## Battle of Berlin Neighborhoods

Capstone Project

## Motivation

Customers are interested in opening up restaurants of different types and nationalities. So the distribution of restaurant types in Berlin neighborhoods is of interest. First, are restaurants, especially international ones, common for that area? Which ones are the most common types (and therefore maybe oversaturated)? How diverse is the distribution of restaurant types? And lastly, how similar are the neighborhoods based on their restaurant landscape?

# Analyzing the Neighborhoods

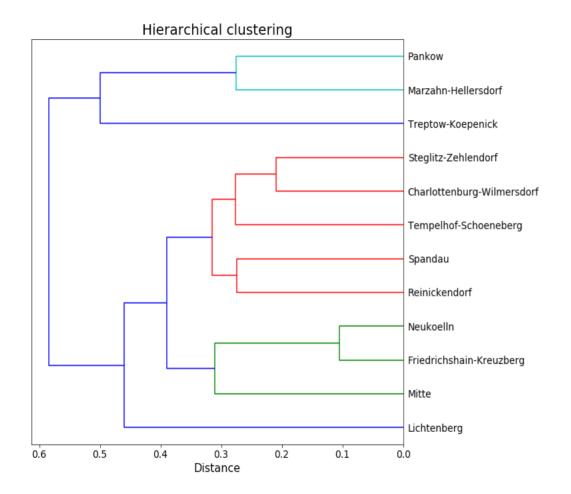
- The highest number of different types of restaurants has Berlin-Mitte (with 36 types)
- closely followed by Friedrichshain-Kreuzberg with 34
- Pankow and Treptow-Koepenick have less than 10 types (also low total number)
- The highest number of restaurants of one type has Neukoelln with 26 (which are Cafés).
- Mitte and Neukoelln both have a mean of 1.43 (mean category count across all 70 categories)
- Mitte has a std of 2.18, whereas Neukoelln has a higher std of 3.48. It can be seen in the top 10 lists below that Mitte has indeed a slightly more regular distribution, and in Neukoelln Cafés are already 1/4 of the total restaurant types.

#### • Top 10 restaurant types of Friedrichshain-Kreuzberg

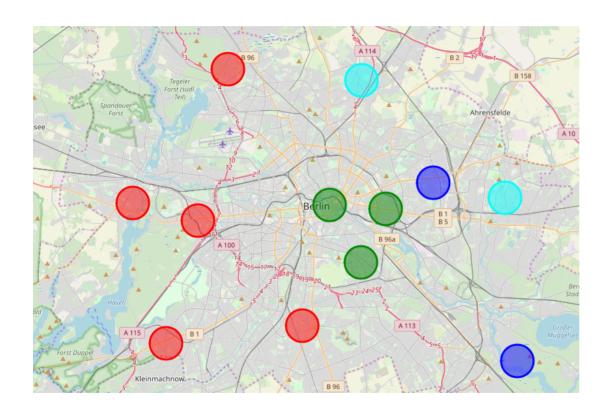
Venue Fre	equency
Café	0.21
Vegetarian / Vegan Restaurant	0.10
Pizza Place	0.09
Falafel Restaurant	0.06
Italian Restaurant	0.05
Bakery	0.05
Burger Joint	0.04
Vietnamese Restaurant	0.03
Middle Eastern Restaurant	0.03
German Restaurant	0.03

• Top 10 restaurant types in total:

Category C	ount
Café	84
Italian Restaurant 45	
Bakery	42
German Restaurant	31
Pizza Place	29
Vietnamese Restaurant	24
Restaurant	20
Vegetarian / Vegan Restaurant	19
Asian Restaurant	14
Falafel Restaurant	14



Hierarchical clustering of the neighborhoods and representation in a dendrogram. Low distance corresponds to a high correlation of the neighborhood restaurants. The central neighborhoods (green) and Western neighborhoods (red) show a high similarity



 Berlin with its three restaurant clusters (green, red and cyan) and the remaining two neighborhoods (blue)

### Conclusion

- My recommendation: open a restaurant in the green, or red neighborhoods
- However, it also depends on the type of restaurant
- Some neighborhoods seem to have a lot of Cafés, so for opening up a
  Café a neighborhood where this category is not one of the highest
  occurring types might be a better choice (e.g. Pankow)
- For an 'exotic' restaurant such as a Ramen restaurant, a neighborhood with a higher number of different restaurant types could be more suited (e.g. the green clustered neighborhoods).