

# Metallica and Coldplay Longevity and Musical Progression in Context of Overall Music Industry Progression

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## 1. Introduction

Metallica and Coldplay are bands that are probably known to everyone interested into music. This short report analyses the development of these two bands' musical progression over time, by analysing the success of their songs, as well as changes in their styles. The results are being set into context with overall trends in the music industry in the same period.

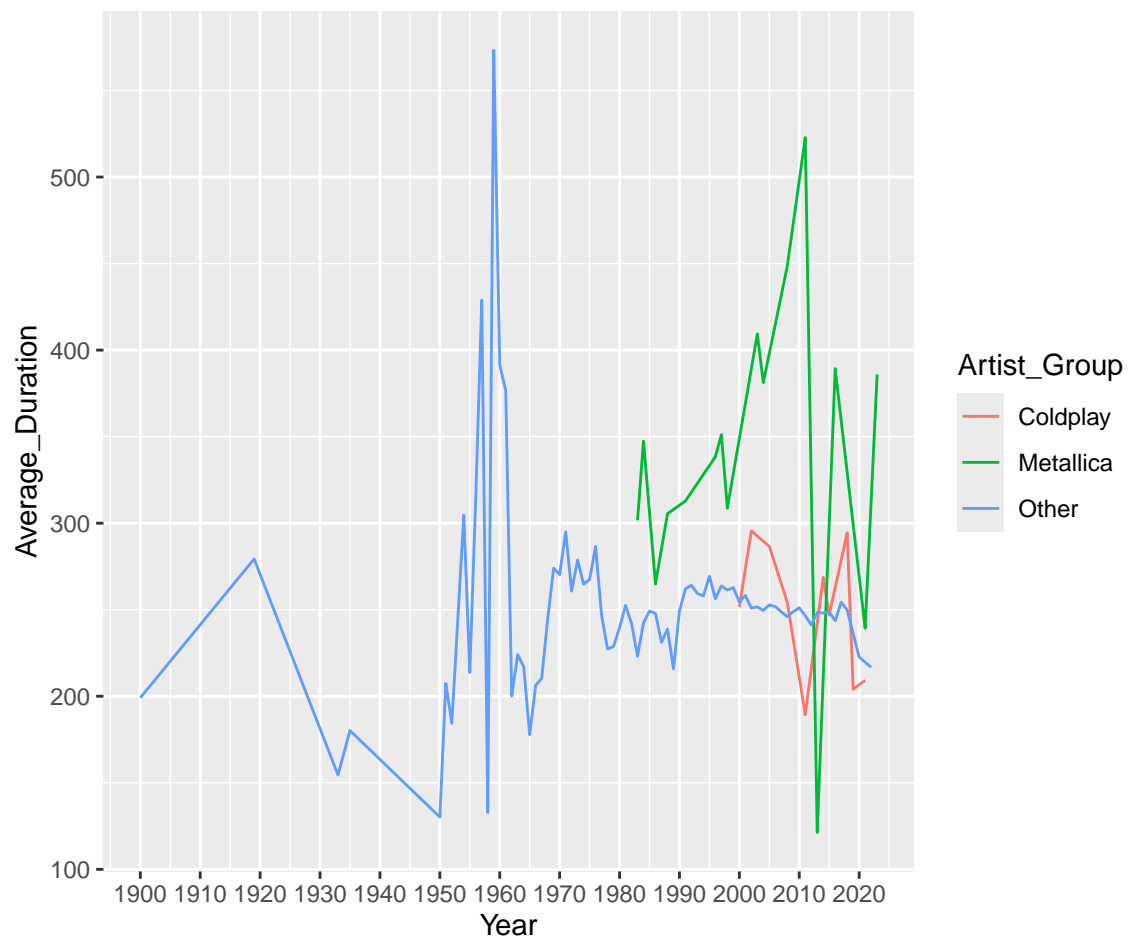
## 2. Data Overview

In a first step, the data frames for coldplay, metallica, as well as the spotify songs are being cleaned. Thereafter, they are being joined to the final data set called "bands".

## 3. Analysis

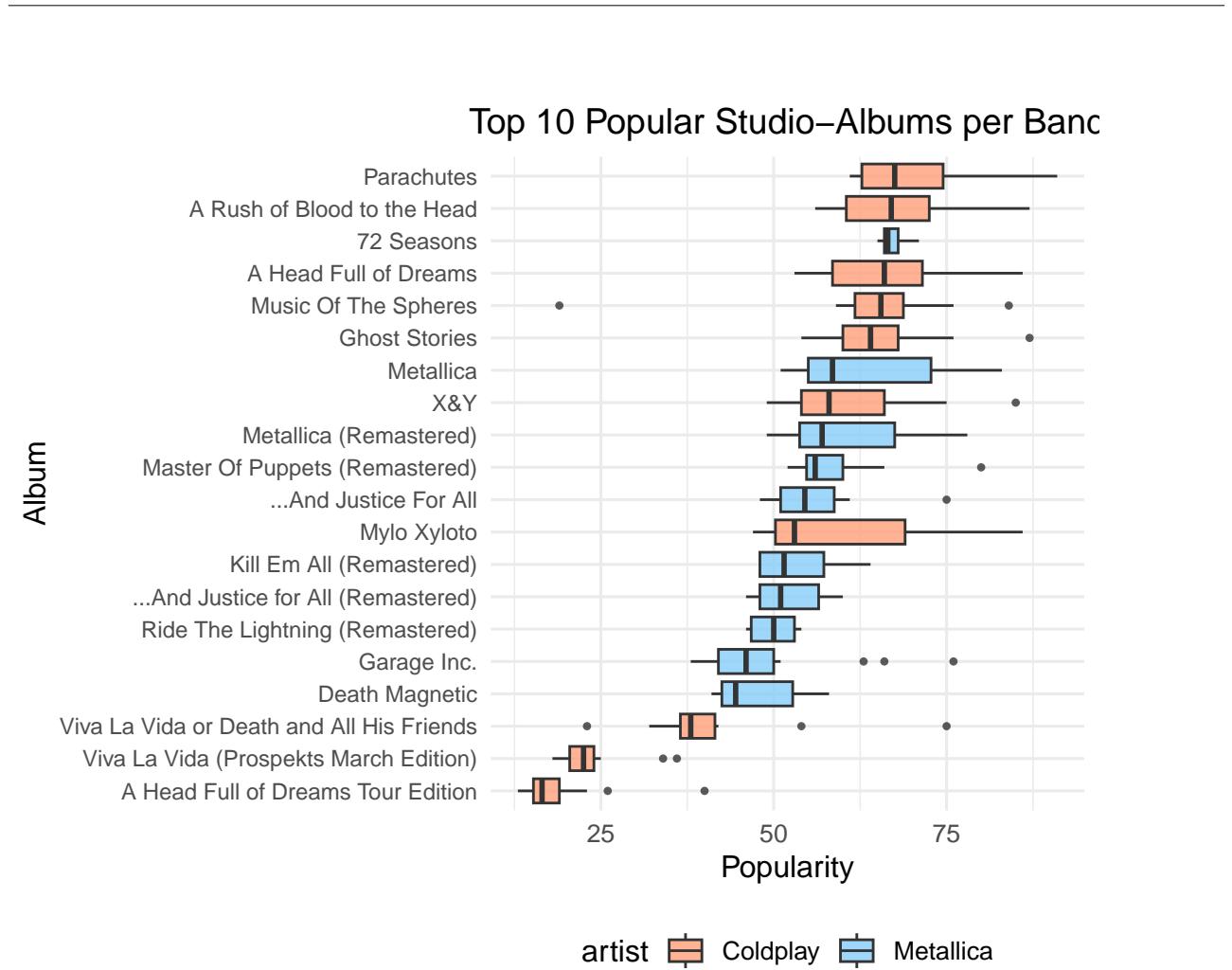
### *3.1. Average Song Duration (Metallica vs. Coldplay vs. Others)*

Next, average duration of songs over time is compared between Metallica, Coldplay and other bands. The results show that Metallica songs are longer than other bands' songs on average.



### 3.2. Top 10 Most Popular Albums (Metallica vs. Coldplay)

Moreover, the top 10 most popular albums of Metallica and Coldplay are being visualized.



### 3.3. Average Audio Features (Metallica vs. Coldplay)

Furthermore, average audio features of Metallica and Coldplay songs are analysed and presented in a table.

Table 3.1: Comparison of Average Audio Features: Coldplay vs. Metallica

Feature	Coldplay	Metallica
danceability	0.427	0.414
energy	0.562	0.798
loudness	-9.411	-8.361
speechiness	0.041	0.072
acousticness	0.300	0.078
instrumentalness	0.254	0.374
liveness	0.200	0.185

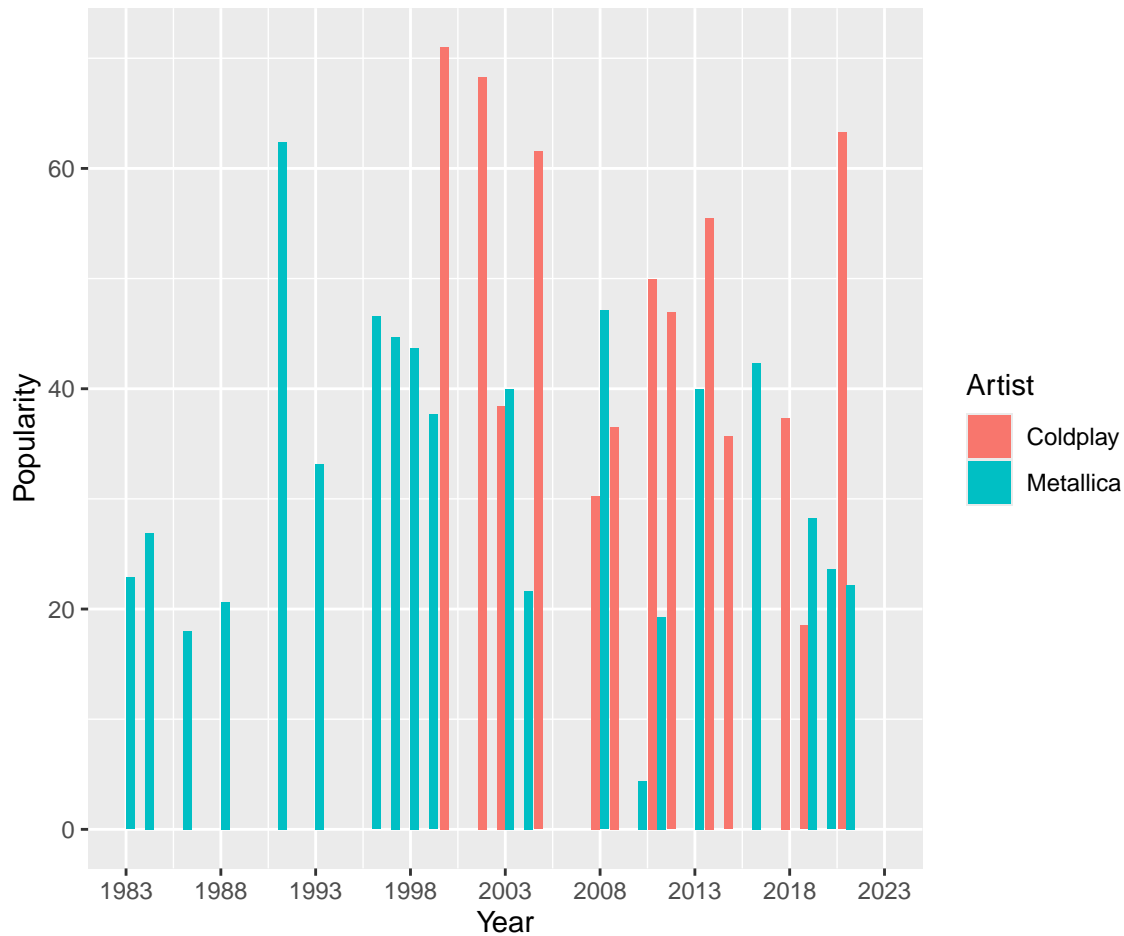
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valence	0.245	0.455
tempo	126.610	122.162
duration	243.591	304.211

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### 3.4. Average Song Popularity (Metallica vs. Coldplay)

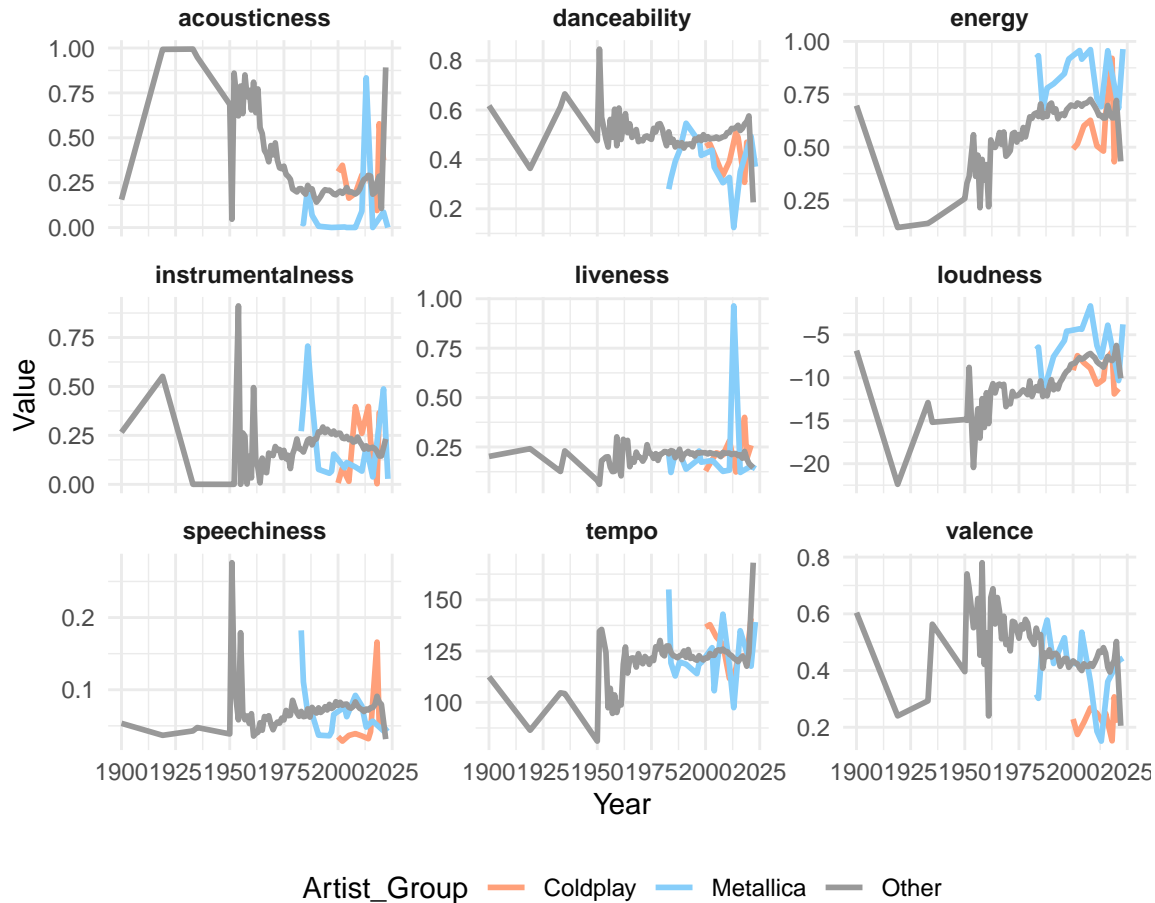
In the next step, the average popularity of songs of Metallica and Coldplay is being compared to get an understanding which of the bands is more popular. The results suggest that Coldplay songs are on average more popular, even though the band Metallica is longer standing and hence more established on the music market than Coldplay.



### 3.5. Overview of Audio Features Over Time (Metallica vs. Coldplay vs. Others)

Lastly, average audio features of Metallica and Coldplay songs are compared to average other songs over time. This allows to trace music trends and evaluate whether the two bands are in line with overall

trends, as well as identify unique selling points of the bands. It becomes apparent that Metallica is lower and more energetic and live than Coldplay and other artists. Coldplay is speechier and more danceable and instrumental on average.



#### 4. Conclusion

The analysis has shown that Coldplay songs are on average more popular than Metallica ones. Furthermore, their music differs in the categories under analysis (e.g. energy, valence). Metallica songs tend to be longer than Coldplay song and the average of other interprets songs. The detailed audio feature analysis has shown that both bands have unique selling points, differentiating their music from overall music trends and average other bands.