Question 2

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Abstract

I will analyze longevity and music progression

1. Introduction

The music industry is in big change. The last twenty years since the first appearances of music streaming services, the whole business model has been under change. TO investigate how or if the change als influenced established bands who are already popular, I will investigate songs of Metallica and Coldplay and set them into relation with a Spotify dataset to compare the songs to other aritsts.

Although the data set contains song data, a hypothesis which could be setup is that the success of a song is perfectly correlated to the Albums popularity. If this was the case, further analysis could be broken down to album level which would simplify the data work significantly. The following plot thus shows a box plot of the popularity of songs per album.

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Contributions:

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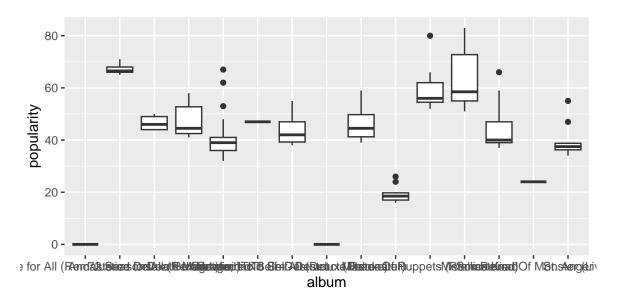


Figure 1.1: Caption Here

We can see that the popularity of sings per album is rather spread. Analysis on album level is therefroe not advisable.

While both bars have a long history, it is interesting if they are still active today. The next plot shows the song releases per band over time

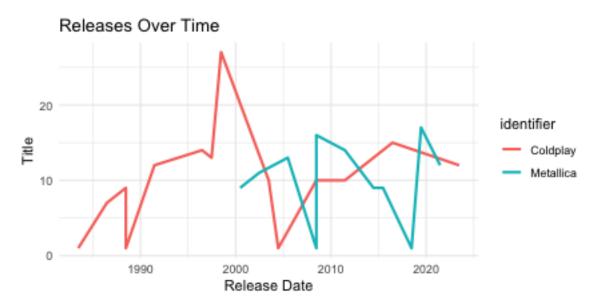


Figure 1.2: Caption Here

The plot shows two things. The first and most important one is that metallica misses pre 2000 data. The comparison can therefore only be done post 2000. We can see that Coldplay released songs on a more regular basis since 2000 than Metallica

2. Change of song duration

In recent years the hypothesis was set up that songs becam shorter over time for two reaosns. The first one to be preferred by different algorithms which are apparently supposed to prefer short songs and the other reason is the rise of social media, where long songs are not important either but only a few good seconds are important to put them under a video. TO test if that is true and also if this applies to Coldplay and Metallica this will be plotted below.

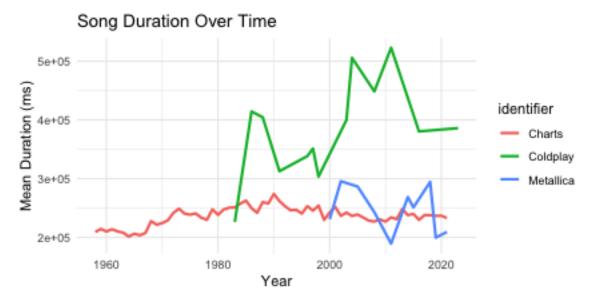


Figure 2.1: Caption Here

We can see that since the 1990s across all spotify songs there is a clear downwards trend for the average song length, although the sample size is small, metallica seems to have a slightly decreasing trend too. Coldplay on the other hand has a clear upwards trend for the song duration

References

Appendix

 $Appendix\ A$

Some appendix information here

 $Appendix\ B$