



Finding potential food trends for Munich

by looking at Berlin

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1. Introduction

1.1 Background

Having lived in each of the cities over 15 years, I realized how it takes many years for Munich to take over food trends from the much more vivid capital Berlin. As an example, you can find Curry-Wurst snack bars in Berlin in every corner but they hardly existed in Munich up until several years ago. Now you can find long queues especially during nighttime in

front of the few Curry-Wurst venues that have opened up in the meantime in Munich.

Another example is the other food Berlin claims to have invented is a style of Döner Kebab with toasted bread and 3 types of sauces. Only in the last years Munich Döner sellers had to admit that this style is much more popular than their "traditional" untoasted , yogurt sauce version.

Now the Berlin style Döner is more common in Munich.

1.2 Business Problem

While only quality food venues will eventually survive, the first step is to get into the market. The idea is if we can look at the distribution of different food venues in Munich and Berlin to see if there is a potential food trend in Berlin that has not reached Munich yet.

So the target audience could be somebody interested in opening up a food venue in Munich or also a journalist or marketing person looking for new potential in food venues in Munich.

2. Data

2.1 Districts of Munich & Berlin

I used Wikipedia to retrieve the different district names of Munich and Berlin:

https://de.wikipedia.org/wiki/Liste_der_Stadtteile_M%C3%BCnchens

https://de.wikipedia.org/wiki/Verwaltungsgliederung_Berlins

Districts are smaller than boroughs but bigger than neighbourhoods in these cities. The sparsity of the Foursquare data in Germany and the instability of the geopy API made districts our best choice to aggregate the food venue data.

Less than 3 districts were removed from the data as geopy could not handle their name.

Here are links to the latitude and longitude of the districts in Munich and Berlin retrieved by geopy with the scraped names from the wikipedia sites.

https://github.com/petermfrankenhooker/Coursera_Capstone/blob/master/munich_districts_geo.csv

https://github.com/petermfrankenhooker/Coursera_Capstone/blob/master/berlin_districts_geo.csv

2.2 Food venues per type in Munich and Berlin

As food types are too many to make Foursquare Api calls per food type, we collected the most popular 100 food venues per district which we searched with a 1km radius. These were the aggregated results with duplicates removed of course:

https://github.com/petermfrankenhooker/Coursera_Capstone/blob/master/munich_food_venues.csv

https://github.com/petermfrankenhooker/Coursera_Capstone/blob/master/berlin_food_venues.csv

2.3 More precise venue counts of most relevant food types

Even though the data in 2.2. is incomplete due to the limitation in API calls, we still assume that the actual food venue distribution is somewhat preserved. Hence we did Foursquare API calls to retrieve precise venue counts of the most promising food types:

https://github.com/petermfrankenhooker/Coursera_Capstone/blob/master/final_venues.csv

There is a small error rate in the Foursquare API calls which we also cleaned from the results.

3. Methodology

We assume that even though the food venue data of Foursquare is somewhat sparse in Germany that the overall distribution of popular food venue types is preserved.

3.1 German food taste

To check if the Foursquare data makes sense check we look if the most popular food venue type in Berlin and Munich are somewhat similar as the assumption is that Germans in both cities share a common taste.

Looking at food types in Berlin with 30 venues and more.

3.2 Most promising food types for Munich

Then we look at the food types where there are 2 or less venues in Munich and more than 5 in Berlin.

3.3 Most promising food types for Berlin

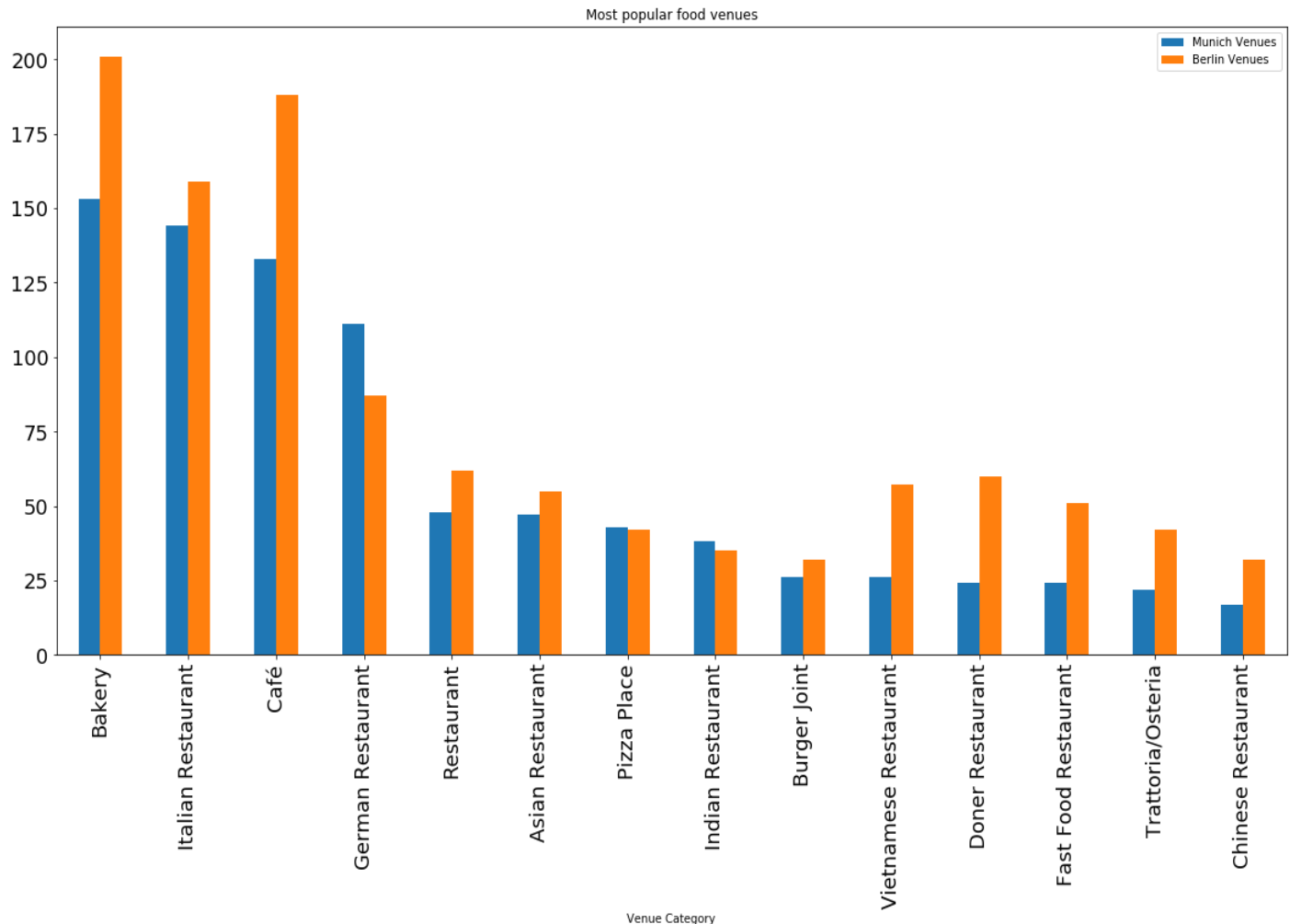
Even though it is not our fokus we look at the opposite so 2 or less venues in Berlin and 5 or more in Munich, just to see if we get any extra conclusions.

3.4 More precise counts

For the food types fulfilling these conditions we look at the counts retrieved by the API per food type and check if the conditions still hold and what food types show the biggest differences in venue counts.

4. Results

4.1 Here is the bar chart that shows that the venue counts of types which have 30 or more in Berlin :

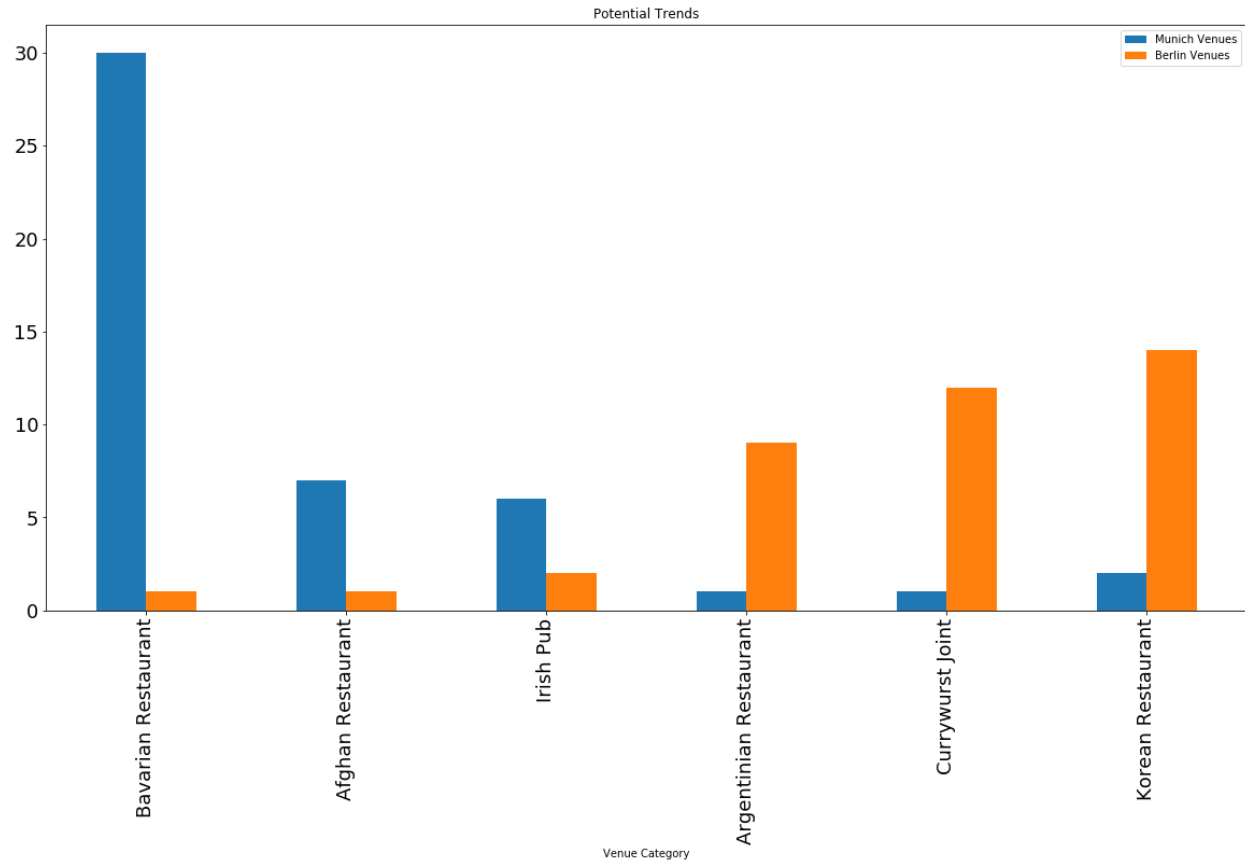


We can see that the most popular food types are very similar between both cities: Bakeries, Cafes , German and Italian restaurants are clearly the preferred choice, which also resembles by German taste.

Also Vietnamese, Döner and Fast Food venues are more popular in Berlin than in Munich, as it would be expected due to the large populations of Vietnamese , Turkish and international people in Berlin.

So this bar chart makes the data returned by Foursquare look very reasonable.

4.2 Two or less in Munich/Berlin and five or more in Berlin/Munich



We see the food types with the biggest differences between the cities.

4.3 More precise counts

Now the exact counts of the remaining food types from 4.2 per city:

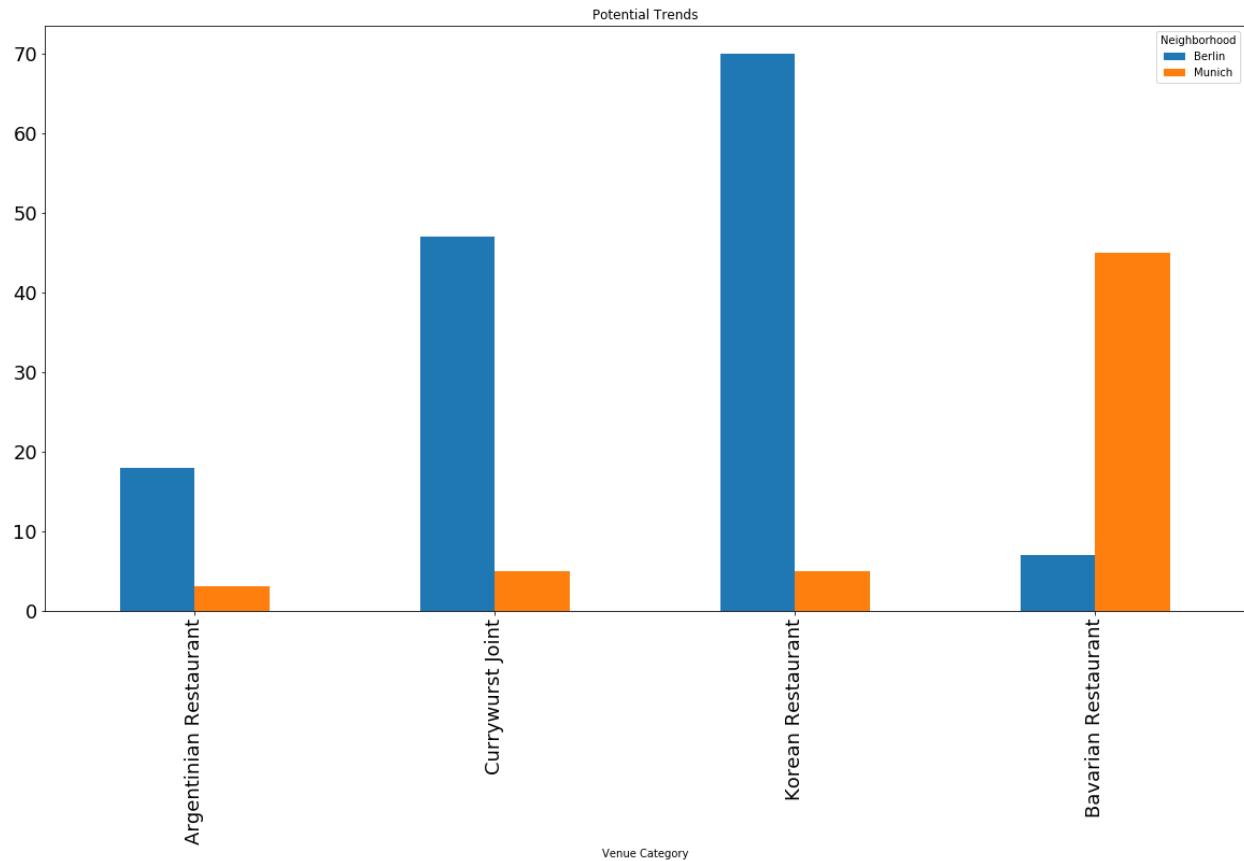
Neighborhood	Berlin	Munich
Venue Category		
Afghan Restaurant	9	14
Argentinian Restaurant	18	3
Bavarian Restaurant	7	45
Currywurst Joint	47	5
Irish Pub	10	7
Korean Restaurant	70	5

We see that the differences for “Irish Pubs” and “Afghan Restaurants” was only due to the way we retrieved our first data set.

So these were removed from the candidate list.

Which left us with

4.4 The final chart



Korean and Currywurst Joints stick out as potential food trends for Munich. Argentinian Restaurants might also have some potential in Munich, While there might be a potential for Bavarian Restaurants in Berlin.

5. Discussion

As Korean Restaurants seem to be the top candidate for Munich, I must say that I really felt a trend wave for Korean food in Berlin roughly 5 years ago from which still there are many Restaurants around which I see full most of the time.

Also for my personal taste I think there is still room for high quality Currywurst Joints in Munich. Only if the housing prices would not be so crazy high.

Of Argentinian food I have never heard anything of. Maybe it is worth investigating this food style more in detail.

The conclusion that we would need more Bavarian Restaurants in Berlin is not really given in my opinion, as I see the few big bavarian places in Berlin quite empty frequently. Alos Bavarian food does not please everybody as it is porky, plain and not very sophisticated in terms of spices: Bavarian food works in Bavaria, but not in Berlin necessarily.

6. Conclusion

In this Analysis I have shown that the Foursquare APi data can be used to see preferred food choices in the 2 big German cities Berlin and Munich. Besides having seen that the top choices are the same in both cities, there is potentially room for more Korean Restaurants in Munich. This is based on the fact that historically Munich likes to pick up trends from the capital.



