

Spotify's Musical Landscape: A Visual Journey Through Data

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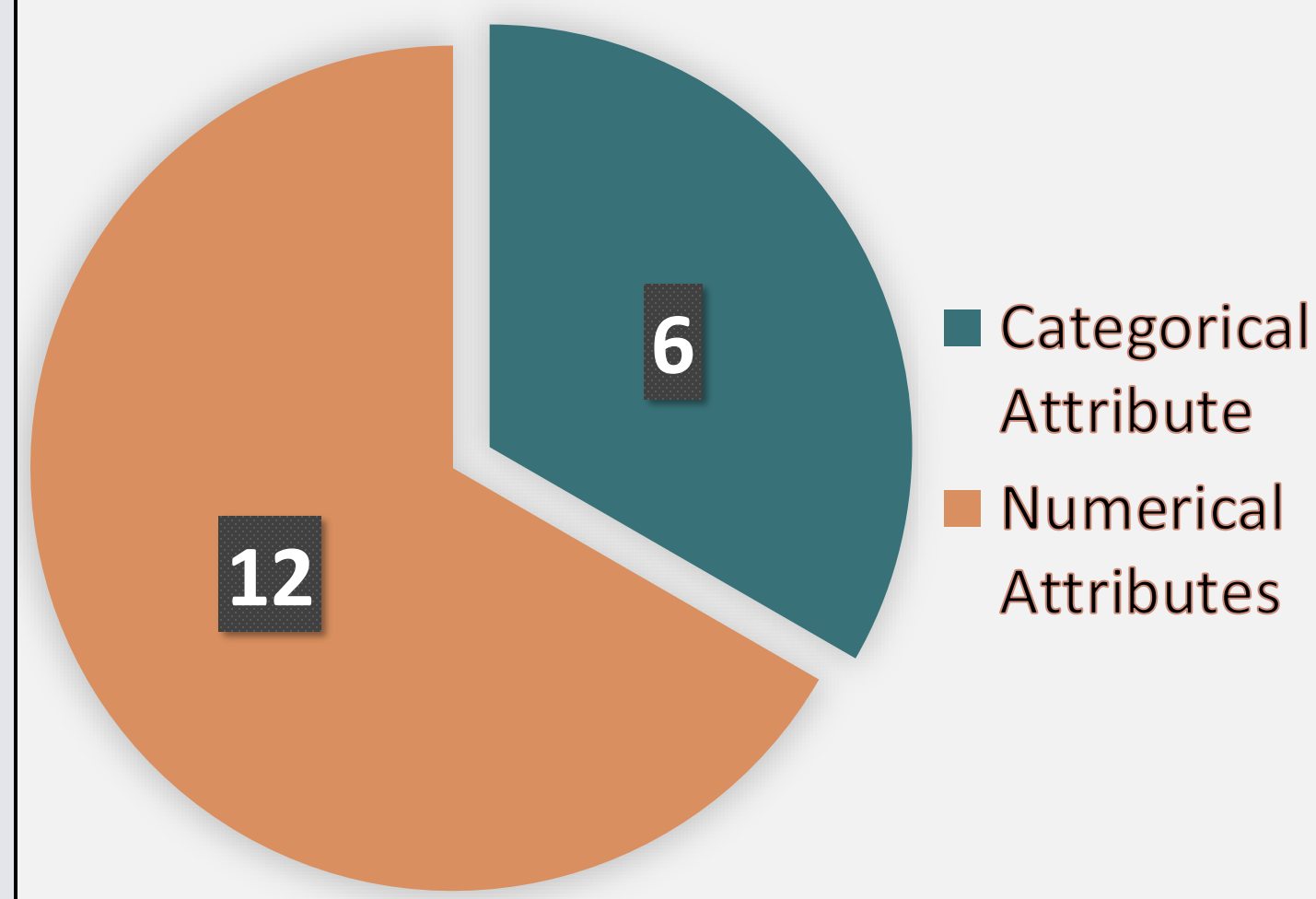
Dataset

Data Source: API call to fetch data from [Spotify.com](https://spotify.com)

Merge this data with two other datasets:

- [Artist information data](#)
- [Spotify-Youtube Database](#)

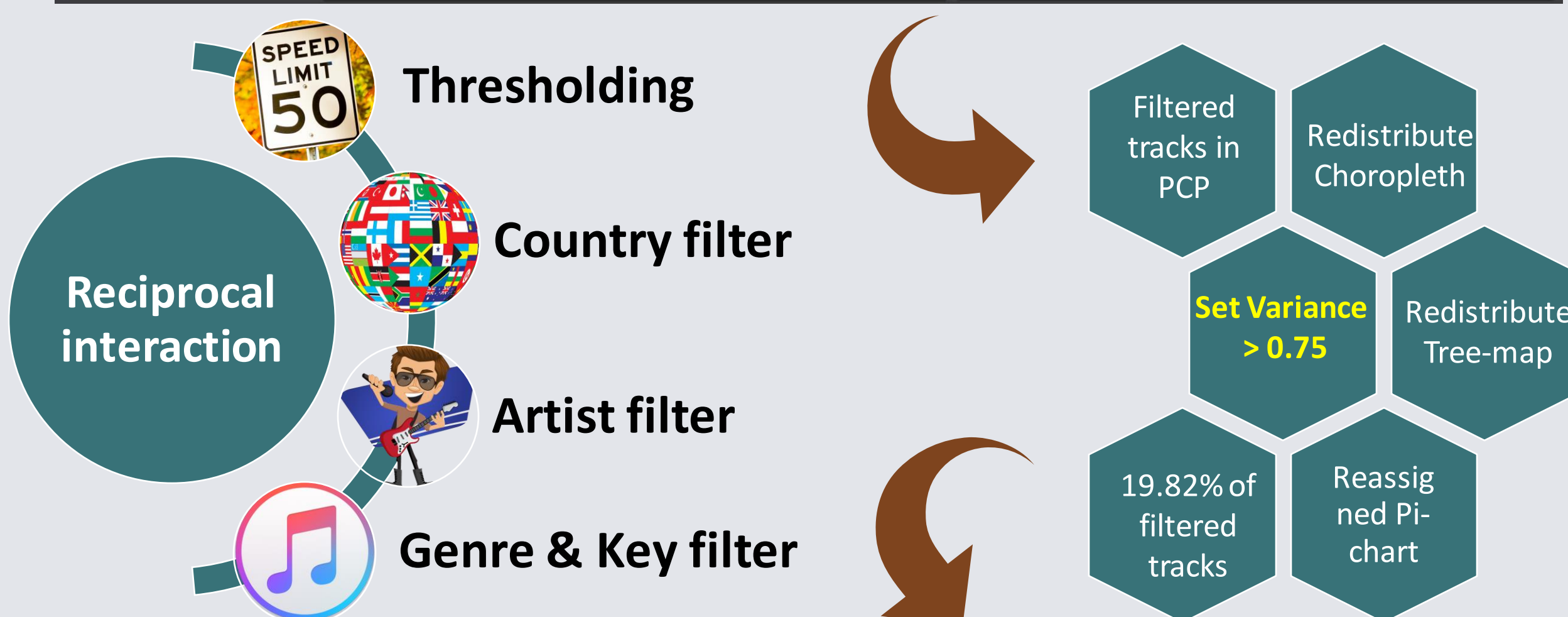
Data distribution



Important Attributes:

1. Track and Artist (C)
2. Artist Country (C)
3. Album type (C)
4. Danceability (N)
5. Valence (N)
6. Tempo (N)
7. Genre (C)
8. Stream Count (N)

Interaction of Plots



Visualizations

Choropleth Map



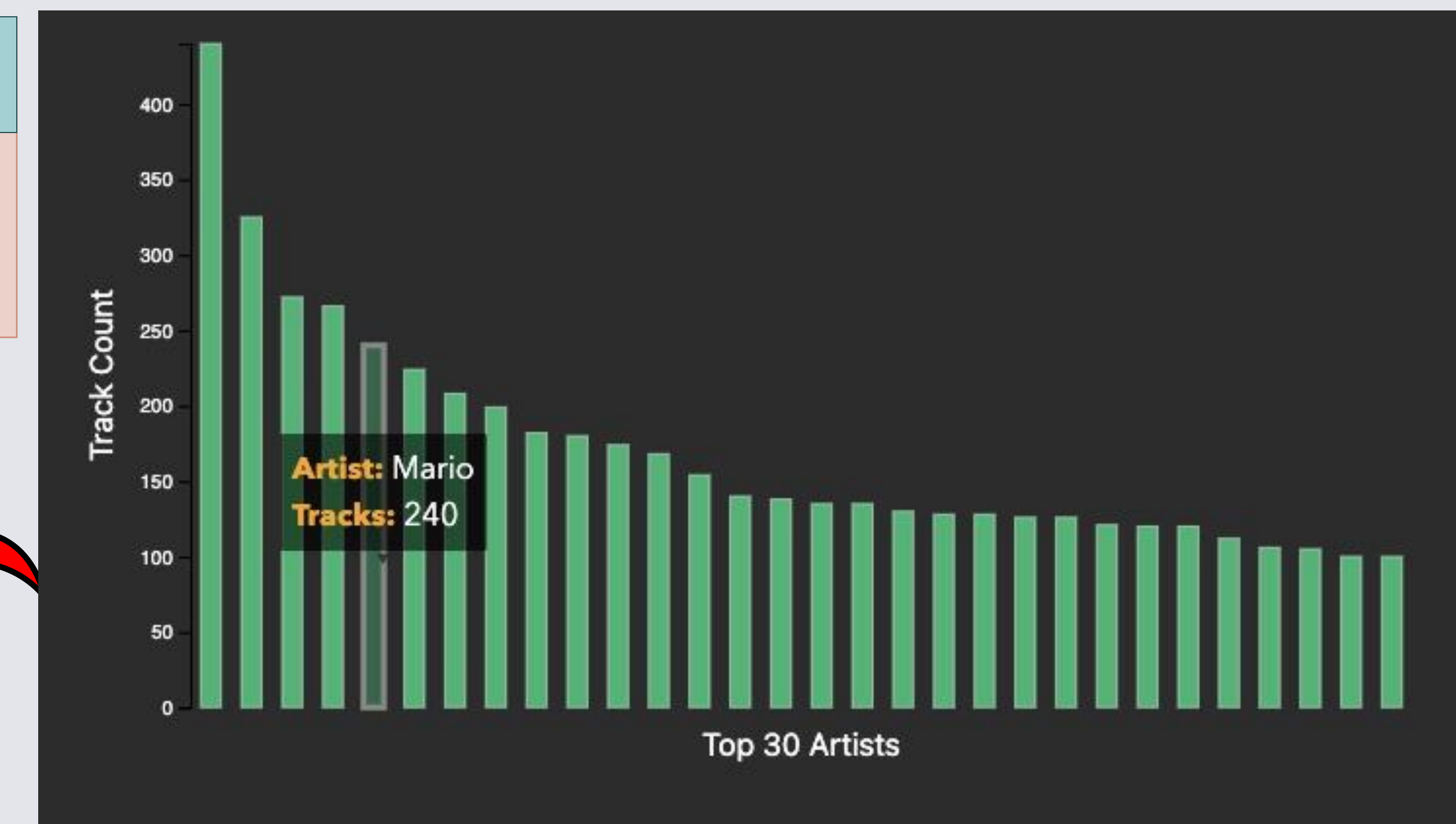
Key Features

- User can zoom in/out
- Highlight upon hover
- Color-wise heatmap

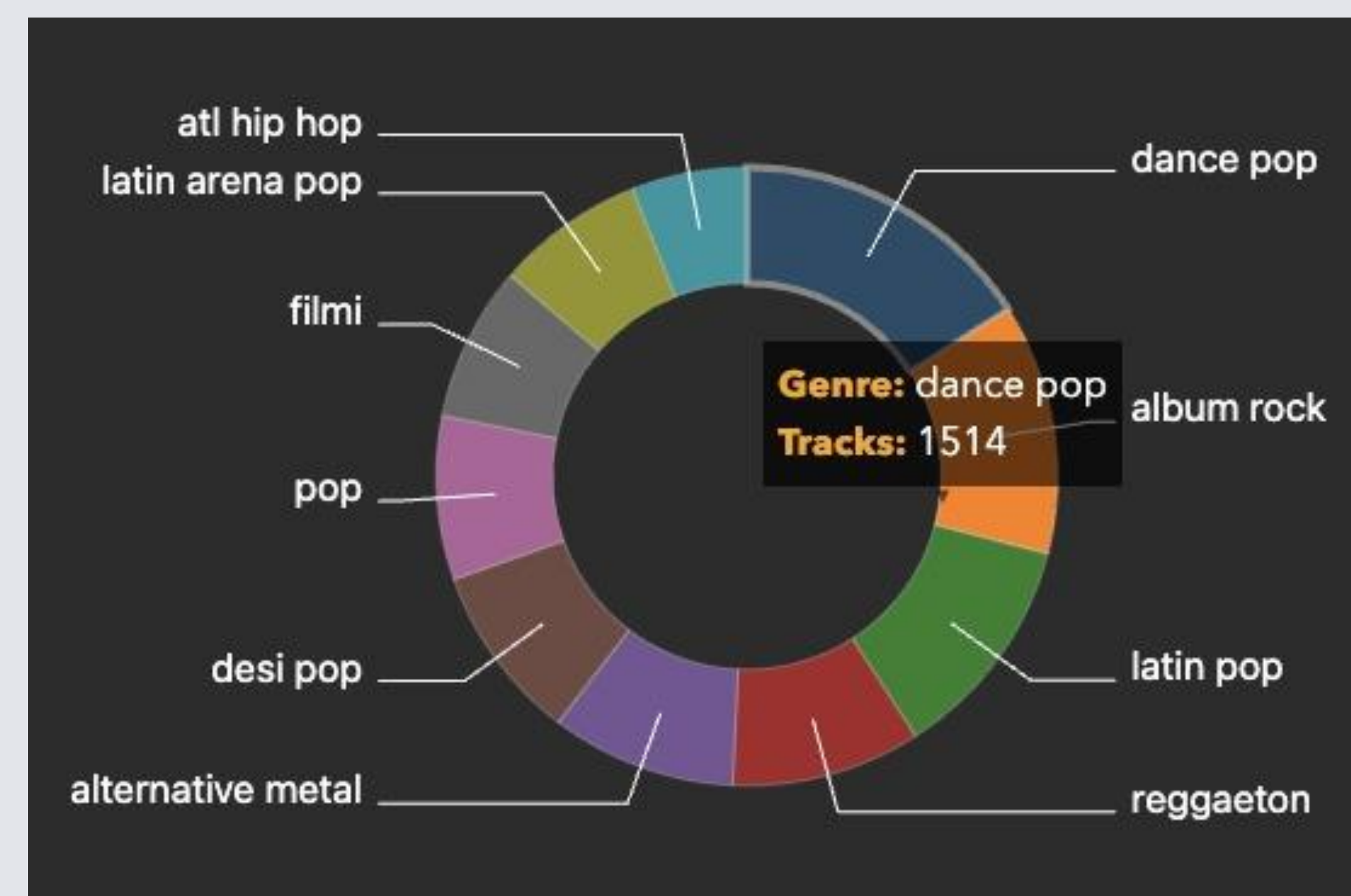
Key Features

- Top N artists (N<=30)
- Count of artist's tracks
- Highlight upon hover

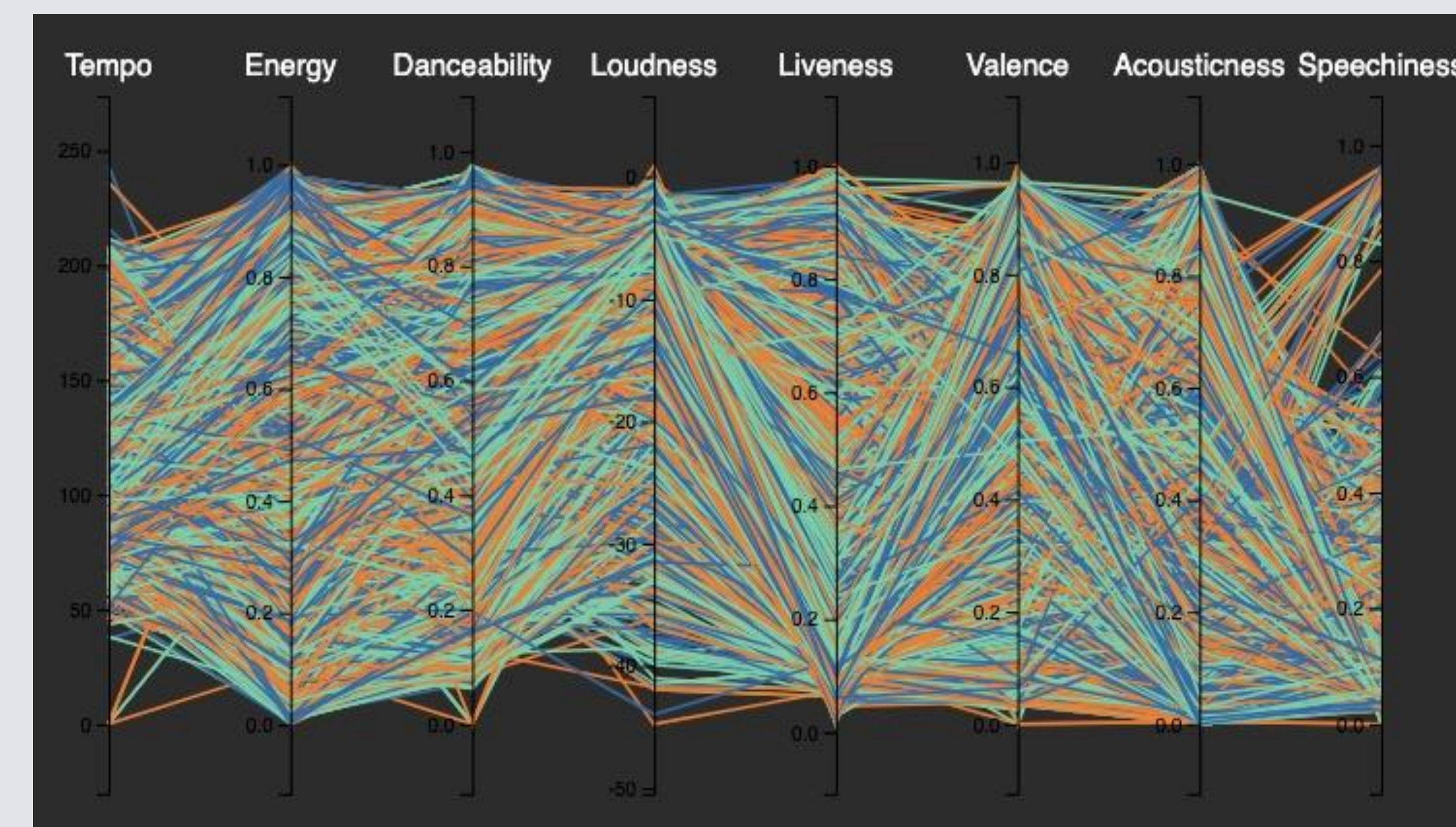
Bar Chart of Top N Artists



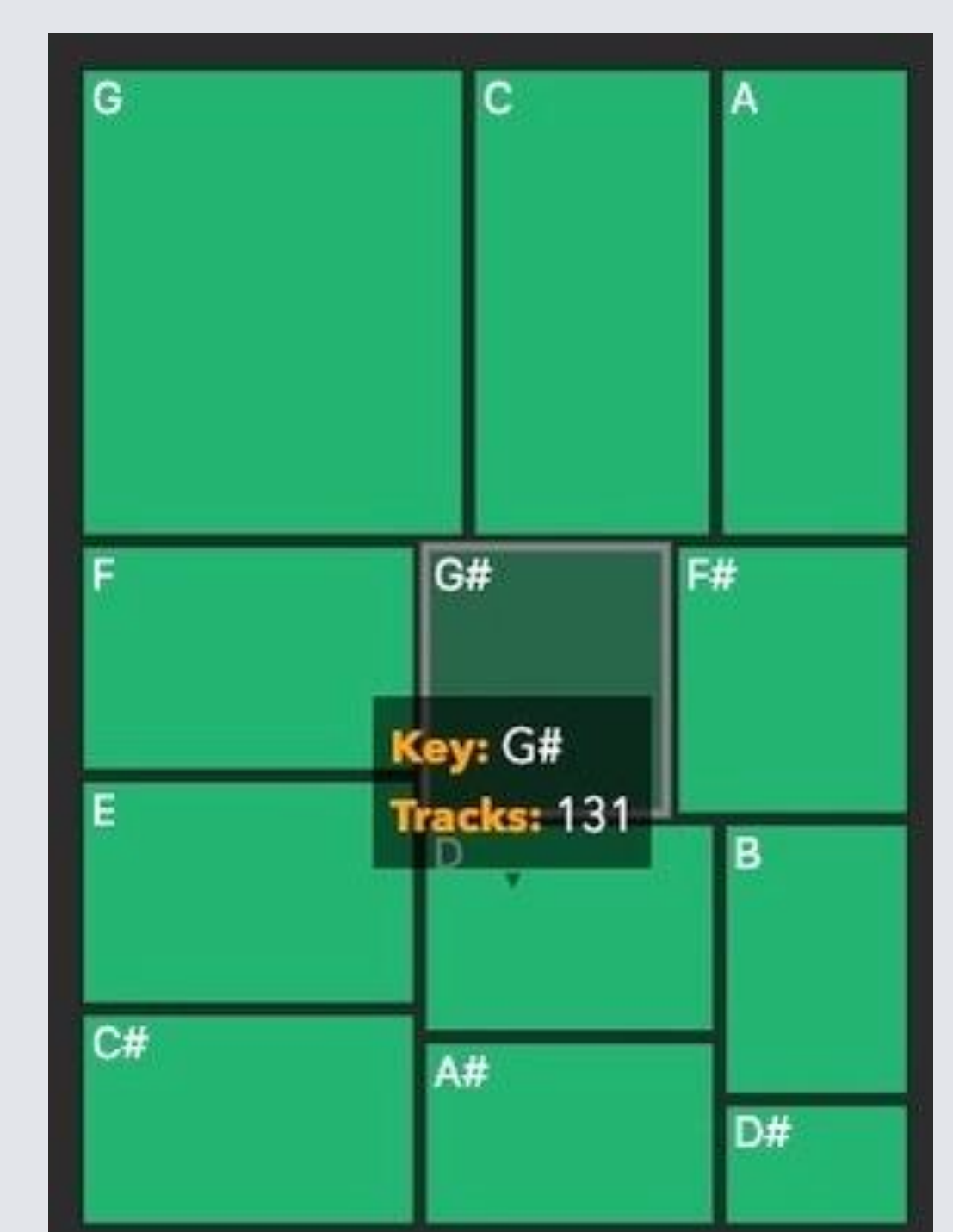
Donut Chart of Genre



Parallel Coordinate Plot of Track Attributes



Tree map of Keys



Key Features

- Distribution of different genre
- Highlight upon hover
- Number of track per genre

Key Features

- Correlation among multiple attributes
- Distribution of different clustered data

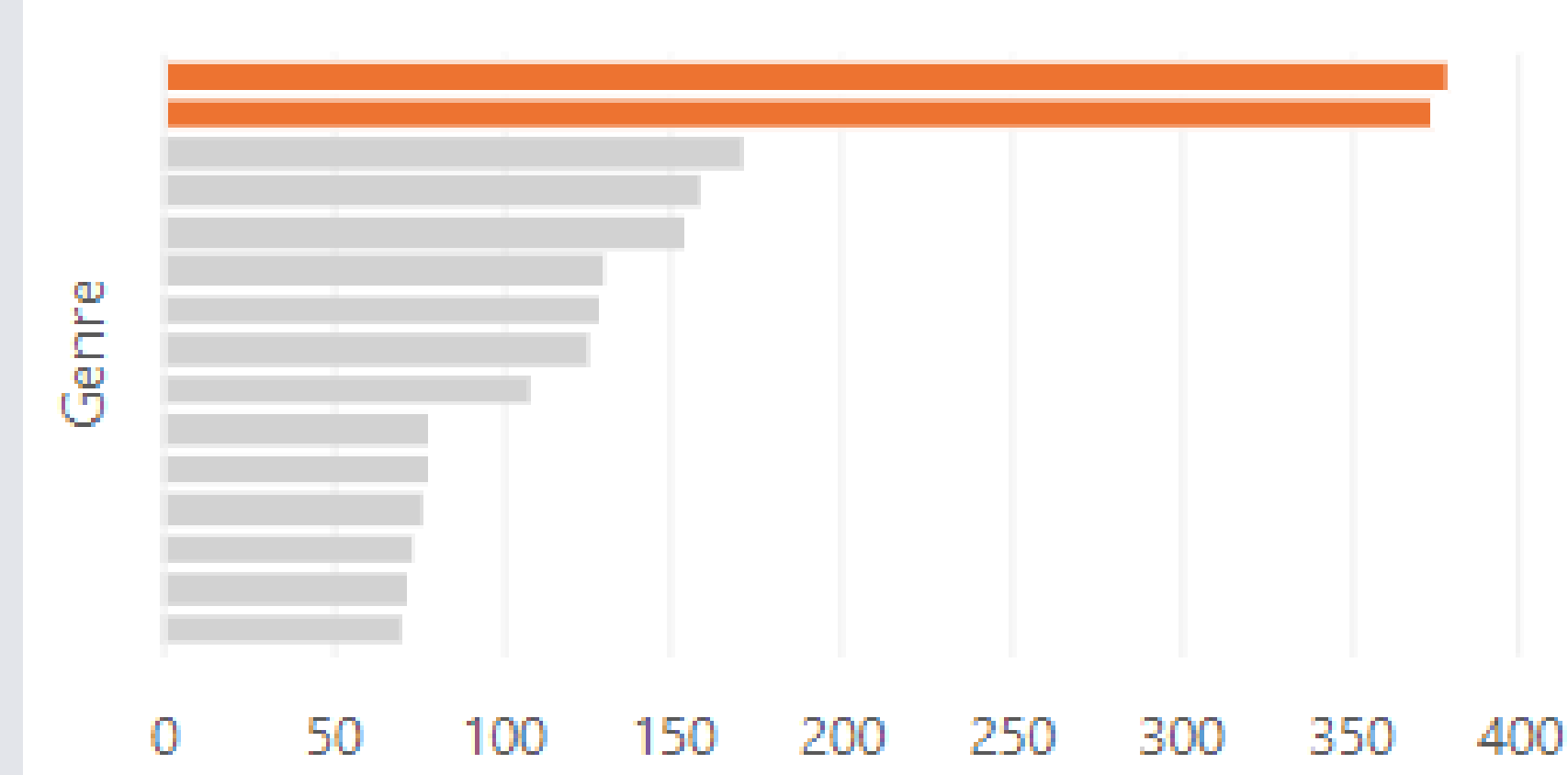
Key Features

- Distribution of key scales globally
- Artist and country-wise key distribution

Insights

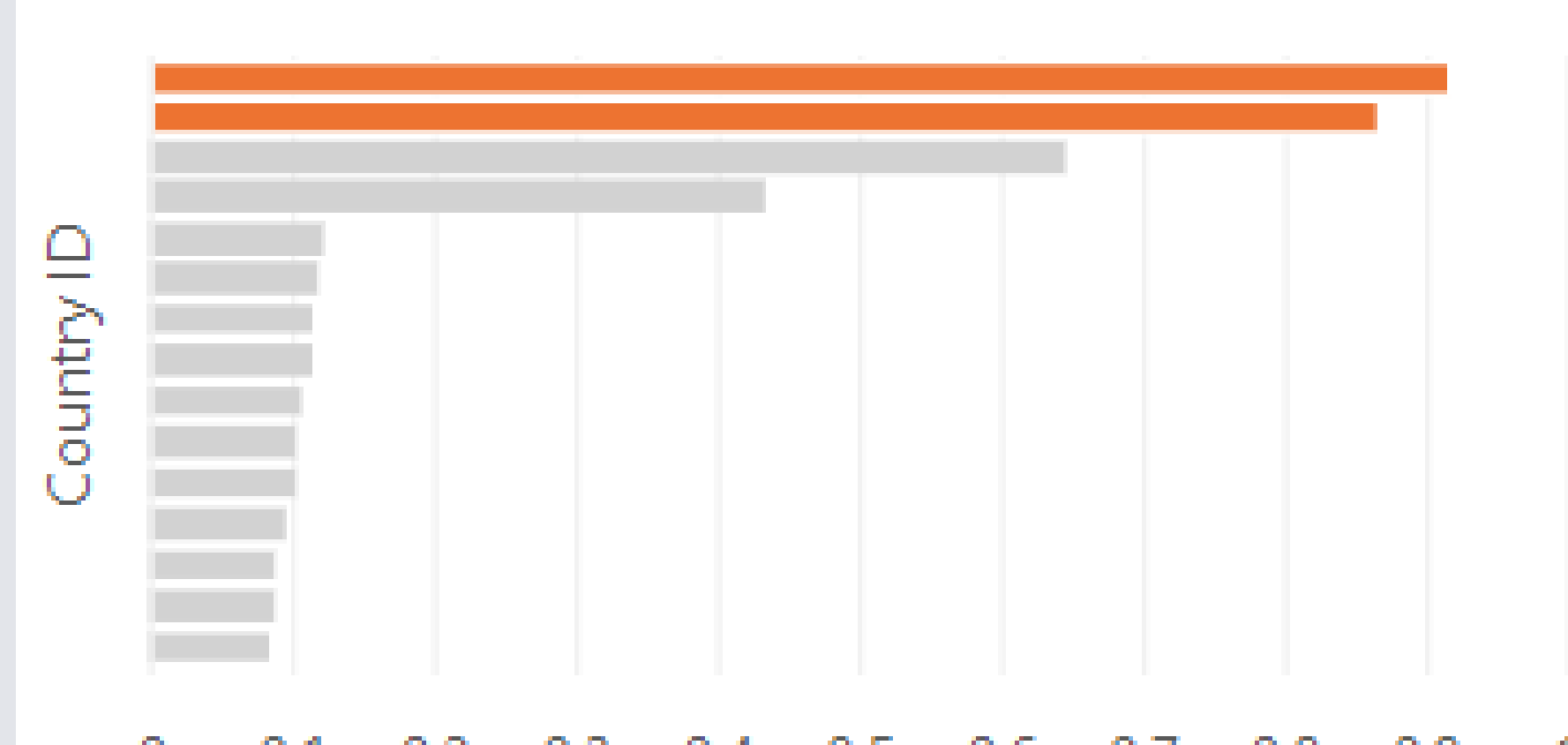
'Genre': **pop** and **dance pop** have noticeably higher 'Stream'.

Sum of Stream (Billions)



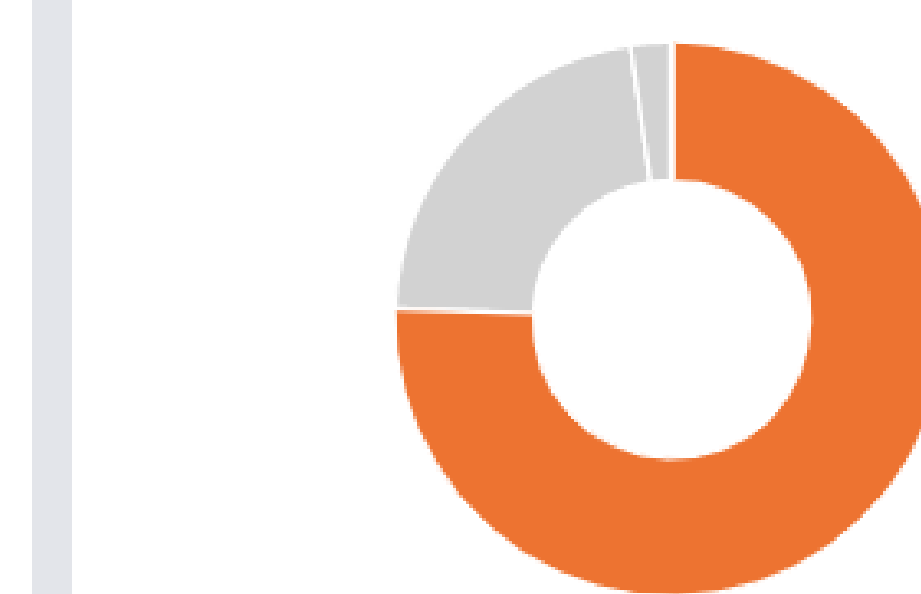
'Country ID': **HUN** and **COD** have noticeably higher 'Instrumentalness'.

Average of Instrumentalness

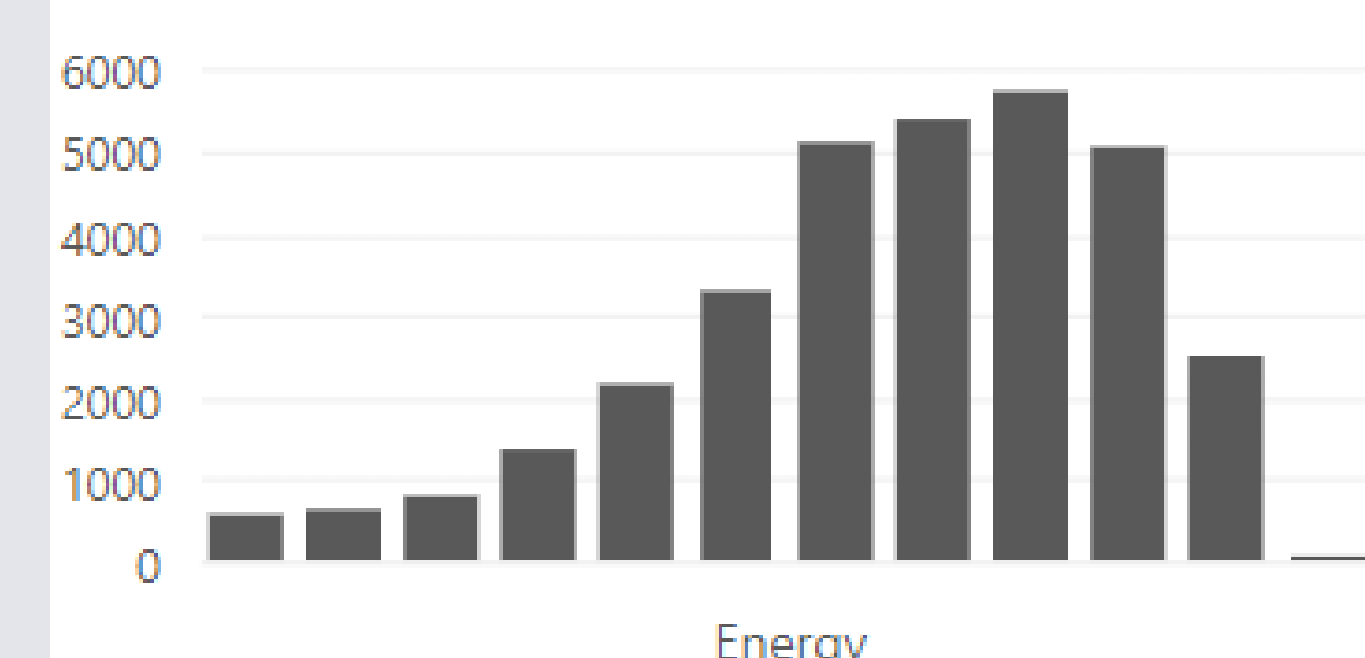


Insights (cont.)

'Album Type': **album** accounts for the majority of 'Stream'.



Frequency of 'Energy'



References

- Bostock, Mike. "D3.js - Data-Driven Documents." 2012. <http://d3js.org/>.
- Ward MO, Grinstein G, Keim D. Interactive data visualization: foundations, techniques, and applications. CRC press; 2010 Jun 14.
- Aggarwal CC. Data mining: the textbook. New York: springer; 2015 Apr 13.