Musical Borders, analysis of how music can contain and reflect aspects of societies from countries grouped by geographical location

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Introduction

- Business Problem
  - Streaming patterns by geographical differences
  - Music recommendations
  - Applied in European – Central Asia
- Project plan
  - Data retrieval
  - Data processing
  - Results analysis

Data

- Data retrieval
  - Spotifyr: data regarding spotify streamings
    - 50 most listened songs per country
  - WDI (World Development Indicators):
    - Data from European countries
    - Clustering by countries:
      - Northern & Central European countries
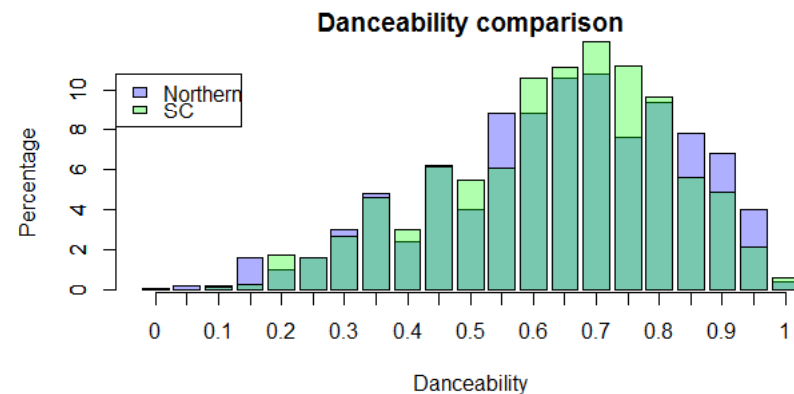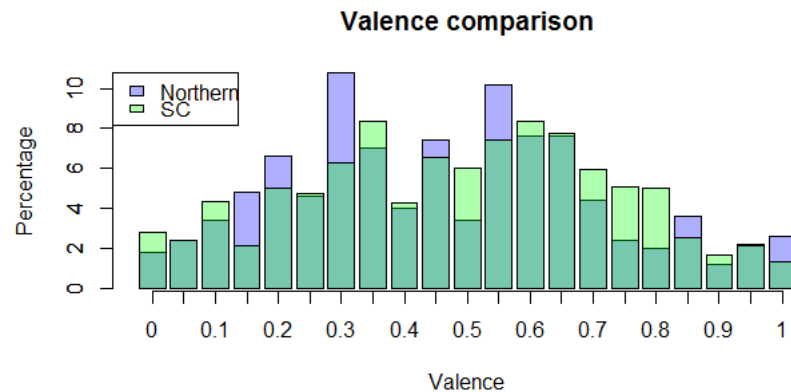   - Southern European countries

Data

- Data processing
  - Rstudio
  - Fueatures:
    - Danceability
    - Valence

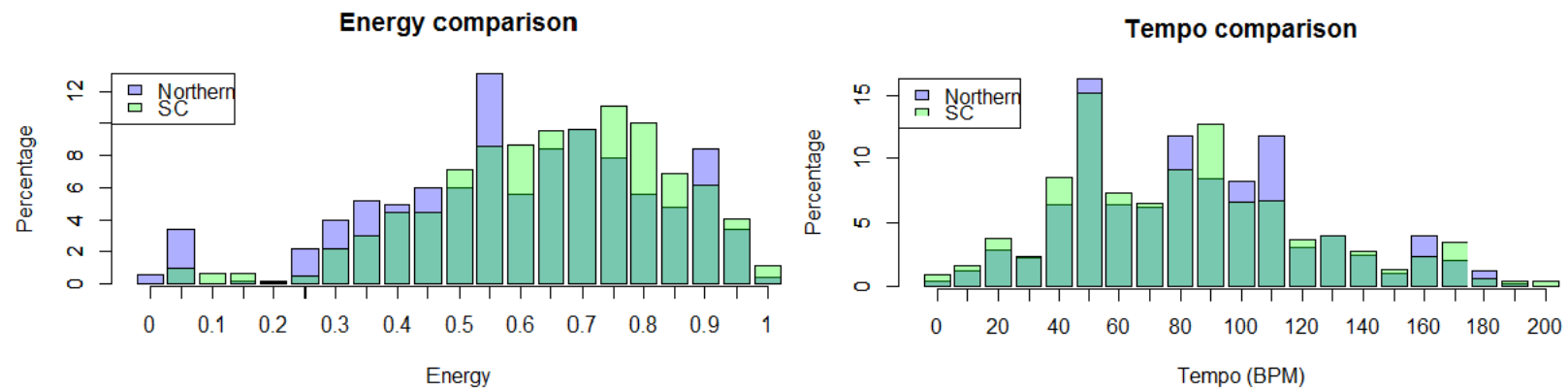|	playlist_name	valence_mean	danceability_mean	energy_mean	speechiness_mean	acousticness_mean	instrumentalness_mean	liveness_mean	tempo_mean
1	Austria Top 50	0.5930340	0.7374000	0.6780200	0.19758200	0.2515760	0.0048844896	0.1304580	120.4512
2	Belgium Top 50	0.4297740	0.6908800	0.6169600	0.12149000	0.3074070	0.0047432046	0.1762300	120.8098
3	Denmark Top 50	0.5056000	0.7314000	0.5946600	0.11975000	0.2781680	0.0049168778	0.1506580	119.8478
4	Estonia Top 50	0.4636440	0.7030200	0.5683200	0.14913200	0.2974872	0.0421011954	0.1612020	125.7036
5	Finland Top 50	0.4647800	0.6838600	0.6506400	0.11261400	0.2251935	0.0161018330	0.1605700	122.2950
6	France Top 50	0.4246140	0.7222600	0.6383800	0.12701200	0.3565454	0.0002292104	0.1418940	124.8059
7	Germany Top 50	0.5968740	0.7396600	0.6794600	0.19139600	0.2431640	0.0023228816	0.1316480	120.9258
8	Iceland Top 50	0.4838780	0.7151200	0.5096380	0.13452400	0.3324541	0.0187852538	0.1760940	117.9019
9	Ireland Top 50	0.4666460	0.6967600	0.5653200	0.13090400	0.3243662	0.0286476826	0.1575000	119.1785
10	Italy Top 50	0.4692000	0.6857000	0.6655200	0.11568200	0.2256980	0.0048457308	0.1619000	116.2678

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Results analysis

- Comparison of countries' clusters by music features:

Results analysis

- Comparison of countries' clusters by music features:

Conclusion

- First approach:
  - Northern and Central coutnries show higher preference in music with low "Valence" and "energy".

- Second approach:
  - Southern countries show higher "danceability" in the most listened songs

- This approaches can be used to predict which type of songs would become a top 50 song depending on the country.

- With a larger dataset this can also be applied at a worldwide scale

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Thank you very much for your attention

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