## 22894551 Question 2

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#### 1. Introduction

This is an analysis of two iconic bands with >20-year careers. Firstly, Coldplay (Alternative/Pop Rock, debut: 2000), and secondly Metallica (Heavy Metal/Thrash, debut: 1981). Using Spotify data, we can compare their musical progression, audience engagement, and adaptation to industry trends, filtering only studio recordings for fair comparisons.

#### 2. Popularity by album

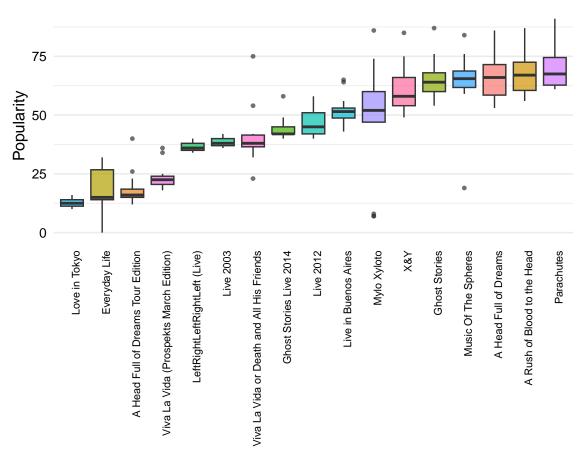
The popularity of each of the bands are shown in a box-and-whiskers plot, showing the popularity scores per album.

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#### 2.1. Coldplay

#### 2.1.1. Overall

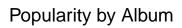
# Popularity by Album

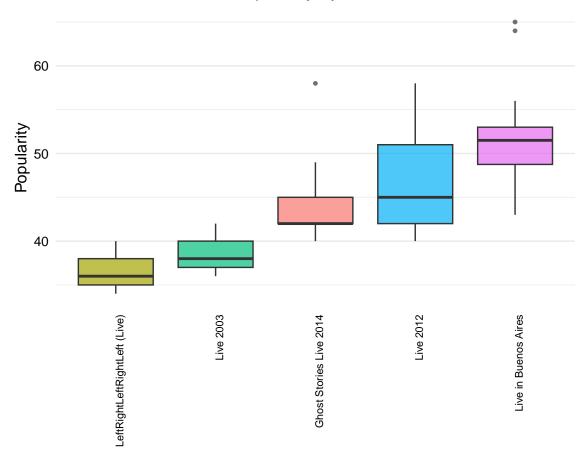


 $\operatorname{Coldplay}$ 

is known for its live albums, with the live albums of "Live in Bueonos Aires" and "Live 2012" surpassing albums like "Love in Tokyo" and "Everyday Life" in popularity.

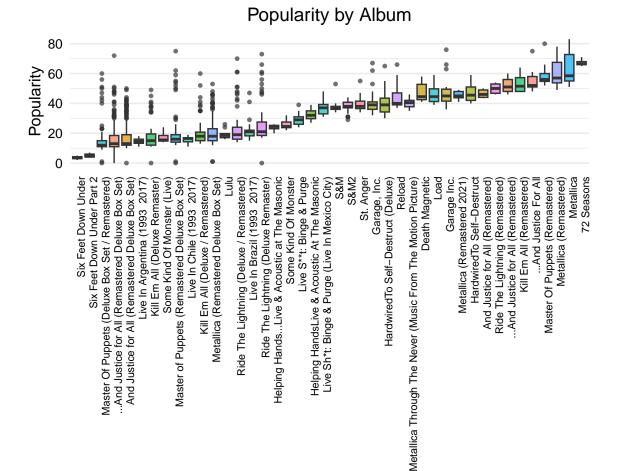
## 2.1.2. Live





#### 2.2. Metallica

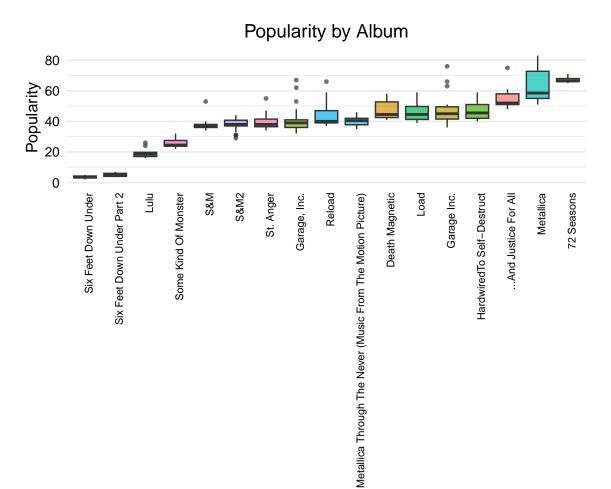
#### 2.2.1. Overall



For

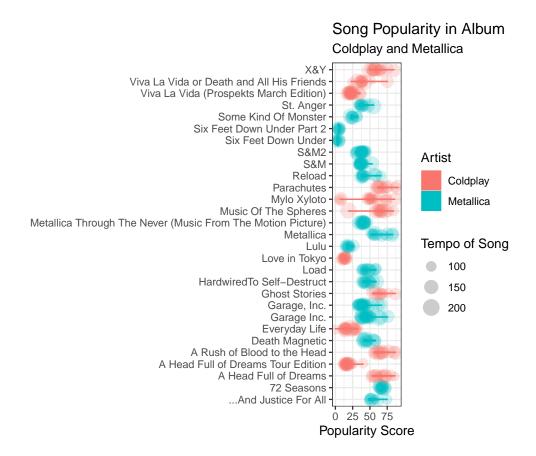
Metallica, the remastered albums gain more traction, as seen by 7 of the top 10 most popular albums being remastered albums.

### 2.2.2. Studio



#### 3. Song popularity

Now let's look deeper into the popularity of the songs within each album.

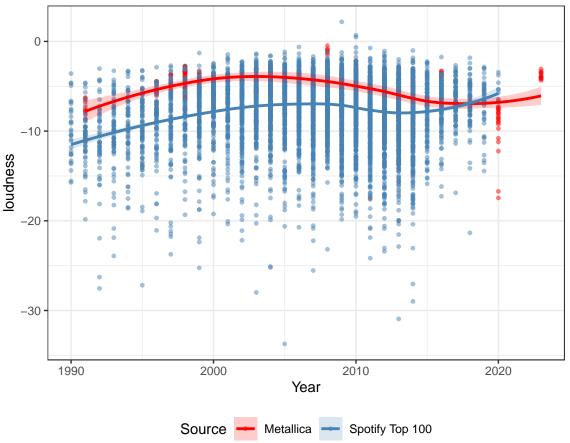


"Parachutes" and "A Rush of Blood to the Head" are identified as Coldplay's two most popular albums of all time. Within those two albums, all songs are popular. Compared to "Mylo Xyoto", where many songs are popular, but some are unpopular - bumping the album to a lower ranking overall. This shows the importance of song popularity in determining album popularity.

#### 4. Timetrends in music style

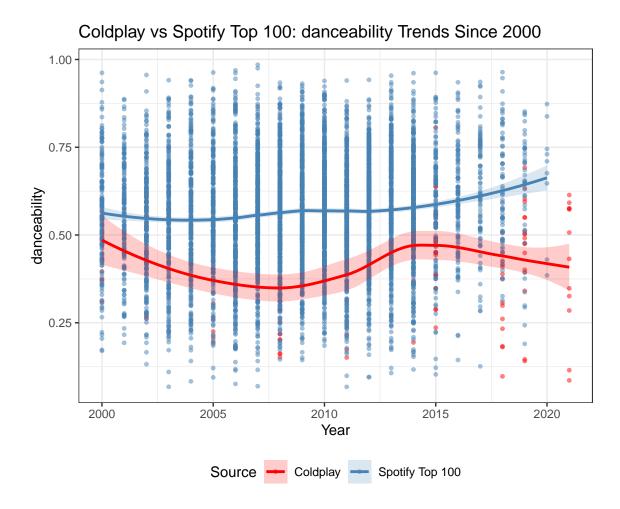
To look deeper into the longevity of these popular bands, we can consider the development of music styles over time. By reviewing the time trends of components of their music compared to that of Spotify (a proxy for global music trends), we can uncover whether the artists changed their style to meet global trends. Metallica, known as a loud band, remains louder than the global trend, up until about 2015, maintaining their signature style.

# Metallica vs Spotify Top 100: loudness Trends Since 1990



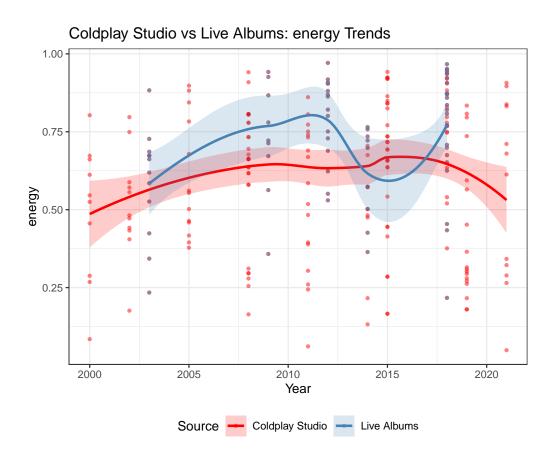
Cold-

play starts following the global danceability trends, but returns to their calmer style over time.



#### 5. Live vs Studio albums

We can see that energy trends are much lower in Live albums, for both Coldplay and Metallica, but especially for Metallica.



## Metallica Studio vs Live Albums: energy Trends

