

Mapping acoustic cues to emotional responses: Exploring musical cue use through cluster analysis



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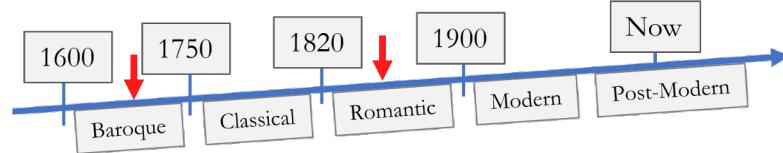
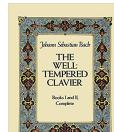
Background



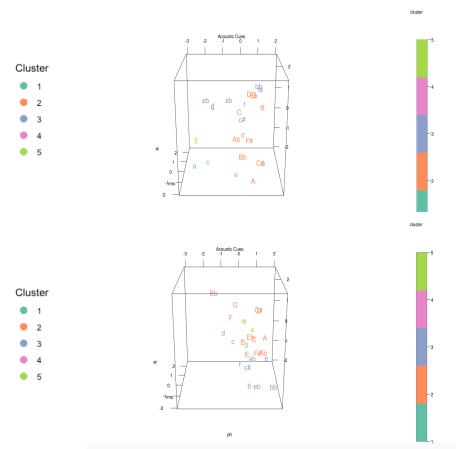
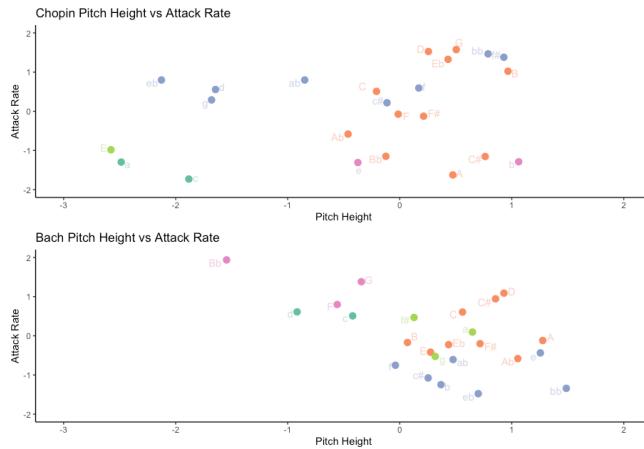
JS Bach
(1685-1750)



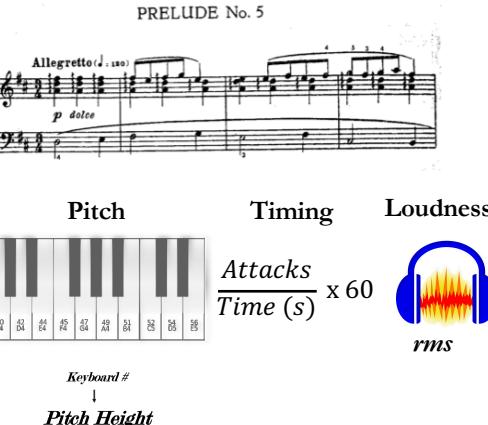
Frédéric Chopin
(1810-1849)



Findings



Methods



Russel's Circumplex

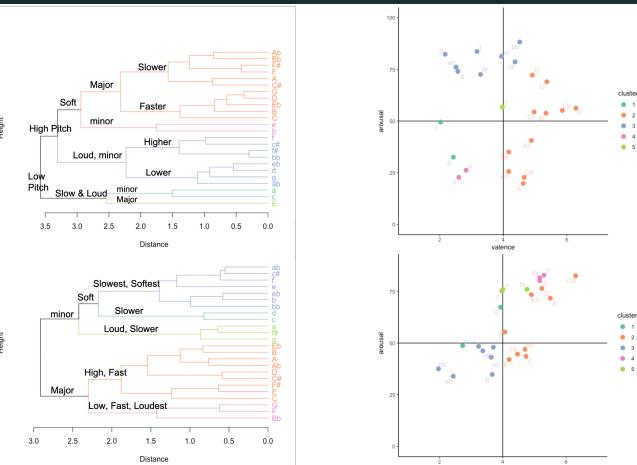
High Arousal

Happy emoji

Low Arousal

High Valence

Smiley emoji



Acknowledgments

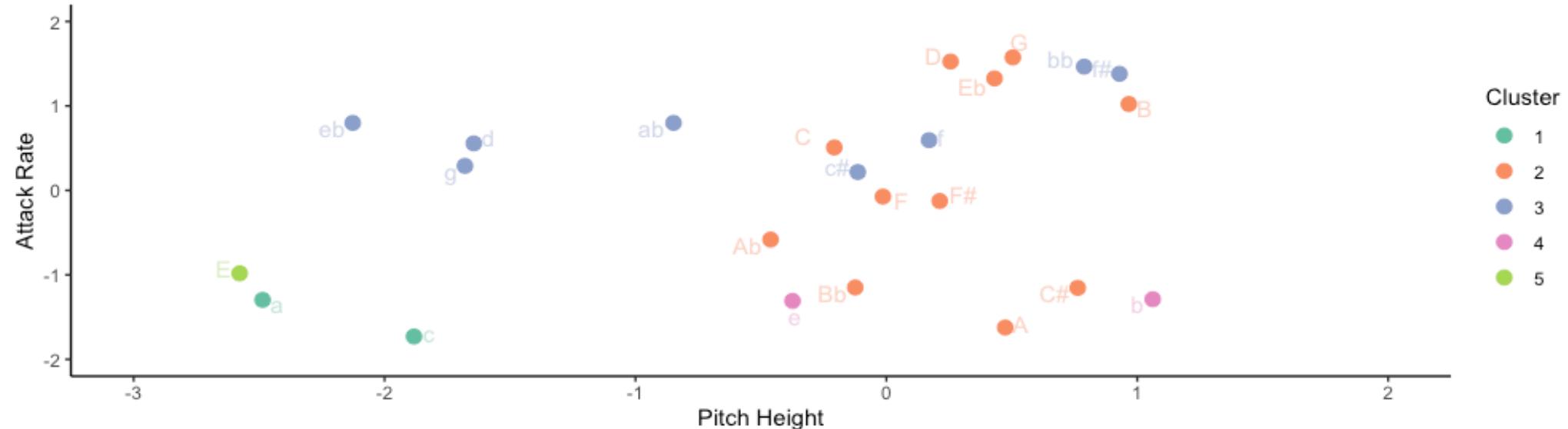
Special acknowledgement to Cameron Anderson for his important contributions to this exploratory study



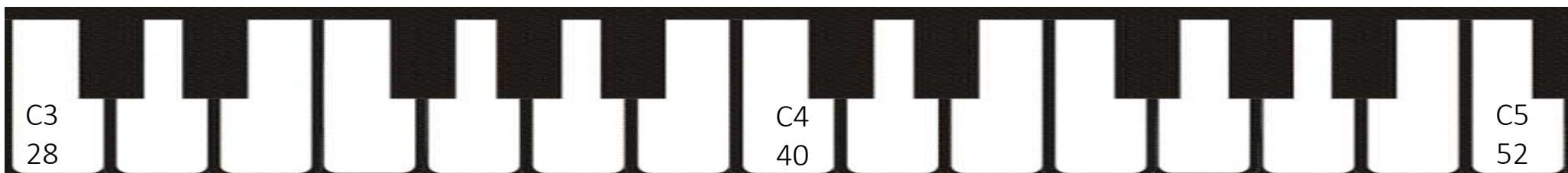
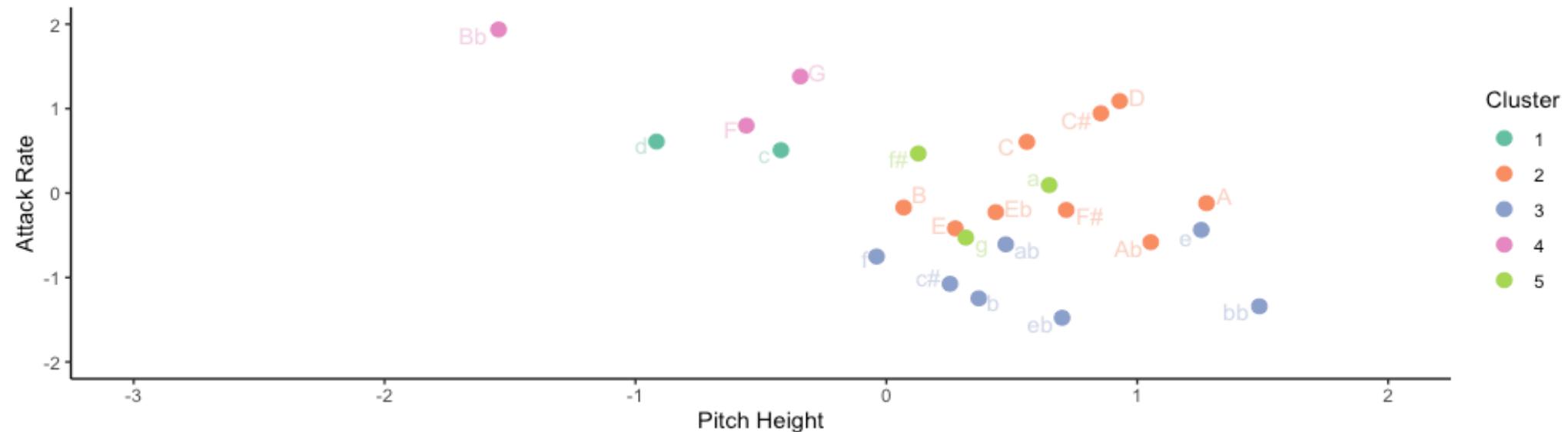
Summary

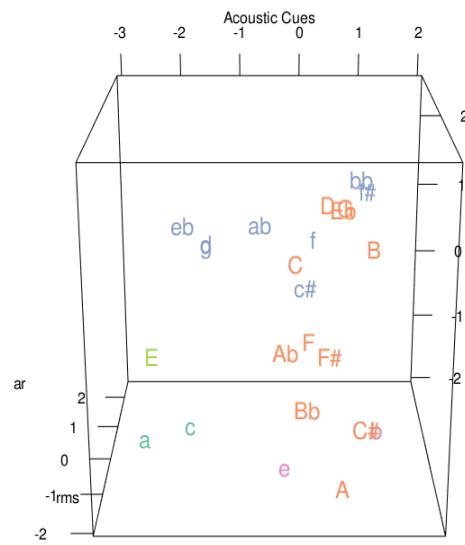
- When examining Bach data and comparing it to Chopin data, we see the changes in cues throughout history.
- Cluster analysis based on cues show that clusters are broken down differently between each composer. For Bach, mode and timing are the dominant cues in terms of clustering, whereas for Chopin, pitch height, timing, and loudness dominate.
- This change in clustering suggests that the roles of these cues changed between these composers, and perhaps over time.

Chopin Pitch Height vs Attack Rate

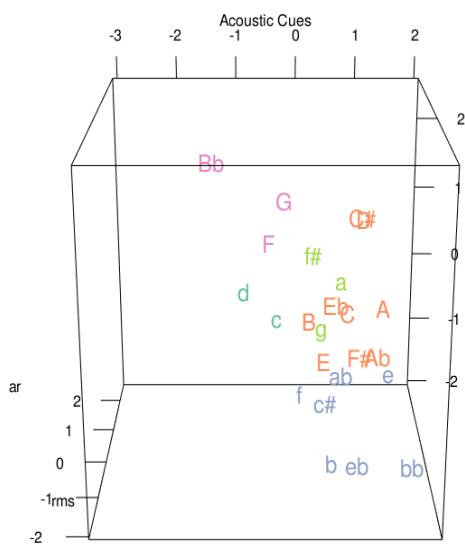
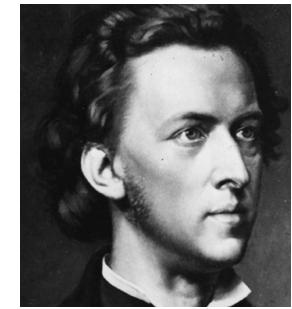


Bach Pitch Height vs Attack Rate

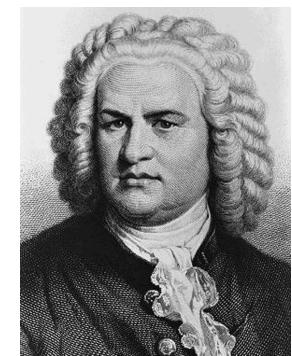
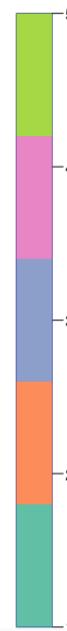




cluster



cluster



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