

Comparison of Neighborhoods

- Berlin – London – New York
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Comparison of Neighborhoods Problem

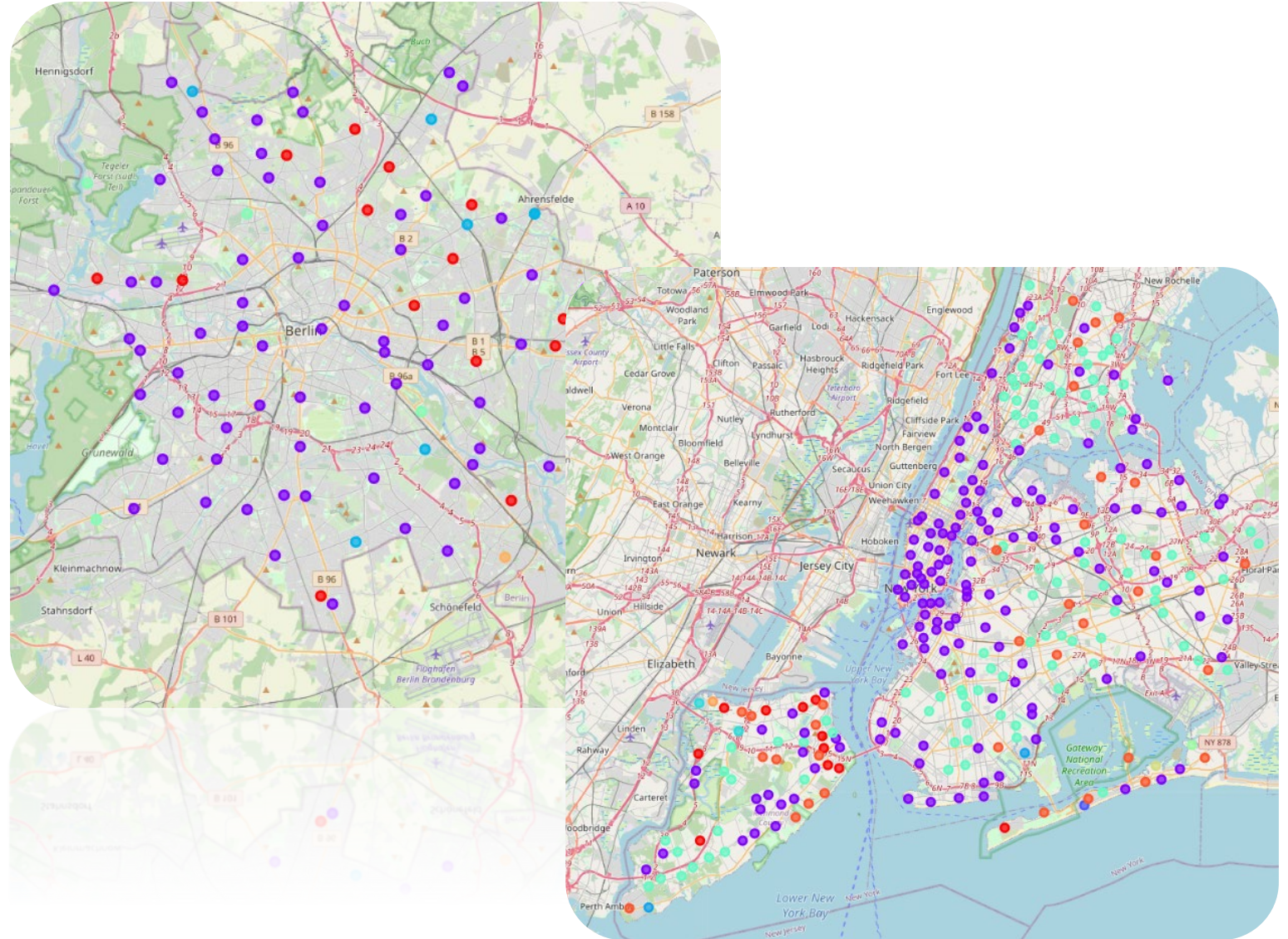
- Comparison of neighborhoods of three different cities
 - Berlin
 - London
 - New York
- Which city fits most the given interests?
- Would would a ranking of neighborhoods look like?

Comparison of Neighborhoods Data

- Boroughs and neighborhoods from different web sources
 - Berlin: scrapping web page
 - London: import Excel-File
 - New York: import JSON
- Combining with Data from Geolocator Nominatim
 - Latitude
 - Longitude
- Combining with Venue Data from Foursquare
 - All venues in a given area
 - Comparison with interests

Comparison of Neighborhoods Data analysis

- Generating Clusters with Kmeans
- Understanding which areas are the most likely to live
- Understanding diversity of different cities



Comparison of Neighborhoods Data analysis

- Generating a ranking of each city
- Regard of personel interests

| | Zipcode | Neighborhood | latitude | longitude | Cluster Labels |
|----|---------|--------------------------|-----------|-----------|----------------|
| 15 | 12043 | Neukölln | 52.481150 | 13.435350 | 1 |
| 7 | 10551 | Moabit | 52.530102 | 13.342542 | 1 |
| 4 | 10243 | Friedrichshain | 52.512215 | 13.450290 | 1 |
| 18 | 10777 | Schöneberg | 52.482157 | 13.355190 | 1 |
| 3 | 10243 | Friedrichshain-Kreuzberg | 52.506862 | 13.450642 | 1 |
| 8 | 10961 | Kreuzberg | 52.486184 | 13.385951 | 1 |
| 37 | 10709 | Hasenheide | 52.417126 | 13.192191 | 1 |
| 54 | 13405 | Tegel | 52.587389 | 13.279046 | 1 |
| 13 | 13187 | Pankow | 52.566017 | 13.403090 | 1 |
| 24 | 10585 | Charlottenburg | 52.515747 | 13.309683 | 1 |

| | Borough | Neighborhood | Latitude | Longitude | Cluster Labels |
|----|-----------|-------------------|-----------|------------|----------------|
| 0 | Manhattan | Murray Hill | 40.748303 | -73.978332 | 1 |
| 2 | Manhattan | East Village | 40.727847 | -73.982226 | 1 |
| 3 | Queens | Astoria | 40.768509 | -73.915654 | 1 |
| 4 | Brooklyn | South Side | 40.710861 | -73.958001 | 1 |
| 5 | Brooklyn | Greenpoint | 40.730201 | -73.954241 | 1 |
| 6 | Manhattan | Chinatown | 40.715618 | -73.994279 | 1 |
| 7 | Manhattan | Upper West Side | 40.787658 | -73.977059 | 1 |
| 8 | Brooklyn | Carroll Gardens | 40.680540 | -73.994654 | 1 |
| 9 | Bronx | Belmont | 40.857277 | -73.888452 | 1 |
| 10 | Manhattan | Greenwich Village | 40.726933 | -73.999914 | 1 |

| | New code | Neighborhood | latitude | longitude | Cluster Labels |
|---|-----------|------------------------|-----------|-----------|----------------|
| 0 | E09000028 | Southwark | 51.502922 | -0.103458 | 1 |
| 1 | E09000019 | Islington | 51.538429 | -0.099905 | 1 |
| 2 | E09000021 | Kingston upon Thames | 51.409627 | -0.306262 | 1 |
| 3 | E09000009 | Ealing | 51.512655 | -0.305195 | 1 |
| 4 | E09000001 | City of London | 51.515618 | -0.091998 | 1 |
| 5 | E09000007 | Camden | 51.542305 | -0.139560 | 1 |
| 6 | E09000020 | Kensington and Chelsea | 51.487542 | -0.168220 | 1 |
| 7 | E09000011 | Greenwich | 51.482084 | -0.004542 | 1 |
| 8 | E09000016 | Havering | 51.544385 | -0.144307 | 1 |
| 9 | E09000013 | Hammersmith and Fulham | 51.486730 | -0.221152 | 1 |

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Conclusion

With the given data and results I would recommend my friend to go to New York. And go for one of the top ten neighborhoods examined through the data analysis. Here he will find the biggest amount of diversity in his interests and has lots of venues to explore. As a second recommendation I would give him the advice to have a look at Berlin. Regarding the data it is more likely to live in Berlin than London.