



# **SPRINT 2**

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*Deck*

A M	540	600	700	800	1000	200	1400	1600	KHZ	AM BROADCAST BAND
F M	88	91	94	97	100	103	106	108	MHZ	FM BROADCAST BAND
VHF u	144	148	152	156	161	167	171	174	MHZ	PUBLIC SERVICE BAND 1
VHF u	30	32	35	38	42	46	50	54	MHZ	PUBLIC SERVICE BAND 2
VHF u	450	460	470	480	490	500	512	540	MHZ	PUBLIC SERVICE BAND 3

VHF II 108 112 116

PATR  
LMA

AC / BATTERY

SQUELCH CUIT

SQUELCH

VOLUME

# PROJECT B3TA

TUNING G-F TUNING

REALISTIC

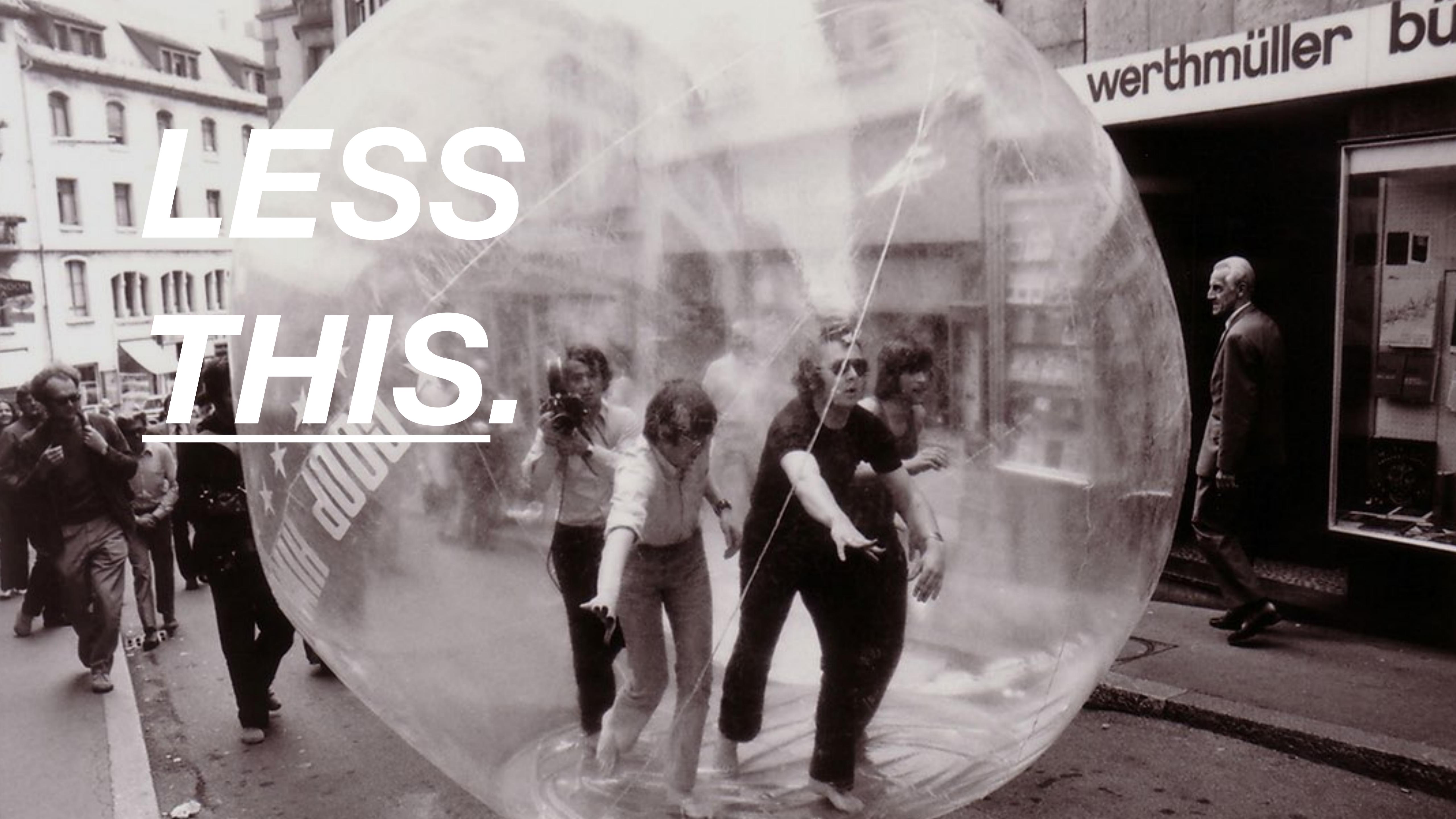


*A quick recap..*

A black and white photograph of a busy city street. In the foreground, several people are walking away from the camera. On the right side, there's a large, ornate building with columns and a balcony. A sign on the sidewalk reads "EXPO". The scene is somewhat blurred, giving it a sense of motion.

**ALGORITHMS  
ARE GREAT.  
BUT THERE'S A PROBLEM...**

***LESS  
THIS.***



A wide-angle photograph of a mountainous landscape at sunrise or sunset. The sky is filled with warm, orange and yellow hues, with rays of light streaming through the clouds. In the foreground, there are large, dark, textured rocks. Beyond them, a valley opens up with a river or stream flowing through it, surrounded by lush green trees and more mountains in the distance.

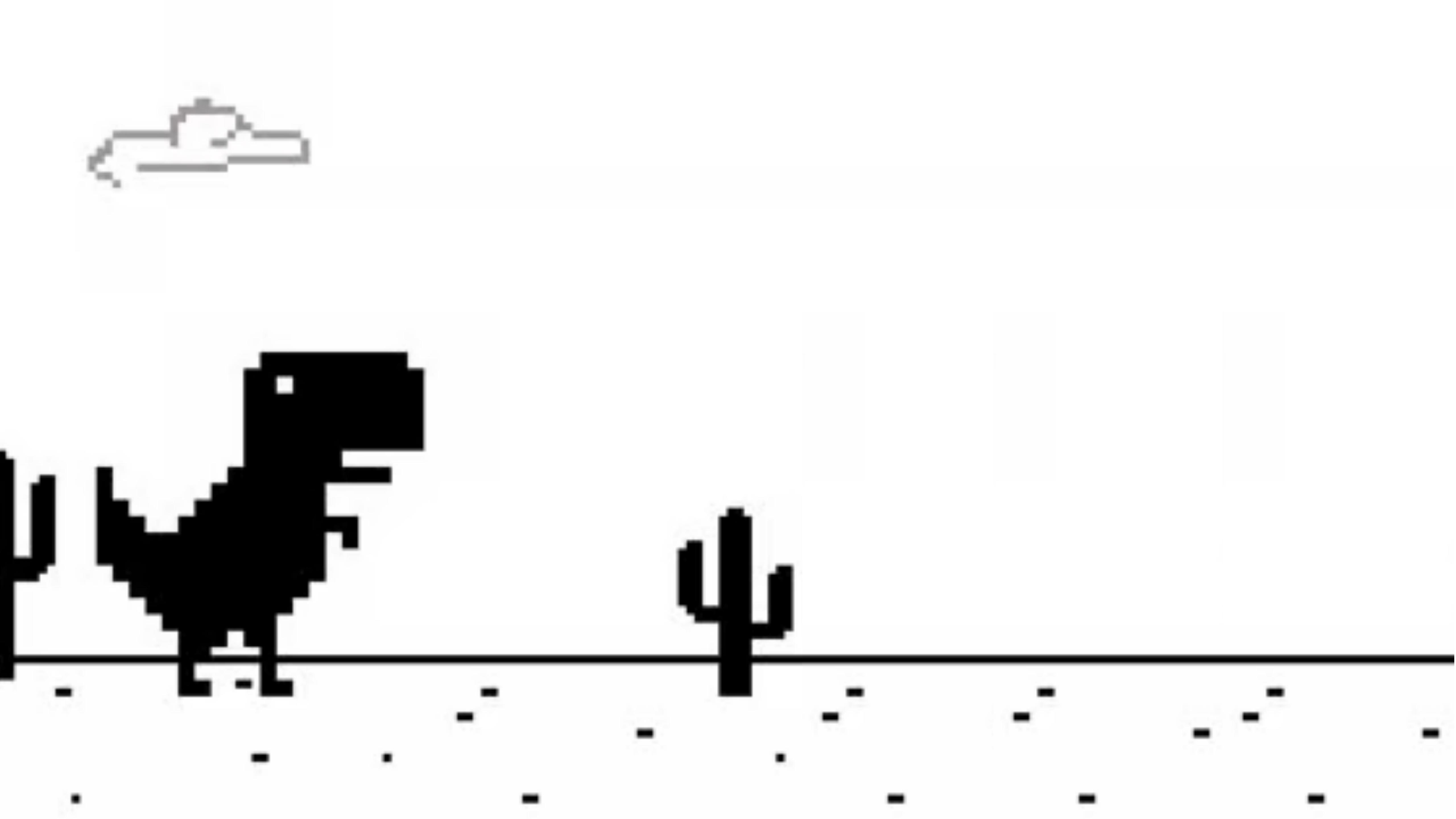
**MORE  
THIS.**

A black and white photograph of a city street scene. In the foreground, several people are walking away from the camera on a paved sidewalk. In the background, there are tall buildings, some with classical architectural details like columns. The overall atmosphere is urban and slightly blurred, suggesting movement or a focus on the text overlay.

**WE NEED A  
RECOMMENDATION SYSTEM THAT  
SETS MUSIC FREE.**



*The Last Two Weeks...*







***LOCATION  
UNKNOWN.***



## *Cleaning & Pre-processing*

1 capstone-b3tascape

EXPLORER ... 02-b3-extended-cleaning-eda-and-pre-processing.ipynb U ●

CAPSTONE-B3TASCAPE PROJECT-B3TA > notebook 02 | Pre-Processing and In Depth EDA > Further Cleaning and EDA (with the exception of pre-processing, from here on we proceed with the 20% sample dataset only) > Genres - re-map and re...

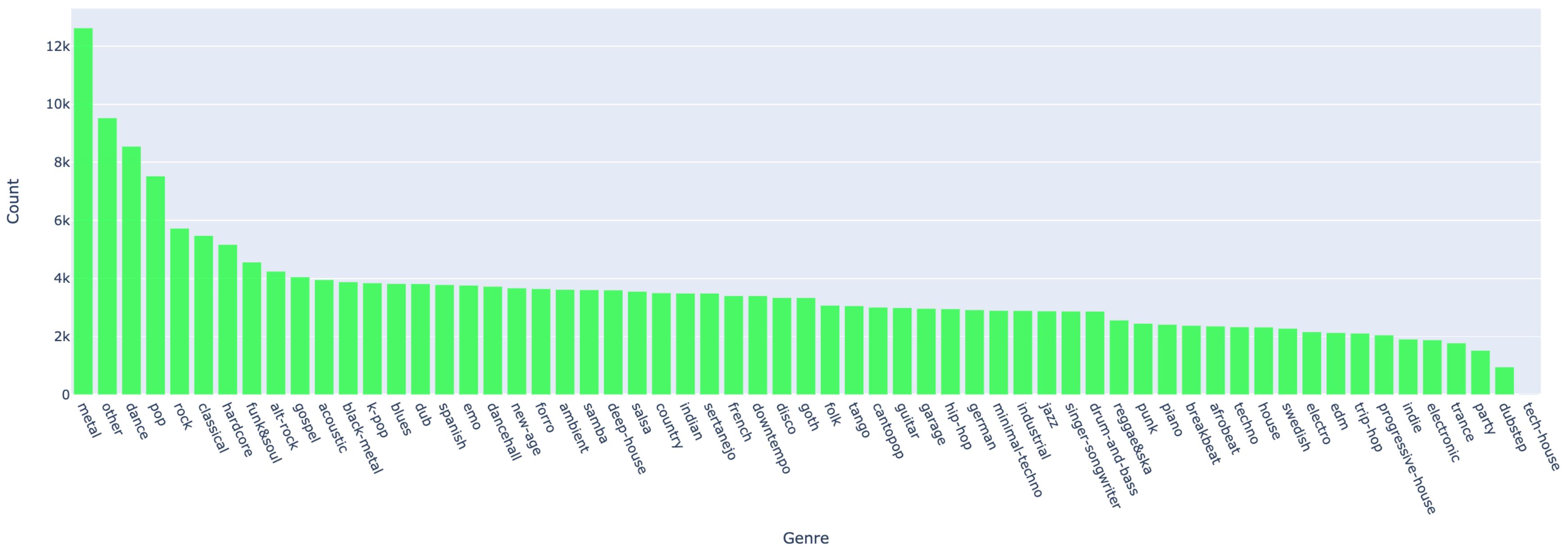
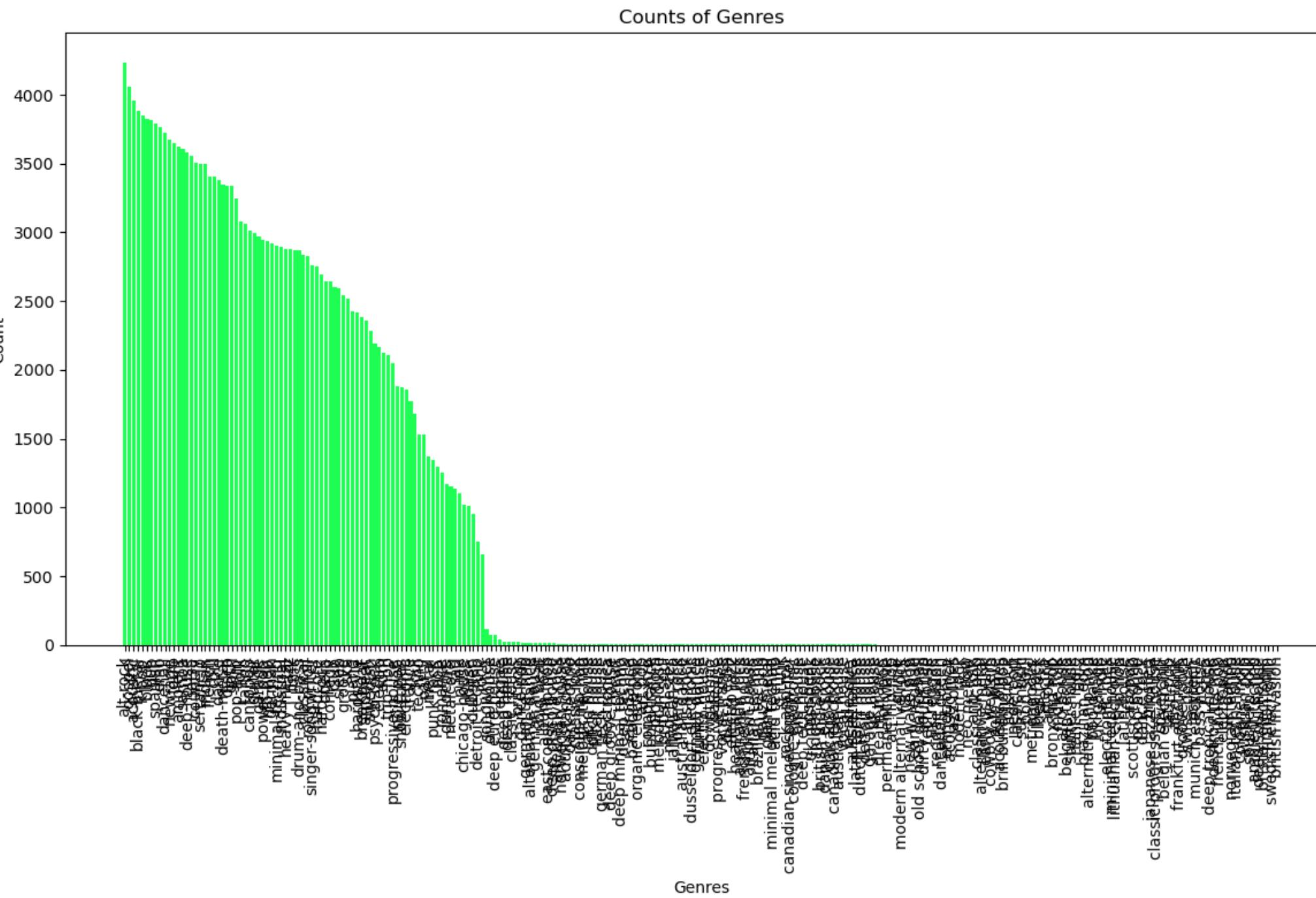
.github .ipynb\_checkpoints data flowchart Steven\_Milburn-BrainSt... notebooks \_\_pycache\_\_ .ipynb\_checkpoints .cache .env 00-b3-spotify-api-acce... 01-b3-loading-cleaning-... 02-b3-extended-cl... U 03-b3-modeling.ipynb 04-b3-findings.ipynb b3tafunc.py reports .cache .gitignore README.md requirements.txt Steven\_Milburn-BrainS... 5

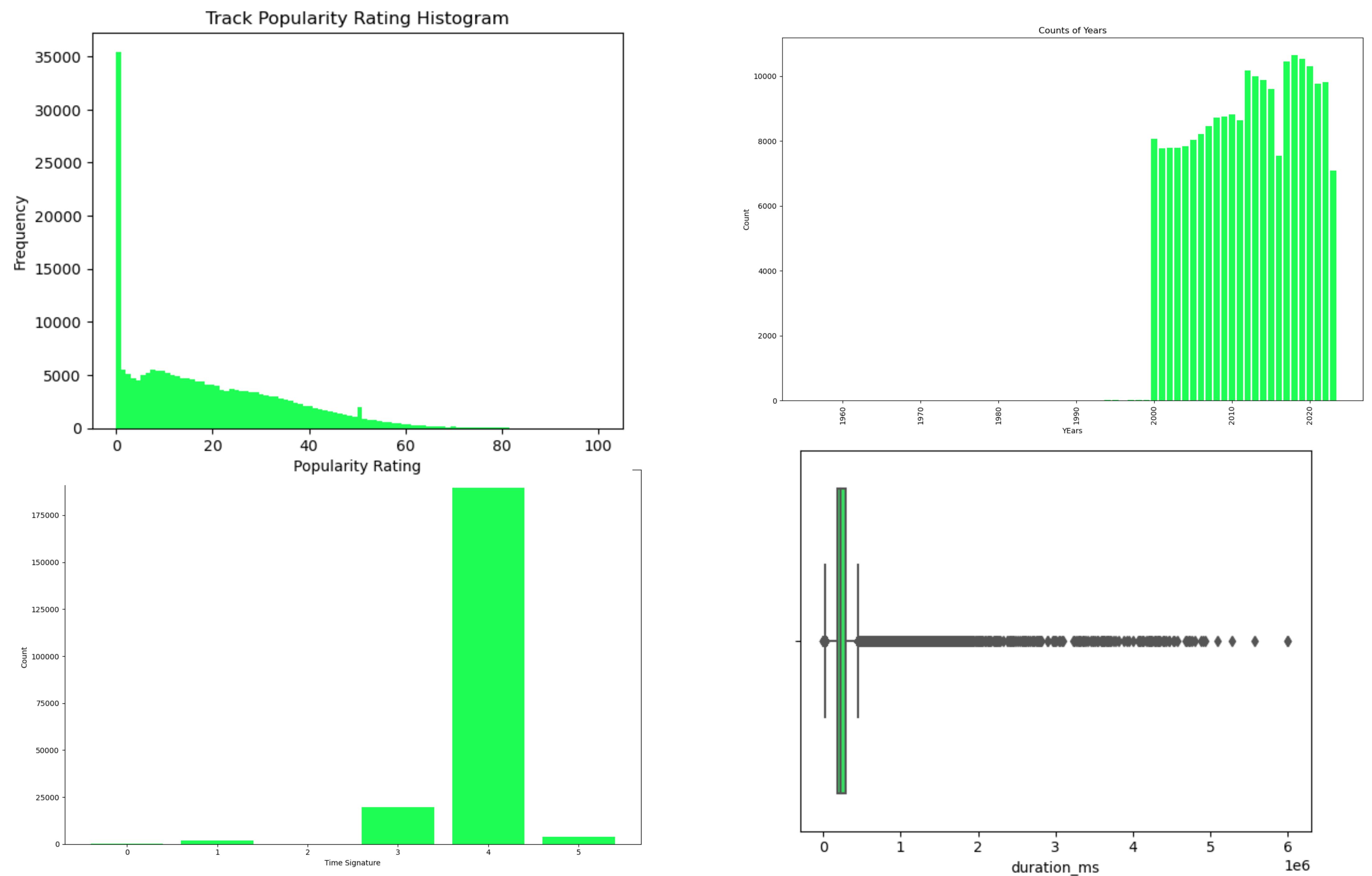
+ Code + Markdown ▶ Run All ⚡ Restart Clear All Outputs Variables Outline ... b3ta (Python 3.8.18)

**CLEANING..**

**PRE-PROCESSING..**

```
1 # Manual genre mapping
2 df20['genre_map_v1'] = df20['genre'].map({
3     'alt-rock' : 'alt-rock',
4     'gospel' : 'gospel',
5     'acoustic' : 'acoustic',
6     'black-metal' : 'black-metal',
7     'k-pop' : 'k-pop',
8     'blues' : 'blues',
9     'dub' : 'dub',
10    'spanish' : 'spanish',
11    'emo' : 'emo',
12    'dancehall' : 'dancehall',
13    'new-age' : 'new-age',
14    'forro' : 'forro',
15    'ambient' : 'ambient',
16    'samba' : 'samba',
17    'deep-house' : 'deep-house',
18    'salsa' : 'salsa',
19    'country' : 'country',
20    'sertanejo' : 'sertanejo',
21    'indian' : 'indian',
22    'french' : 'french',
23    'downtempo' : 'downtempo',
24    'dance' : 'dance',
25    'death-metal' : 'metal',
26    'disco' : 'disco',
27    'goth' : 'goth',
28    'pop-film' : 'pop',
29    'folk' : 'folk',
30    'tango' : 'tango',
31    'cantopop' : 'cantopop',
32    'guitar' : 'guitar',
33    'garage' : 'garage',
34    'power-pop' : 'pop',
35    'hip-hop' : 'hip-hop',
36    'german' : 'german',
37    'minimal-techno' : 'minimal-techno',
38    'industrial' : 'industrial',
39    'heavy-metal' : 'metal',
40    'jazz' : 'jazz',
41    'funk' : 'funk&soul',
```

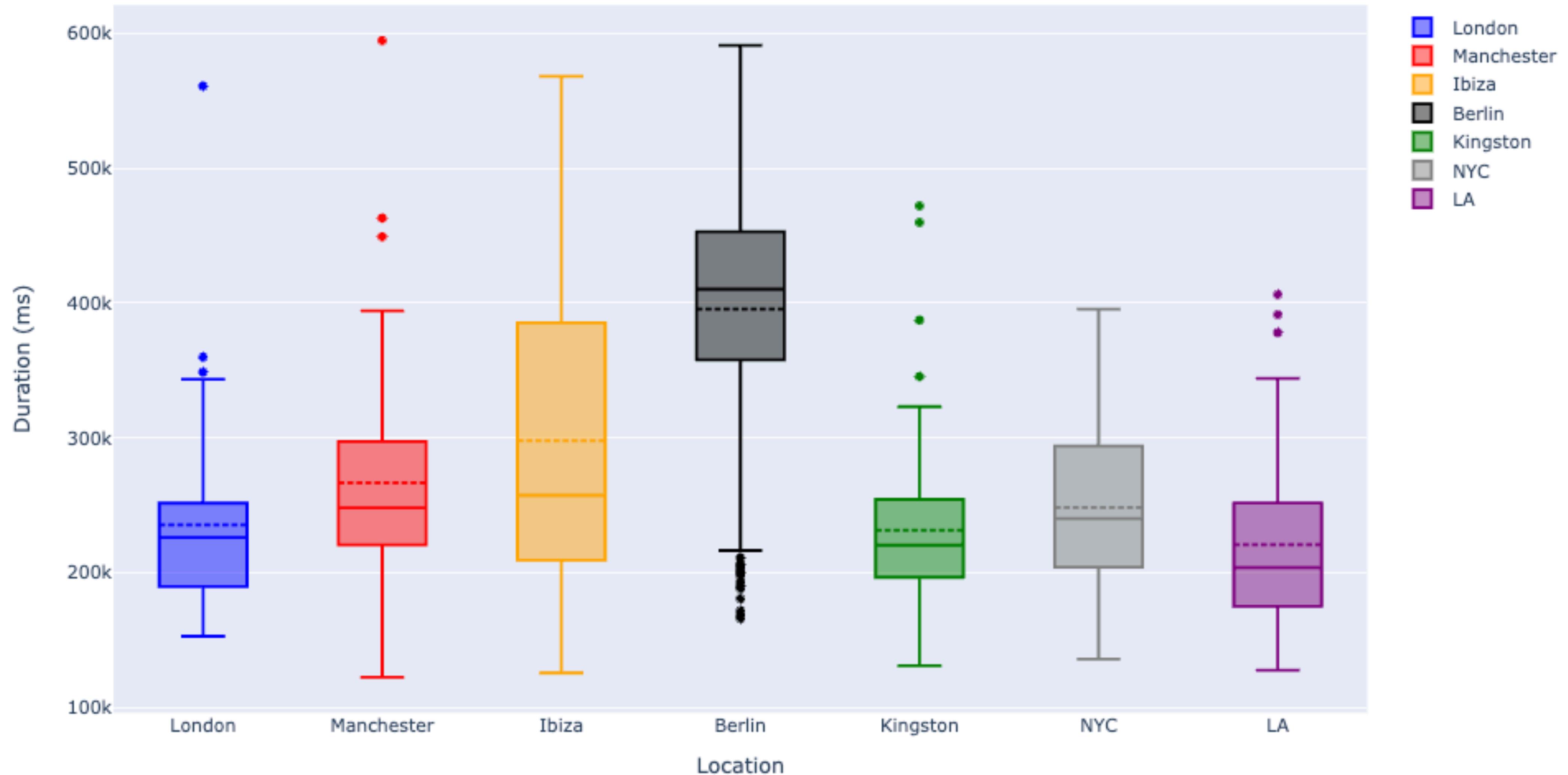




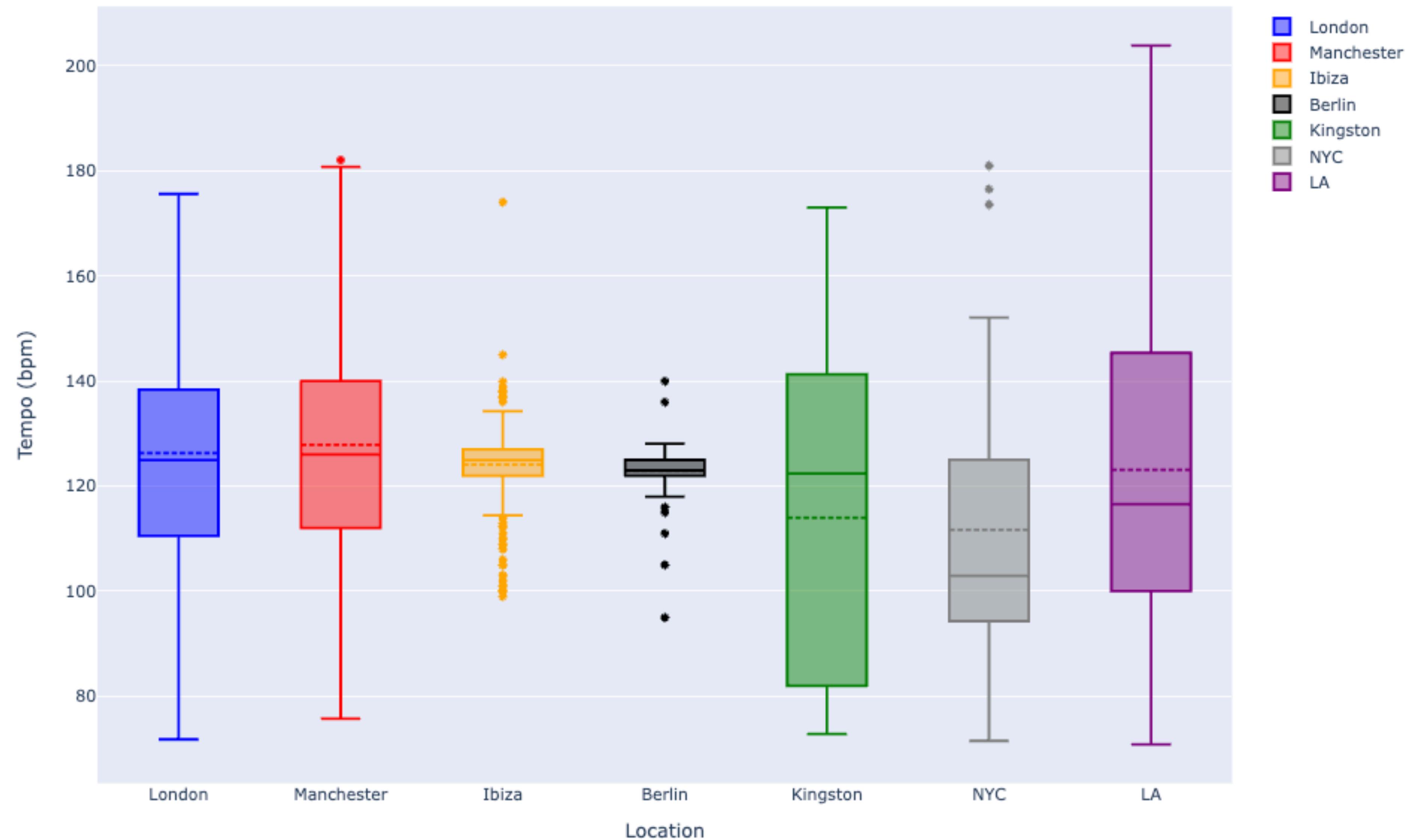


*EDA...*

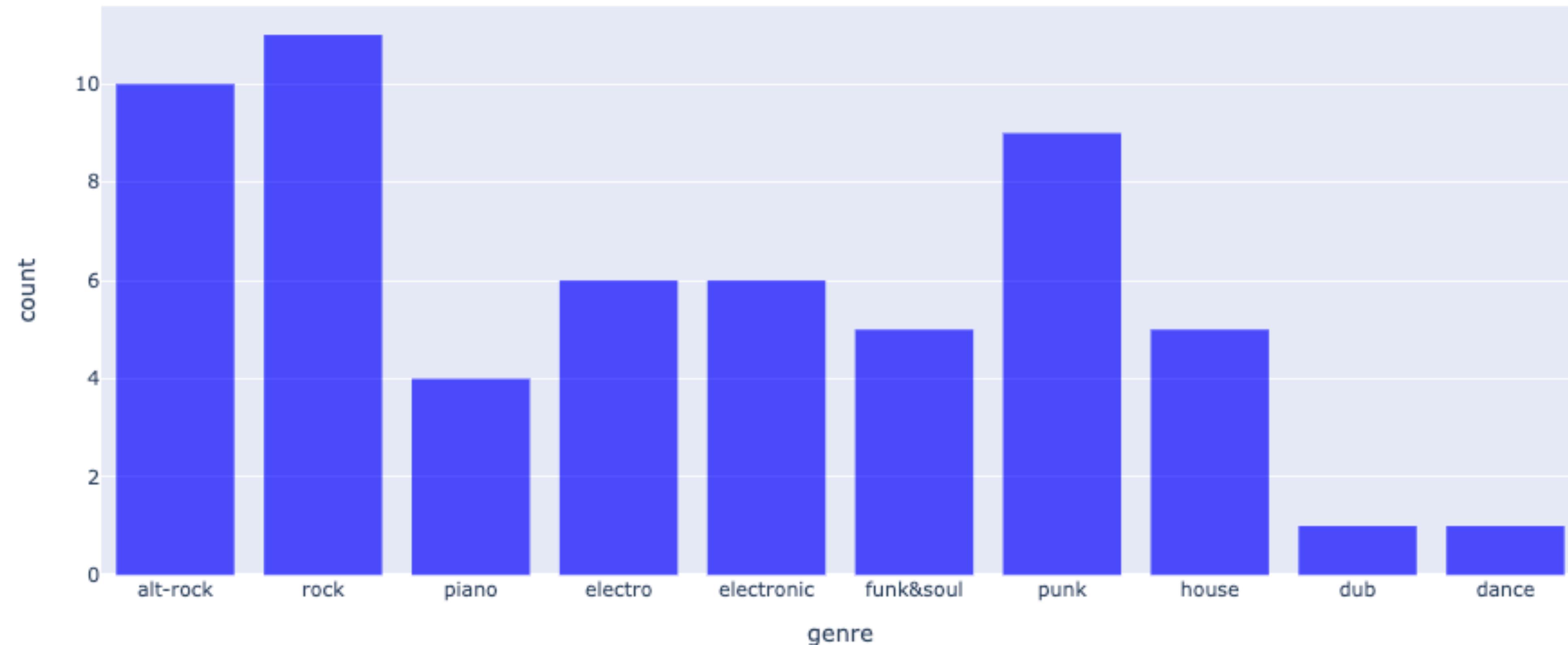
## Track Duration Boxplots by Location



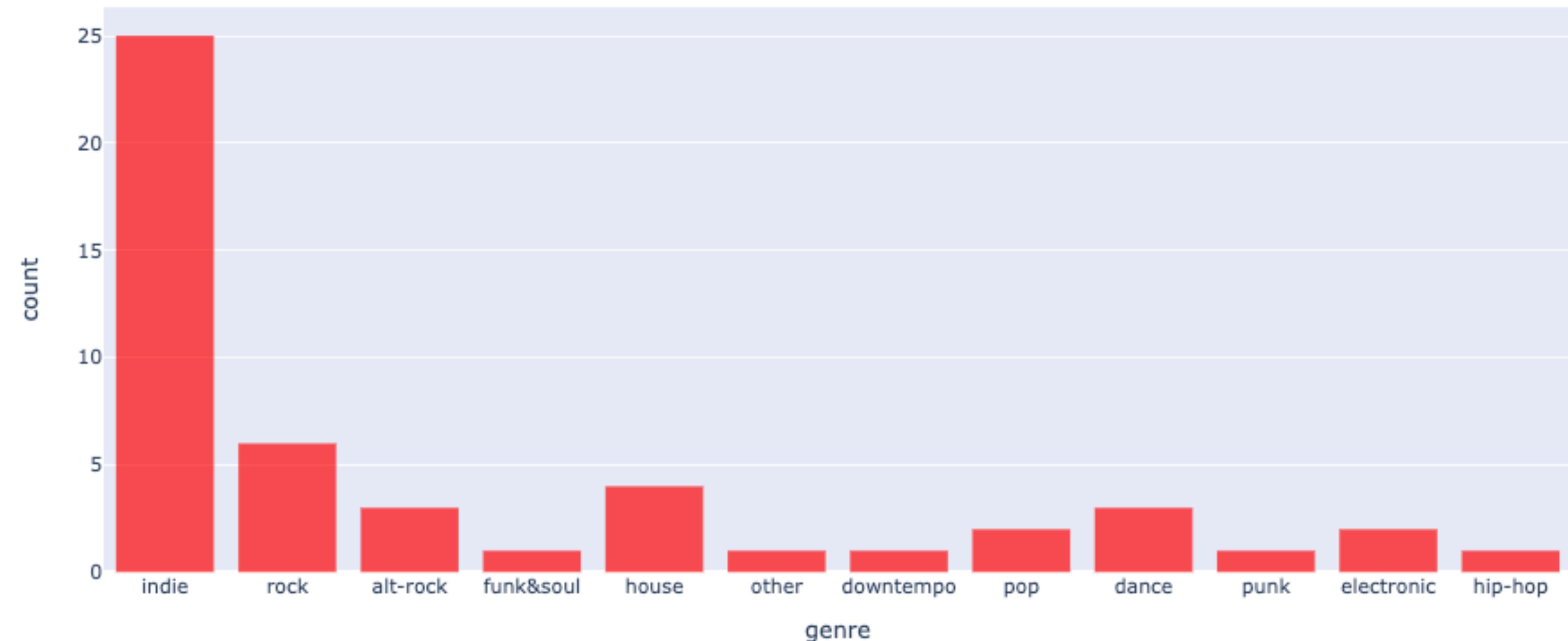
## Track Tempo Boxplots by Location



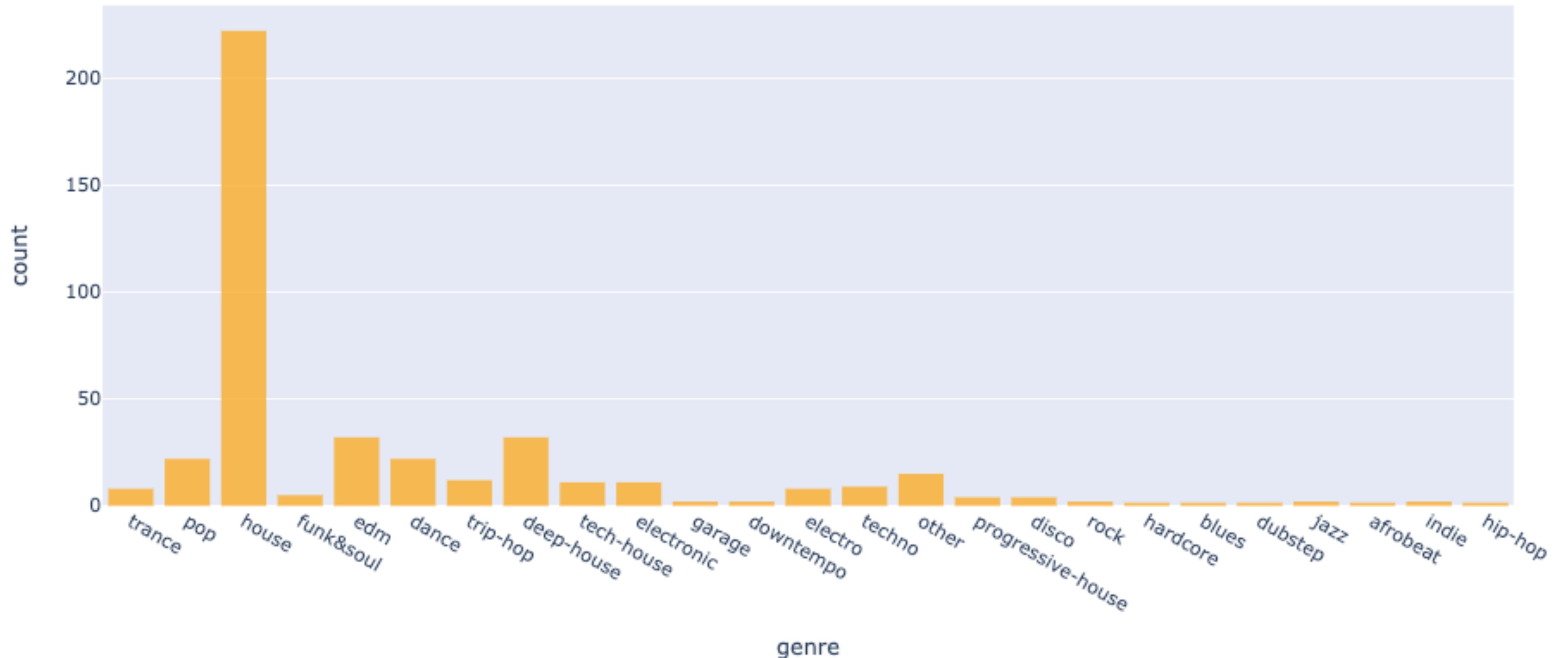
## Genre Distribution in London



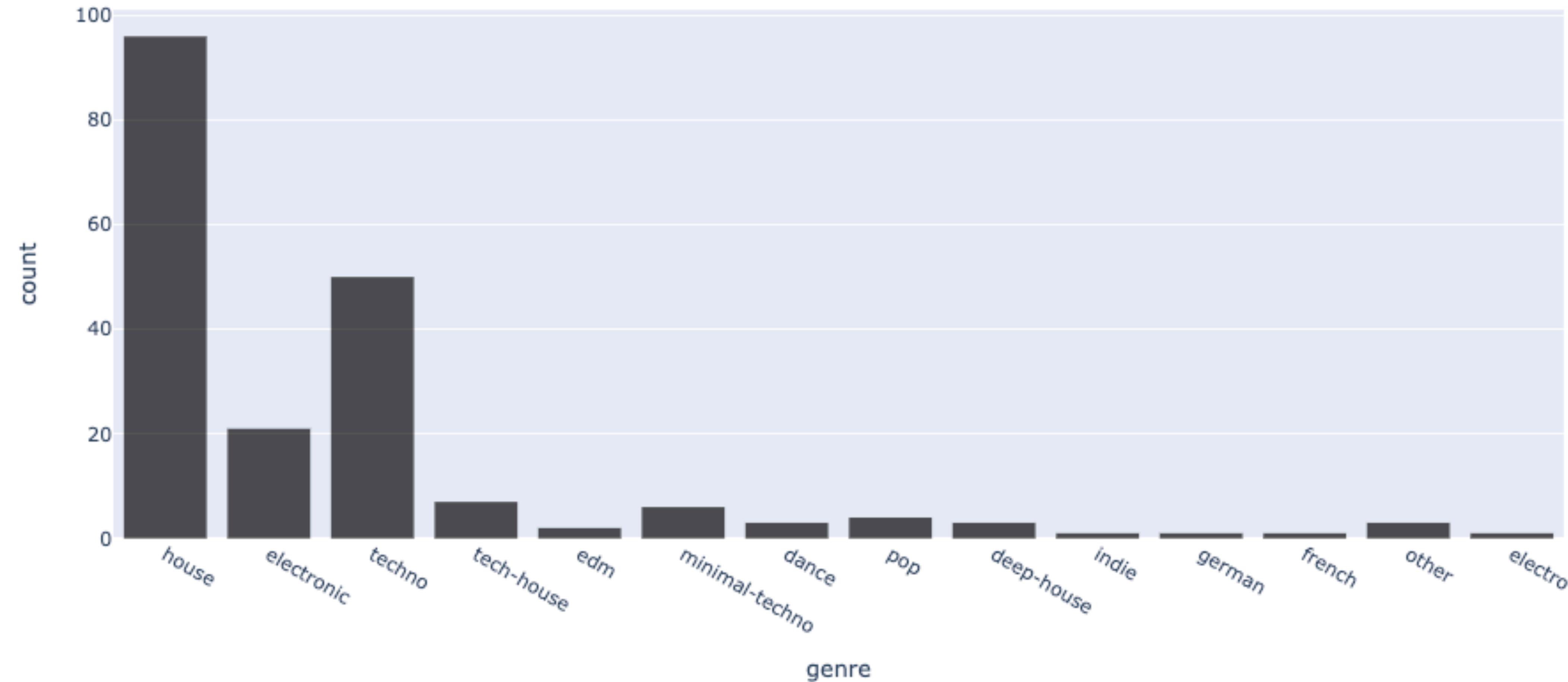
## Genre Distribution in Manchester



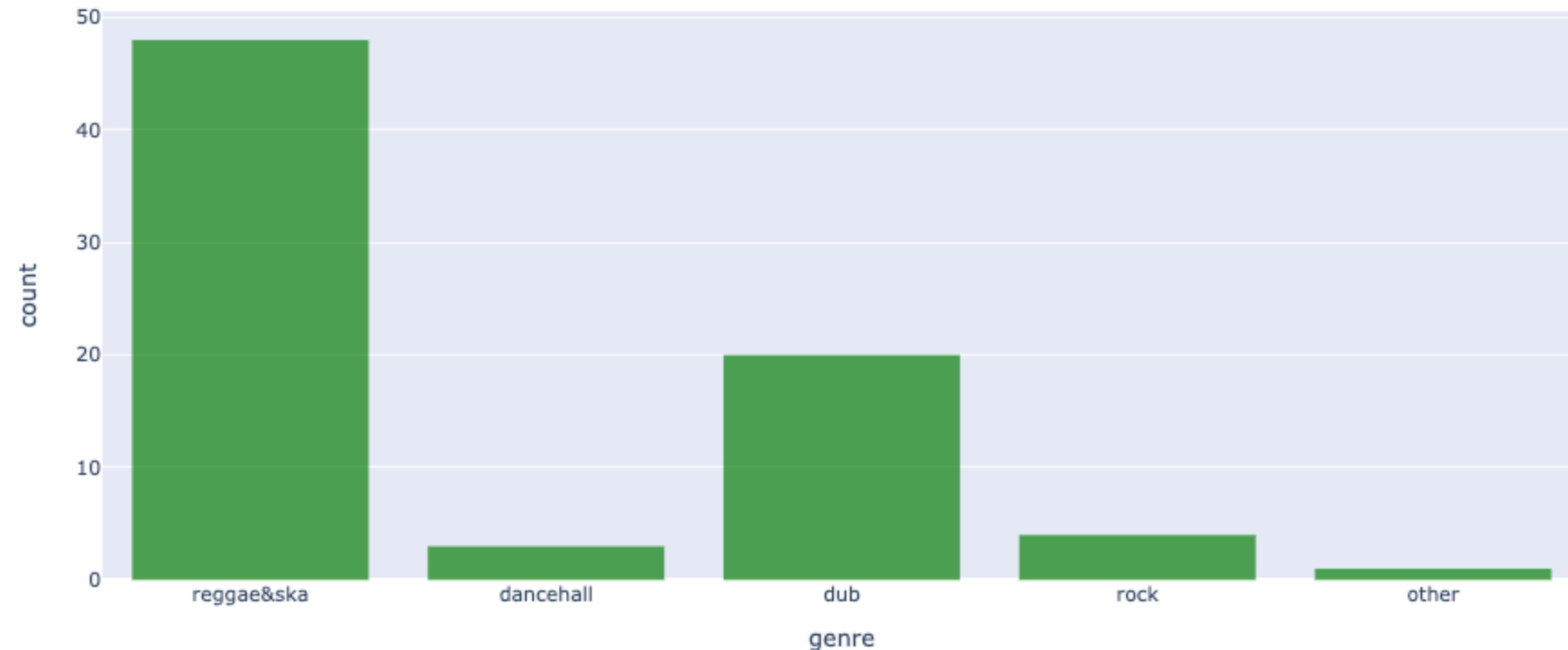
## Genre Distribution in Ibiza



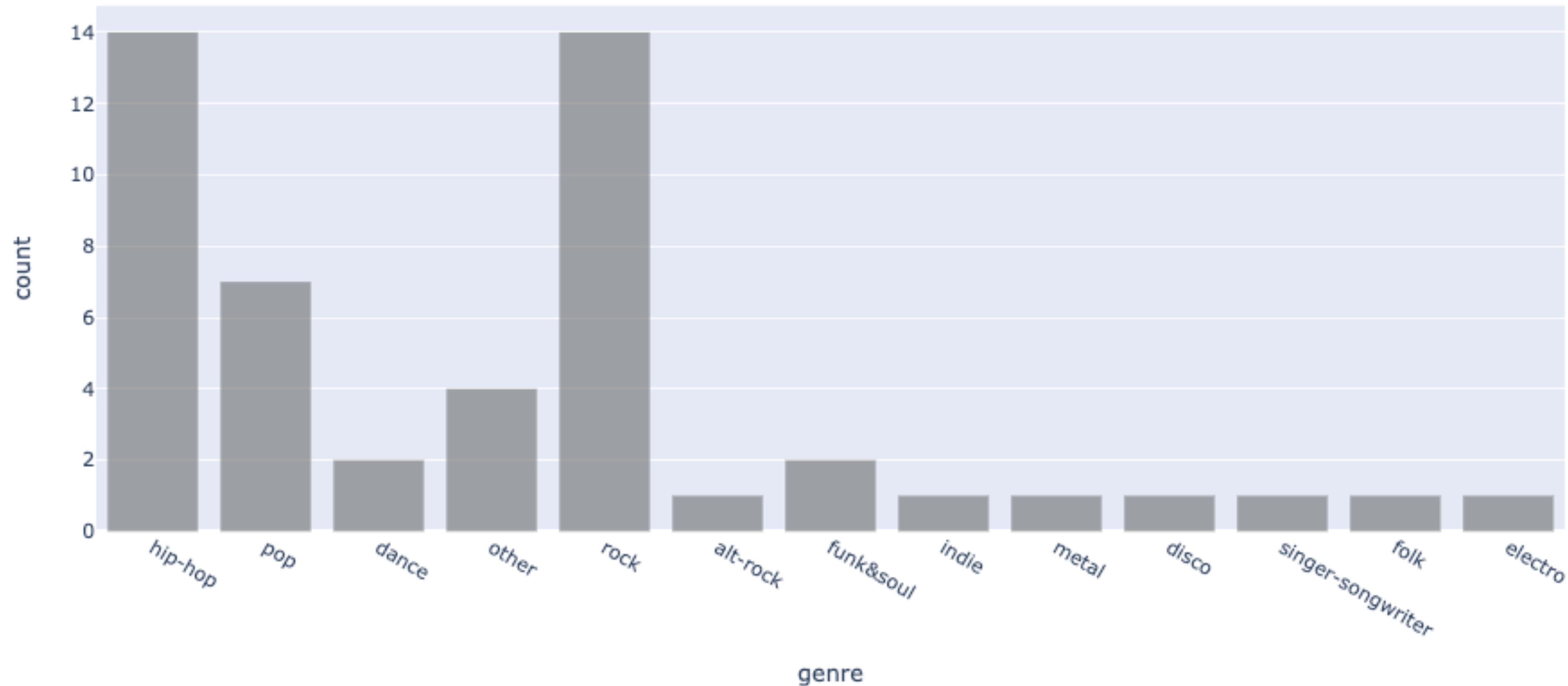
## Genre Distribution in Berlin



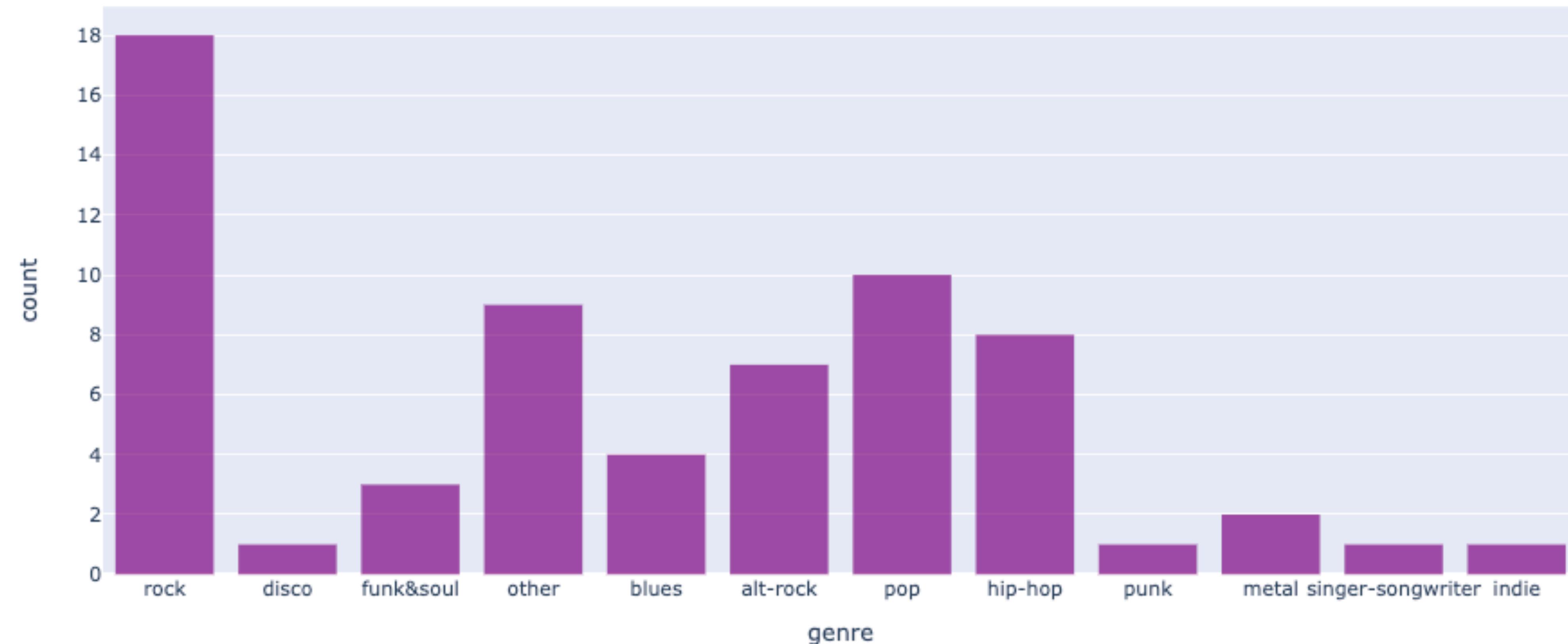
## Genre Distribution in Kingston

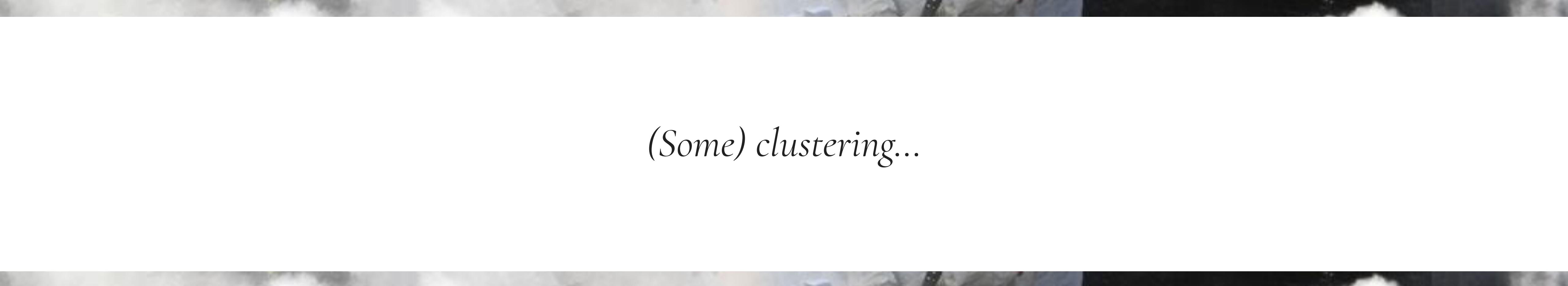


## Genre Distribution in NYC

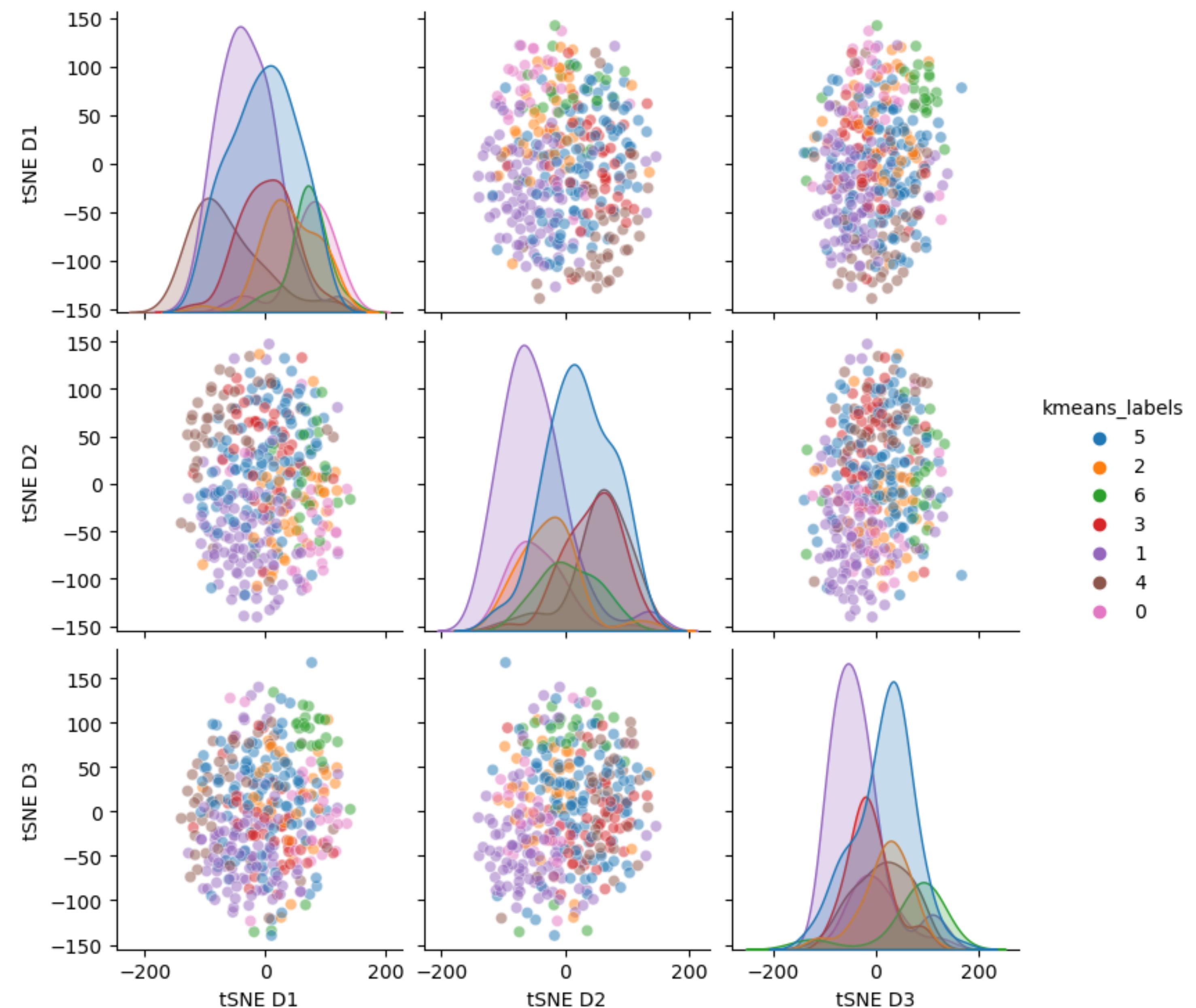
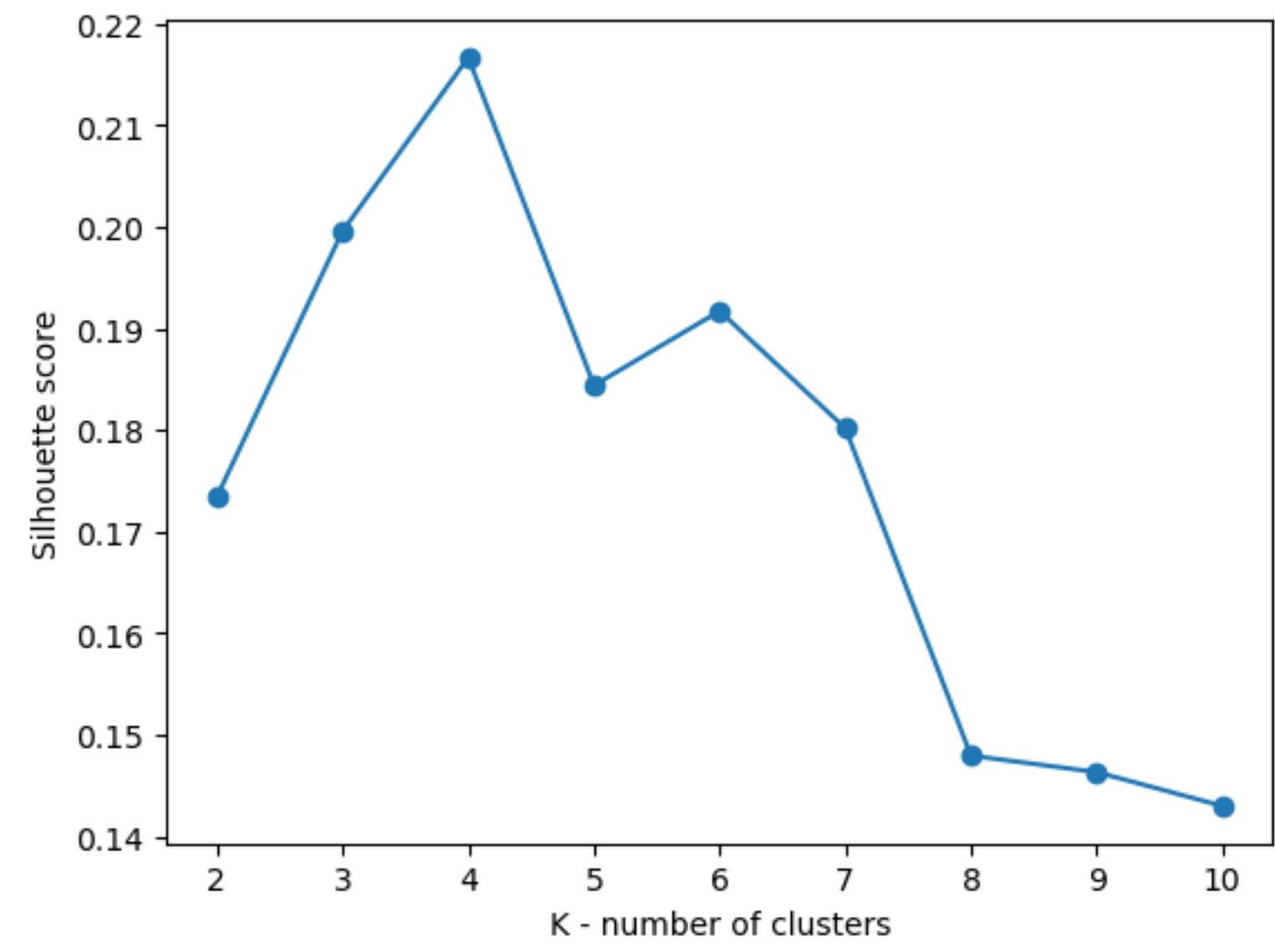
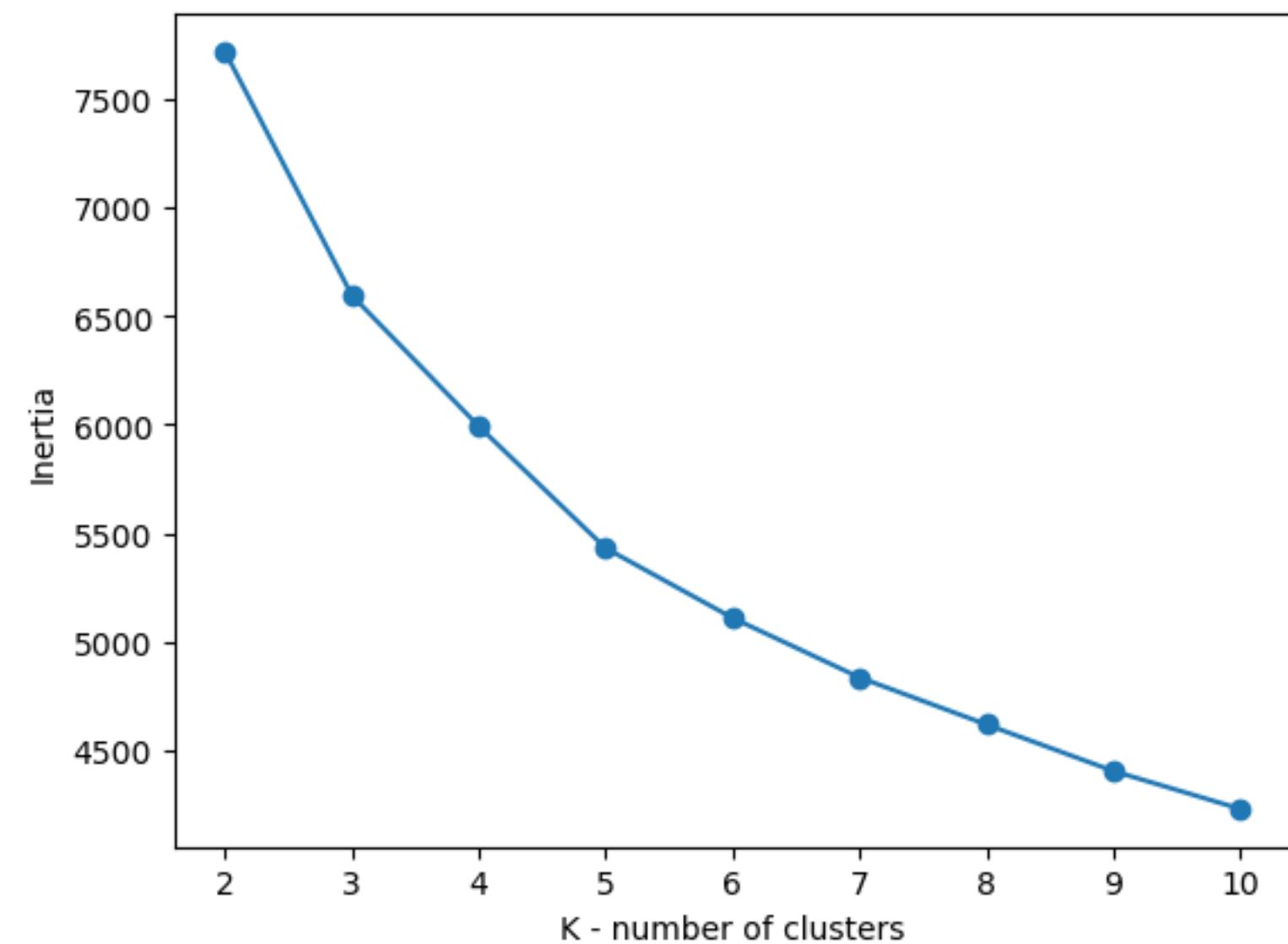


## Genre Distribution in LA





*(Some) clustering...*



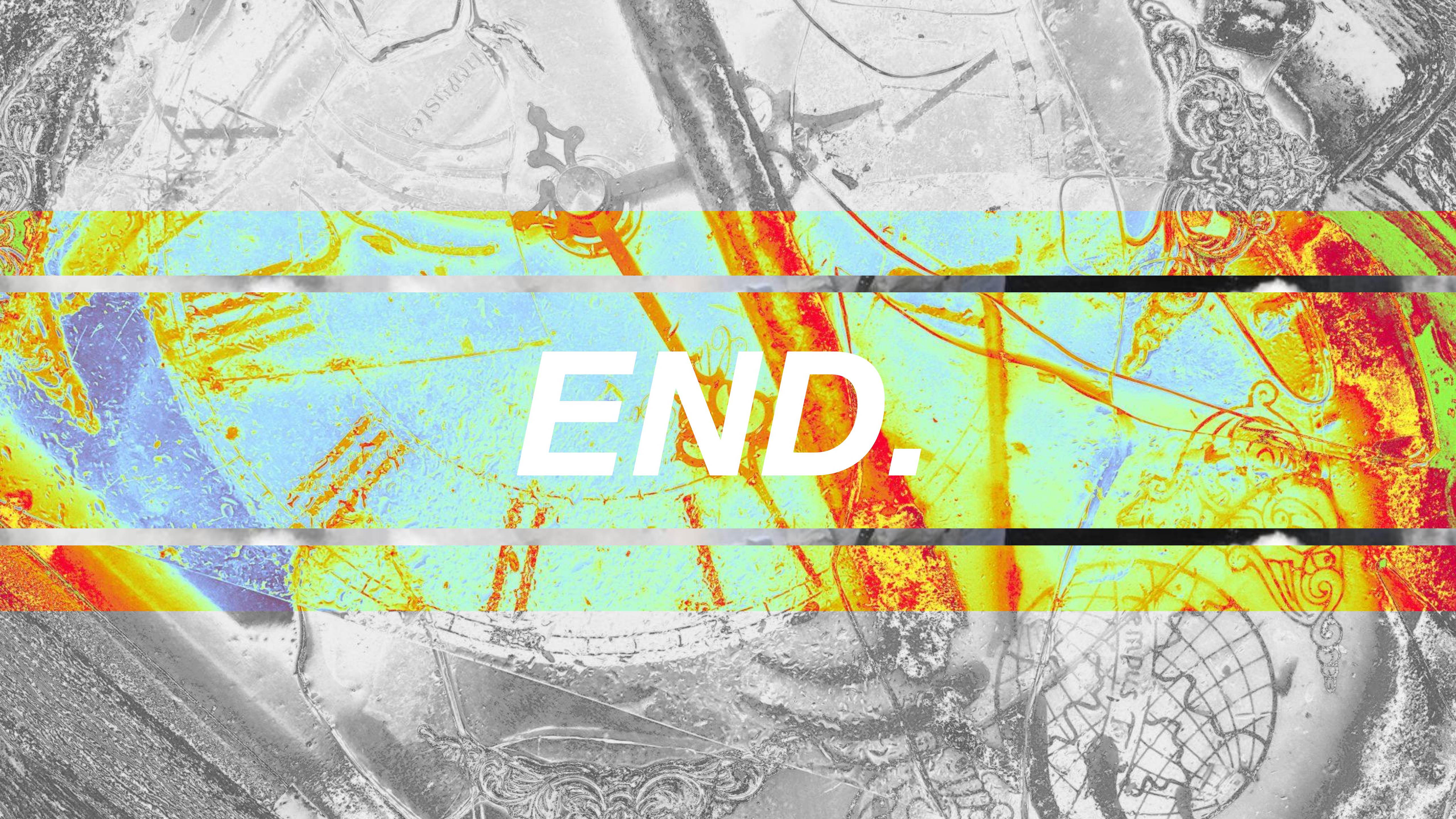


*Next Steps...*

# *Next Steps.*

- Further exploration and analysis of sound profiles
- Definition of track archetypes
- Build on clustering
- Recommendations

*Sprint 3 deadline - Monday 15th April*



**END.**