Urban Culture Through Taste

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Problem Statement

- The project aims to identify the urban culture of different neighborhoods through the food preferences of people.

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Topic Inspiration

- Inspired from the paper The Geography of Taste.
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Problem Statement

- Food choice, drink choice, and restaurant ambience can be good indicators of socioeconomic status of the ambient population in different neighborhoods.
- The project aims to identify the urban culture of different neighborhoods through the food preferences of people.
- The end result of this project would help urban designers to understand the social dynamics of contemporary cities and design more user-friendly and inclusive cities.
- This could also act as a food recommendation system by identifying different cuisines of the same concept / taste.

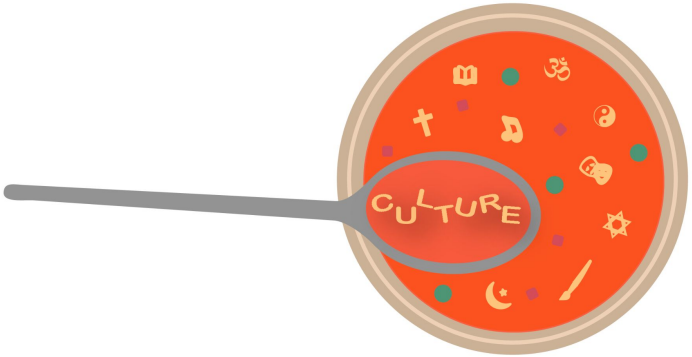
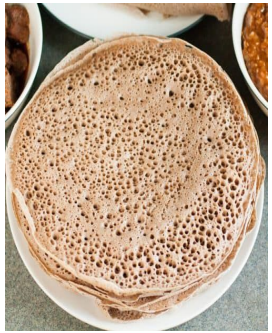


Image by Freely Magazine

Food is Culture

- Korean cuisine, Hotteok (left)
- Tamil cuisine, Obbattu (right)



- Ethiopian cuisine, Injera (left)
- South Indian cuisine, Dosai (right)

- Interestingly, Korean and Tamilians have cultural and language similarities too.
- Eg. Anni & unnie, vettukili & mettugi, pull & pul.
- So, definitely taste of food is an excellent indicator of the urban culture of communities.

Project Idea

- Yelp user reviews
  - distinguish different neighborhoods in terms of their food purchases
  - identify resultant boundaries in 10 United States metropolitan areas
- Natural Language Processing (NLP) techniques
  - to select a set of potential features pertaining to food, drink and ambience
- Identify neighborhoods where similar taste is practiced.
- Identify neighborhoods with significant differences based on demographic factors.

Process

- Scrape data from food reviews
- Convert them to a dataframe.
- Feature Generation - Analyse the reviews and introduce columns - binary / ordinal / categorical
    - Entity names extraction - eg. Ramen, pizza
    - Taste preference - spicy, bland, cold
    - Sentiment analysis
- Put locations into categories using ML. (Clustering)
- Make geoplots showing categories based on demographic factors and tastes.

Datasets

- Scrape Yelp / Doordash restaurant review data.
- Columns could include,
  - Restaurant name
  - Location
  - Food price
  - Demography
  - Date
  - Rating
  - Customer review - contains features of the food like,
    - Taste - spicy, juicy
    - Quantity

References

1. The Geography of Taste: Using Yelp to Study Urban Culture
2. Emotional Landmarks in Cities. The Emotional Life of Cities as Expressed on Social Networks
3. Natural language processing for urban research