choosing a Base Map

- Think about what someone reading your map needs to see for context
- Think about how the base map interacts with the data on your map

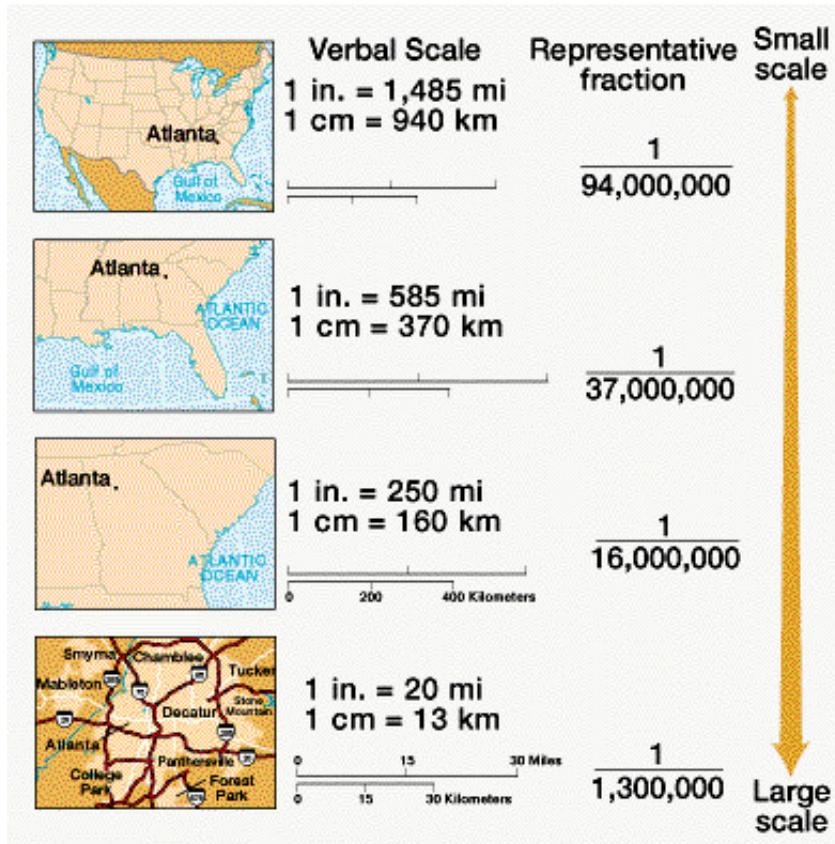
# Base Maps - Hierarchy

- If your data is the most important part of the map, make sure it looks more important than the base map
- Avoid base maps that strongly emphasize features that aren't relevant on your map

# Base Maps - Colors

- Choose base maps with colors that complement the colors on your map
- The contrast between the color on your map and the color on the base map should be enough to make your layers clearly visible

# Base Maps - Scale

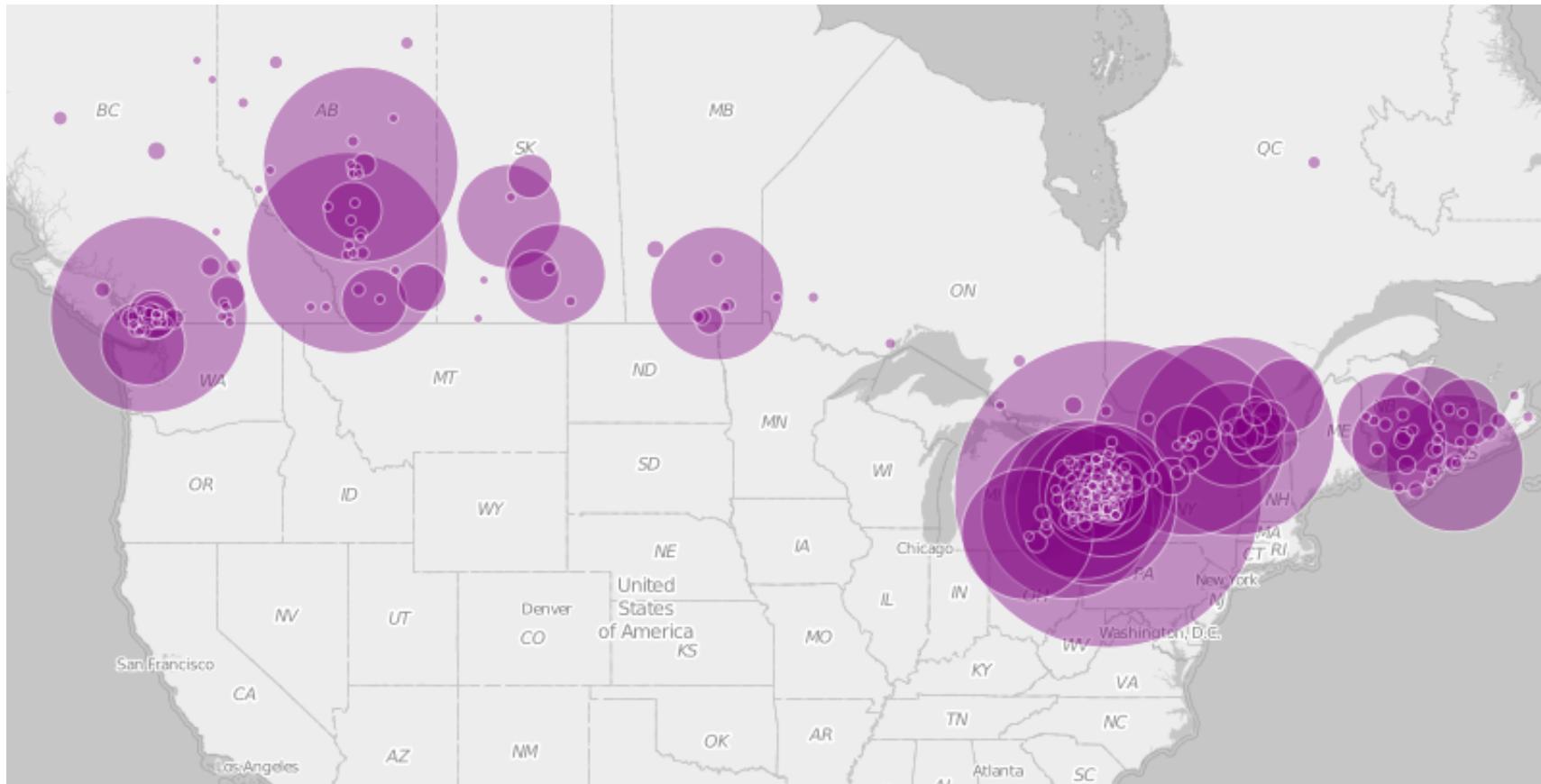


Source: [http://go.owu.edu/~jbkrygie/krygier\\_html/geog\\_222/geog\\_222\\_lo/geog\\_222\\_lo04.html](http://go.owu.edu/~jbkrygie/krygier_html/geog_222/geog_222_lo/geog_222_lo04.html)

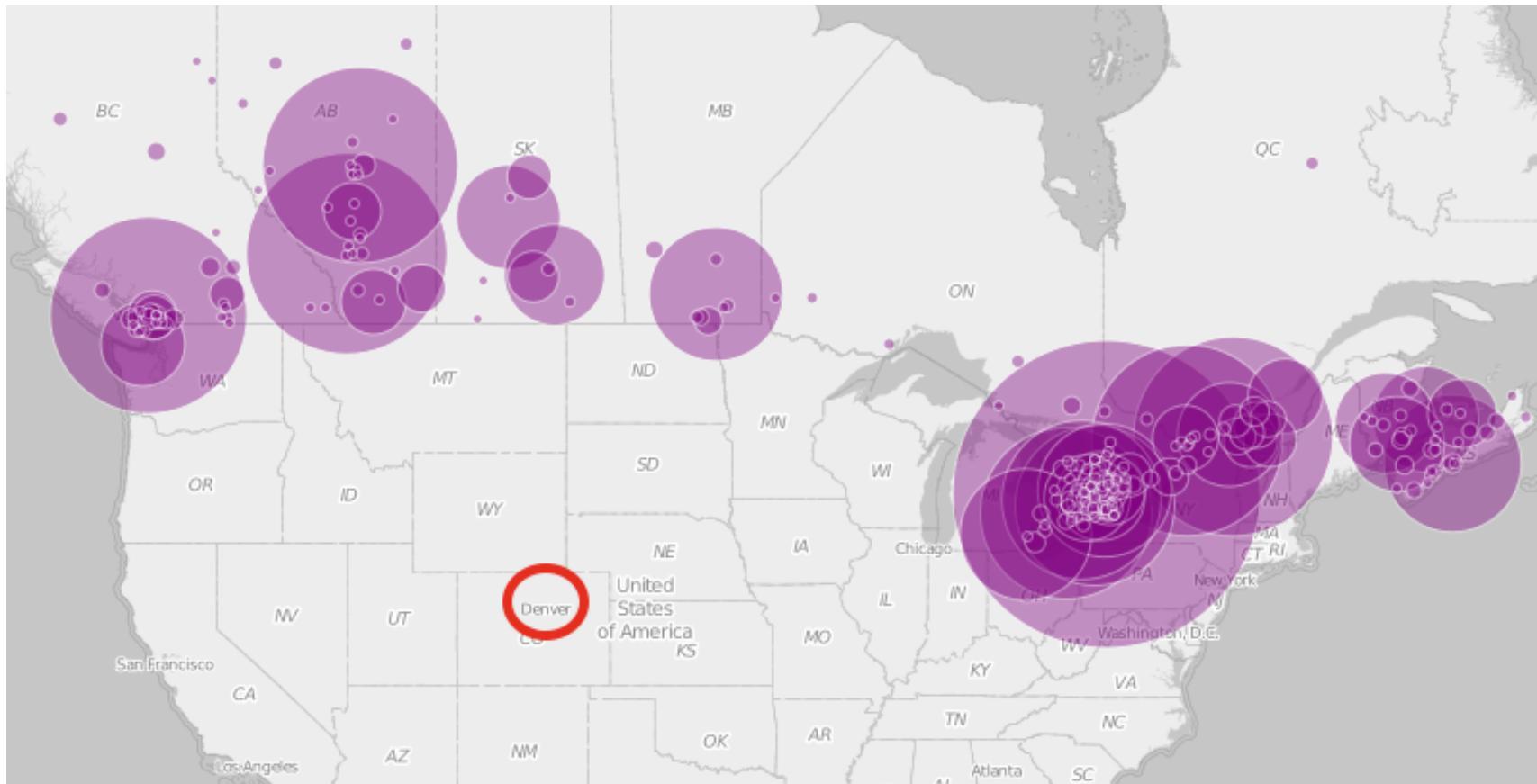
# Base Maps - Scale

- Base maps show different levels of detail at different scales
- Make sure the level of detail is appropriate to your map

# Scale



# Scale



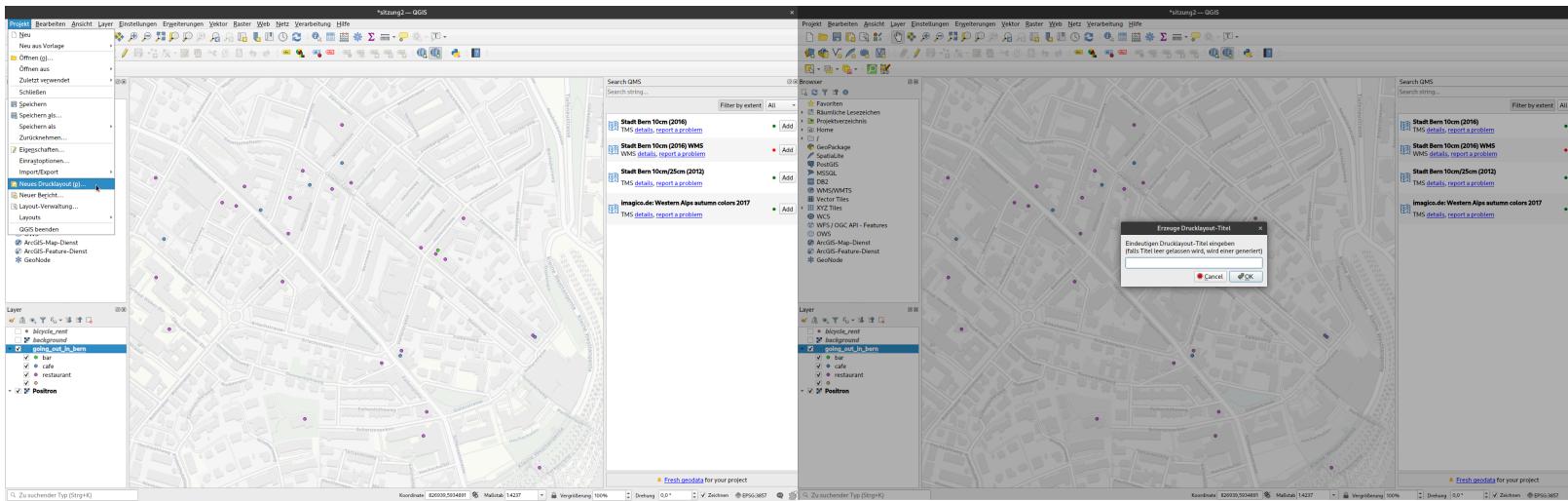
# Your Turn

- Find a good base map for your data
- Think about hierarchy, color, and scale
- Don't be afraid to play around

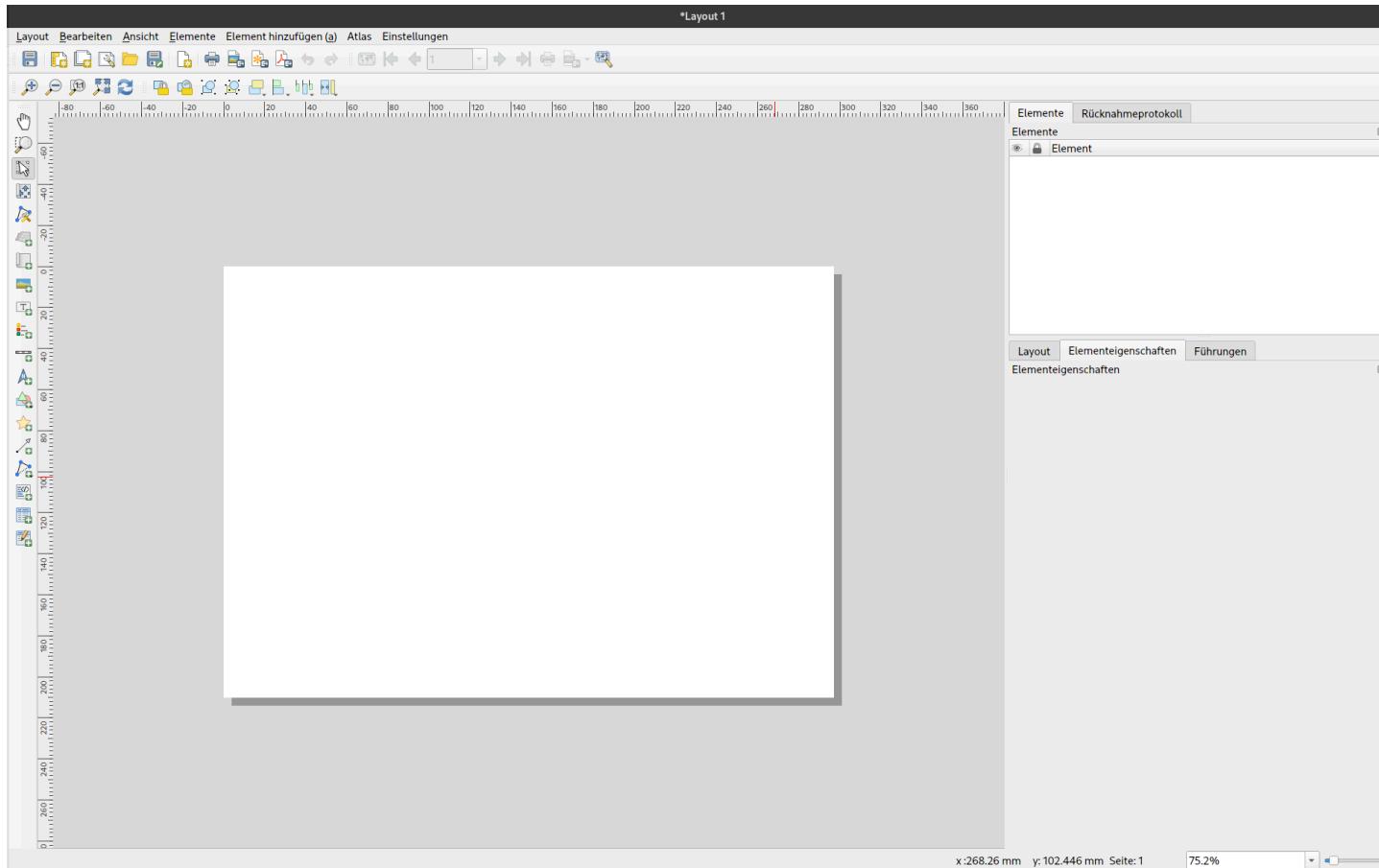
# Print Composer

- How you make exportable and printable maps in QGIS
- Able to add map elements (legends, scales, text, etc)

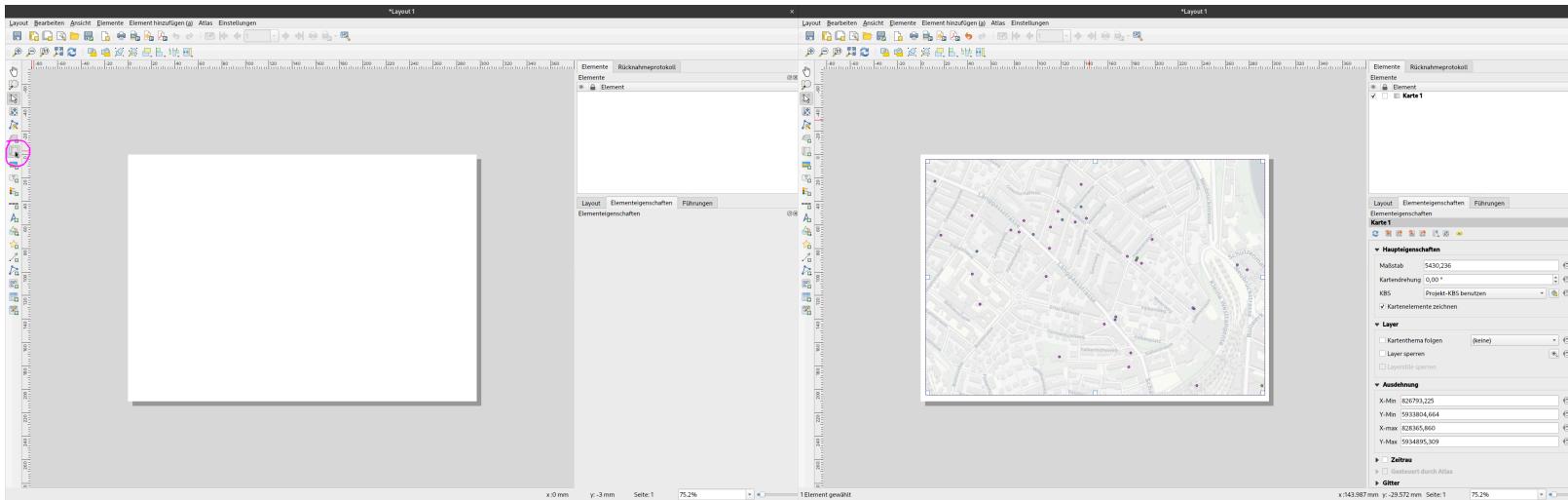
# Create a new print composer



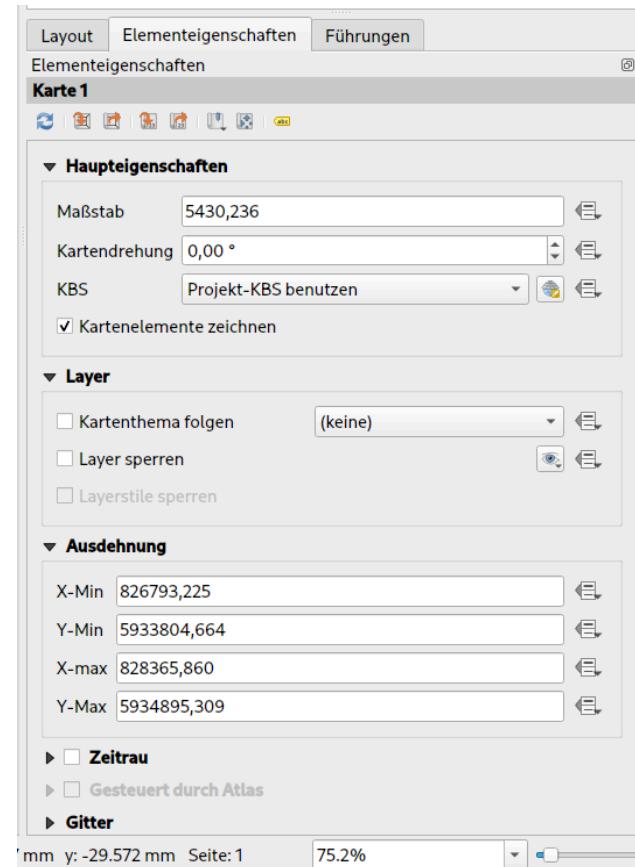
# You are greeted with a blank slate



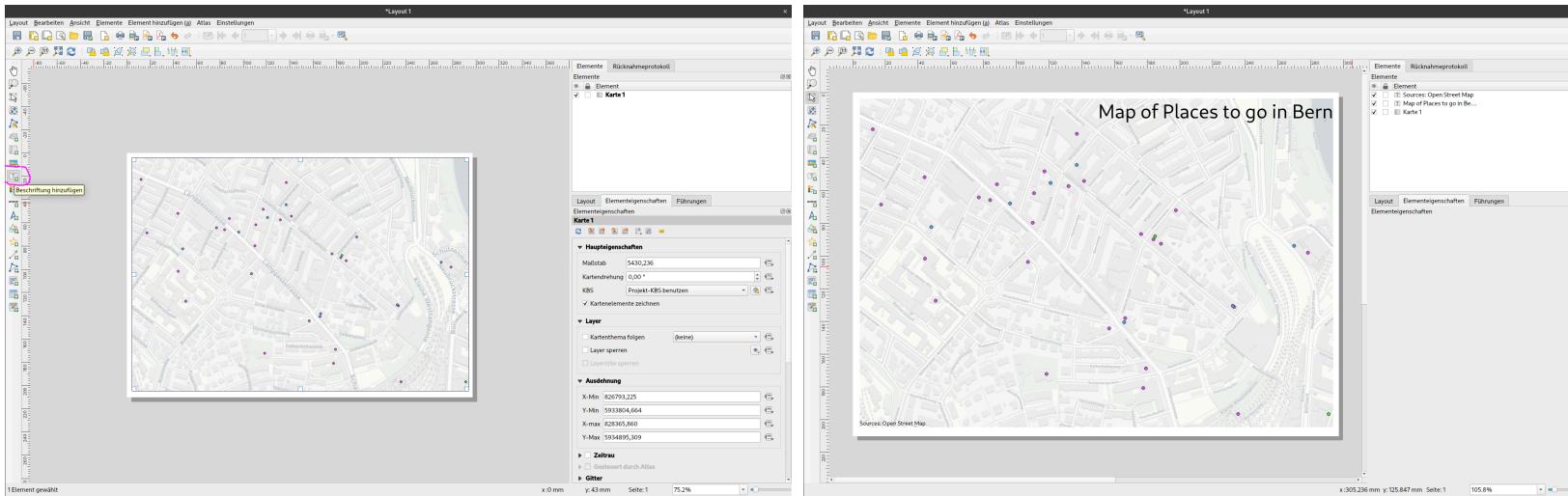
# Add New Map tool will add your current map



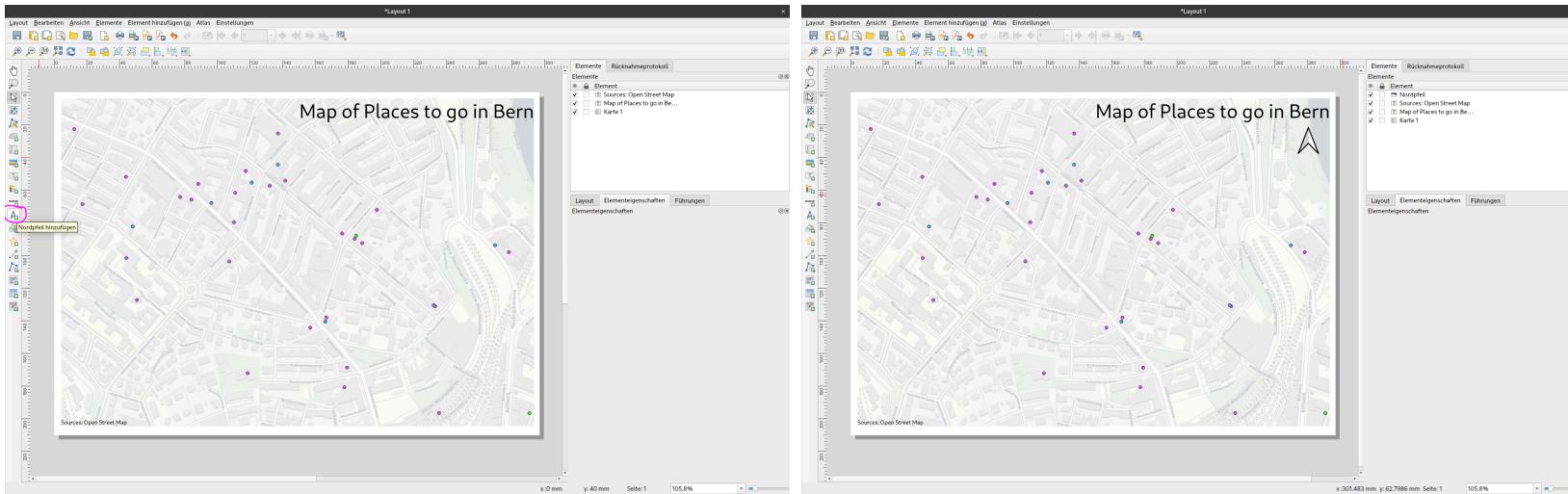
# Customize item properties on the right



# Don't forget a title and your sources

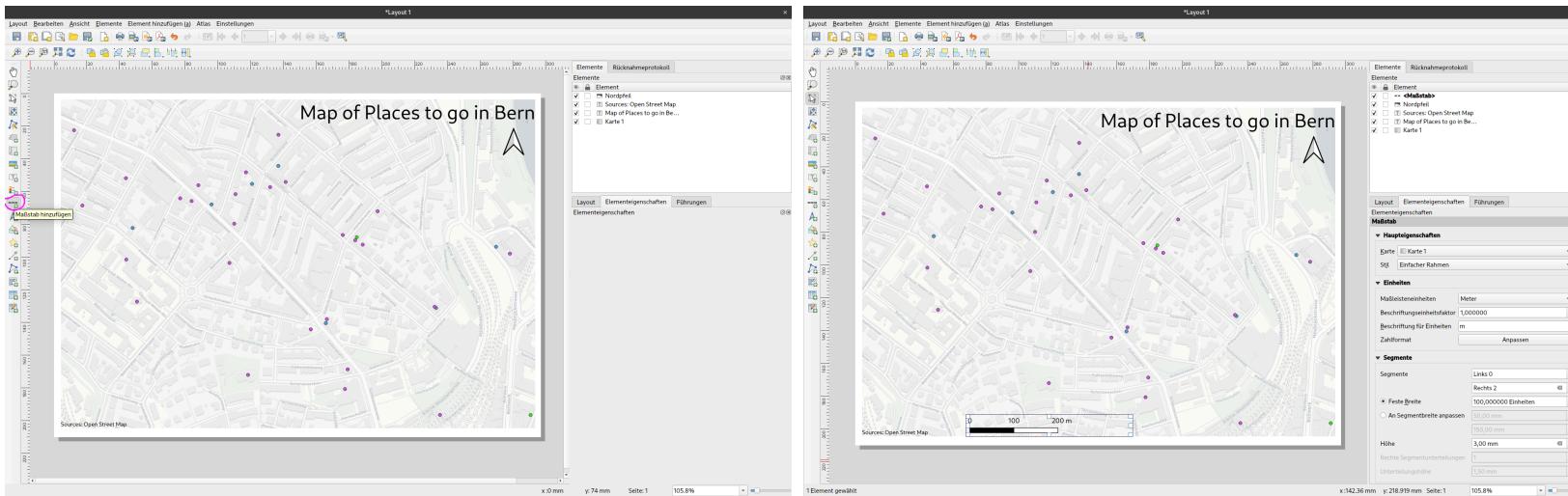


# Adding North Arrow



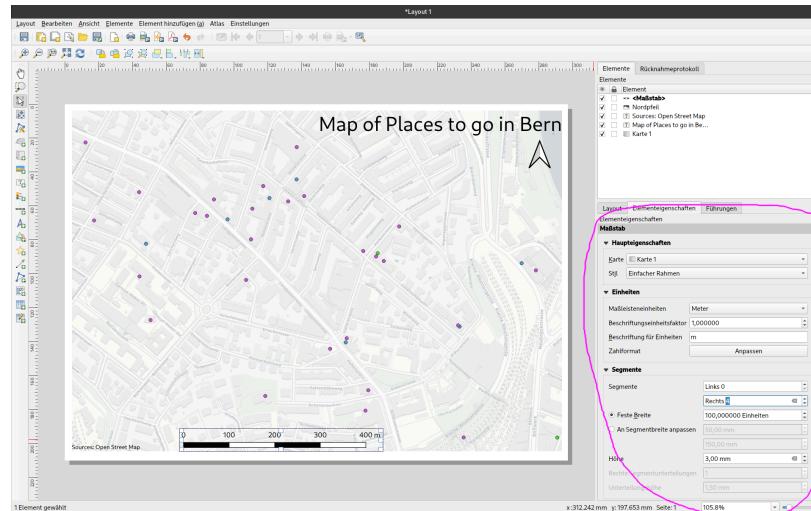
- You can select from multiple arrow types

# Adding Scale bar

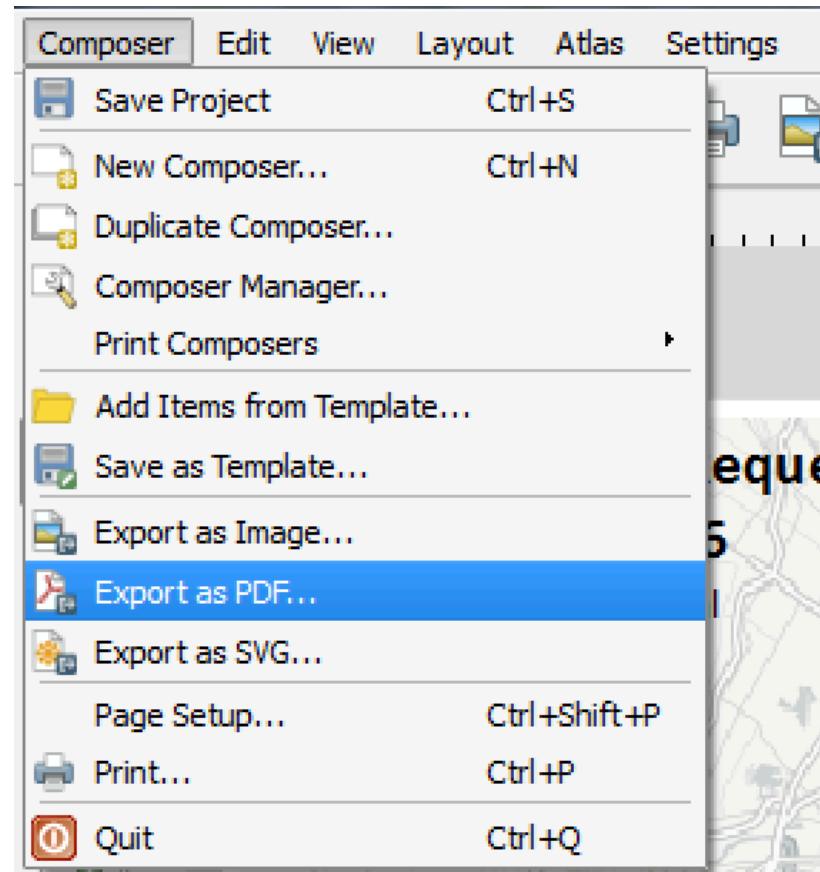


# Adding Scale bar

- You can also select and customize different styles of scale bars



# There are a few exporting options



Now you can share your map or print it



# Print Composer Problems

- Map extent -> "Use current map extent"
- Moving map around -> Adjust with arrows

# What We've Covered

- Selecting features
- Exporting data
- Making Maps

# Homework

- Filter for service requests in your borough
- Try and find something interesting
- Change the style of the point, either to a different shape, color, or icon
- Export your selection as a new shapefile
- Get a background map
- Make a decent Map
- Send me an exported map (png or pdf)

# Any questions?



You might find the course material (including the presentations) at

<https://github.com/BernCoDALab/gia>

You can see the rendered presentations at

<https://berncodalab.github.io/gia>

You can contact me at

[martin.hinz@unibe.ch](mailto:martin.hinz@unibe.ch)

Source: <https://www.instagram.com/sadtopographies>