



# The Sources of Absolute Music: Mapping Emotions in DIDONE Eighteenth-Century Italian Opera



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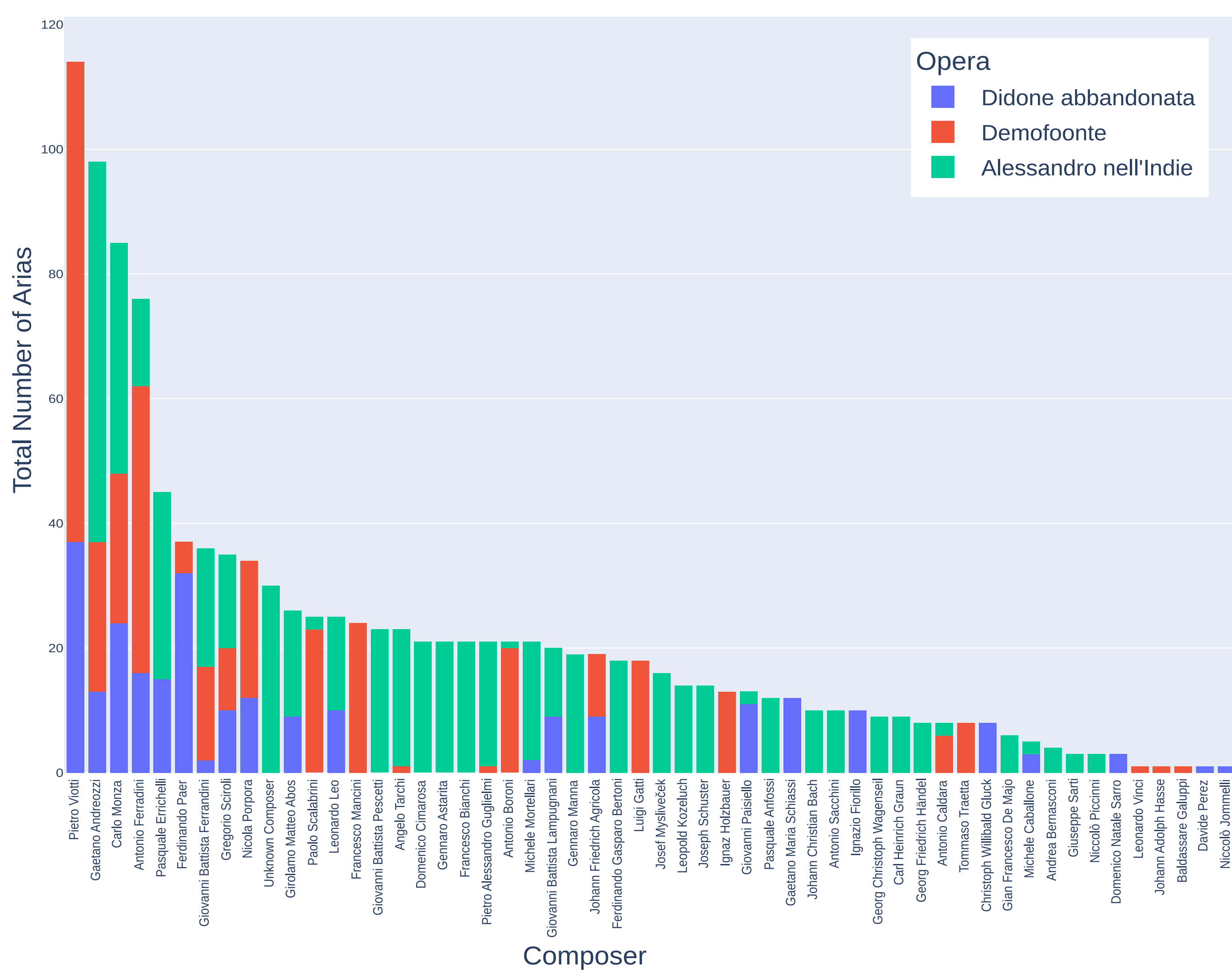
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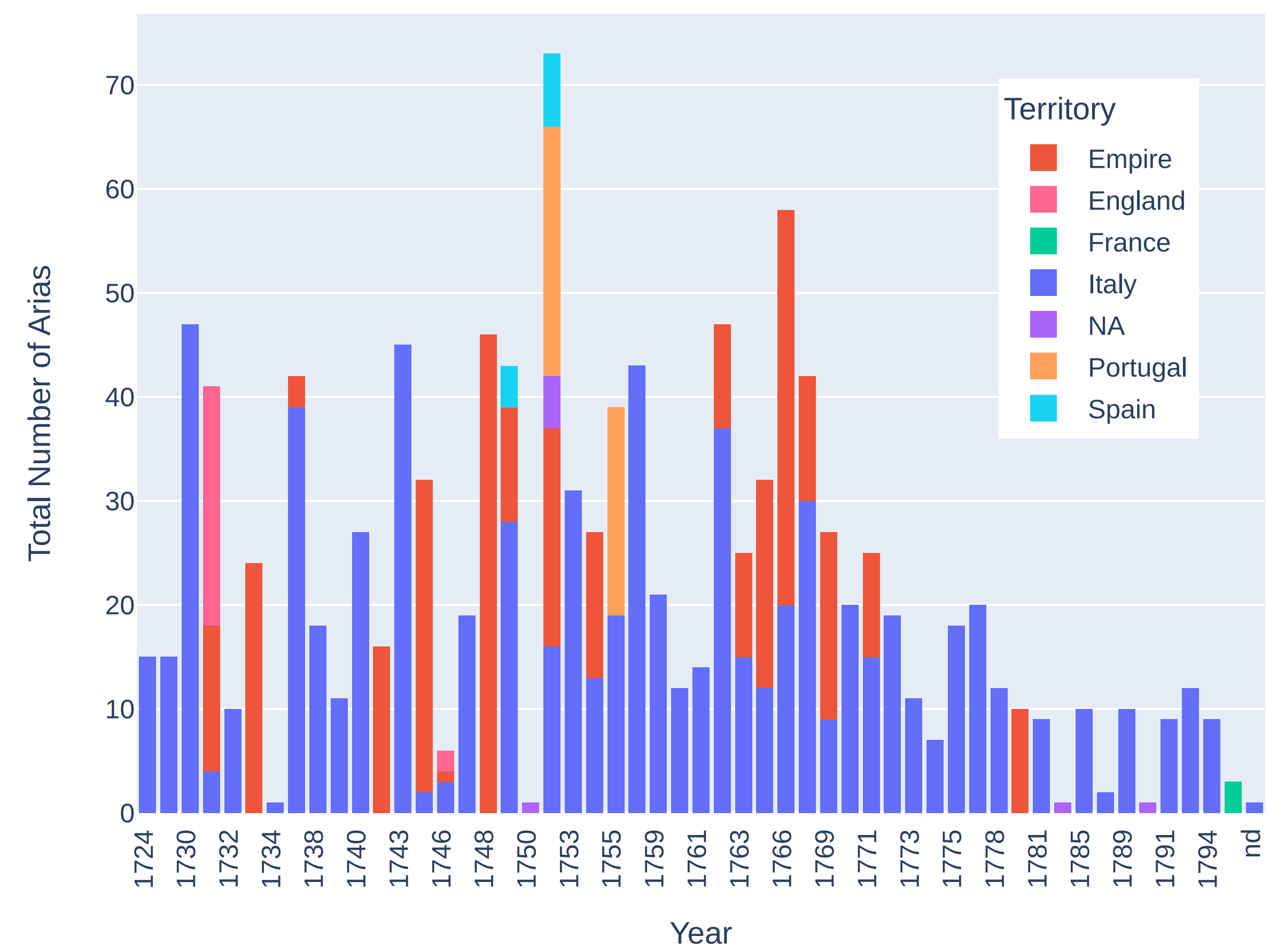
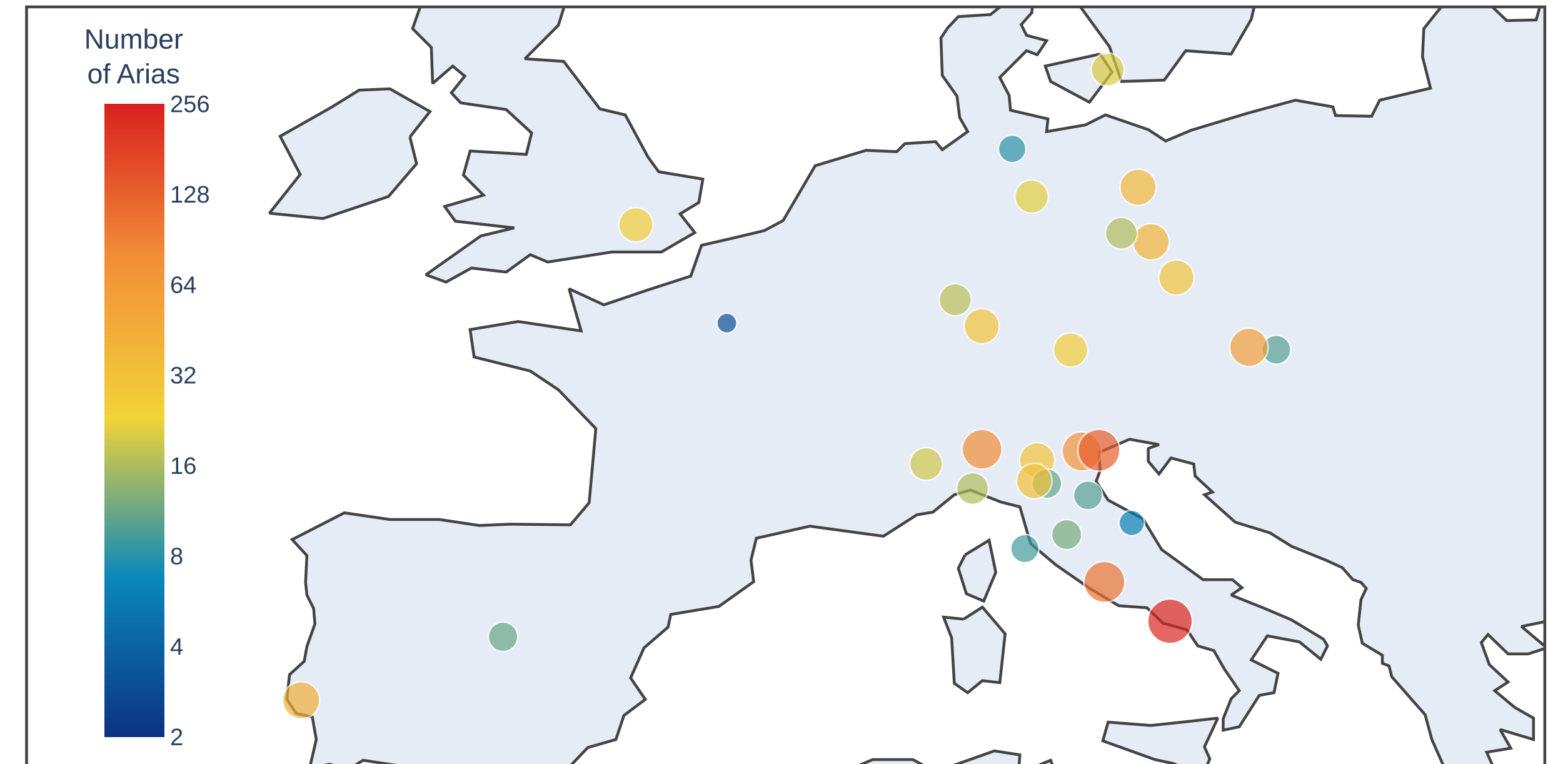
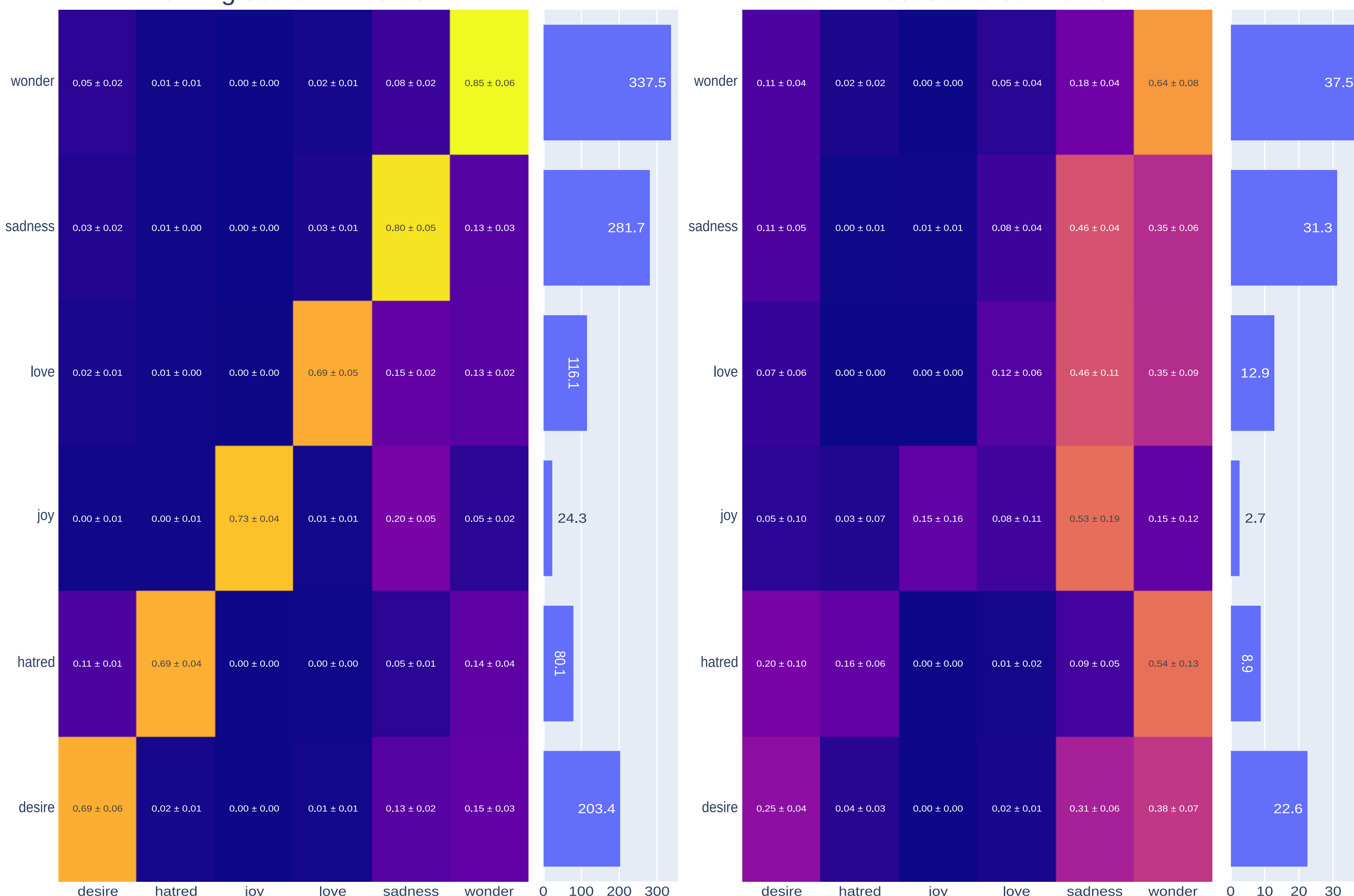
We want to scrutinise conventions that defined the expression of emotions in music throughout a century, paving the way for the emergence of 'absolute' instrumental music.

## Do those resources point towards music's autonomy?

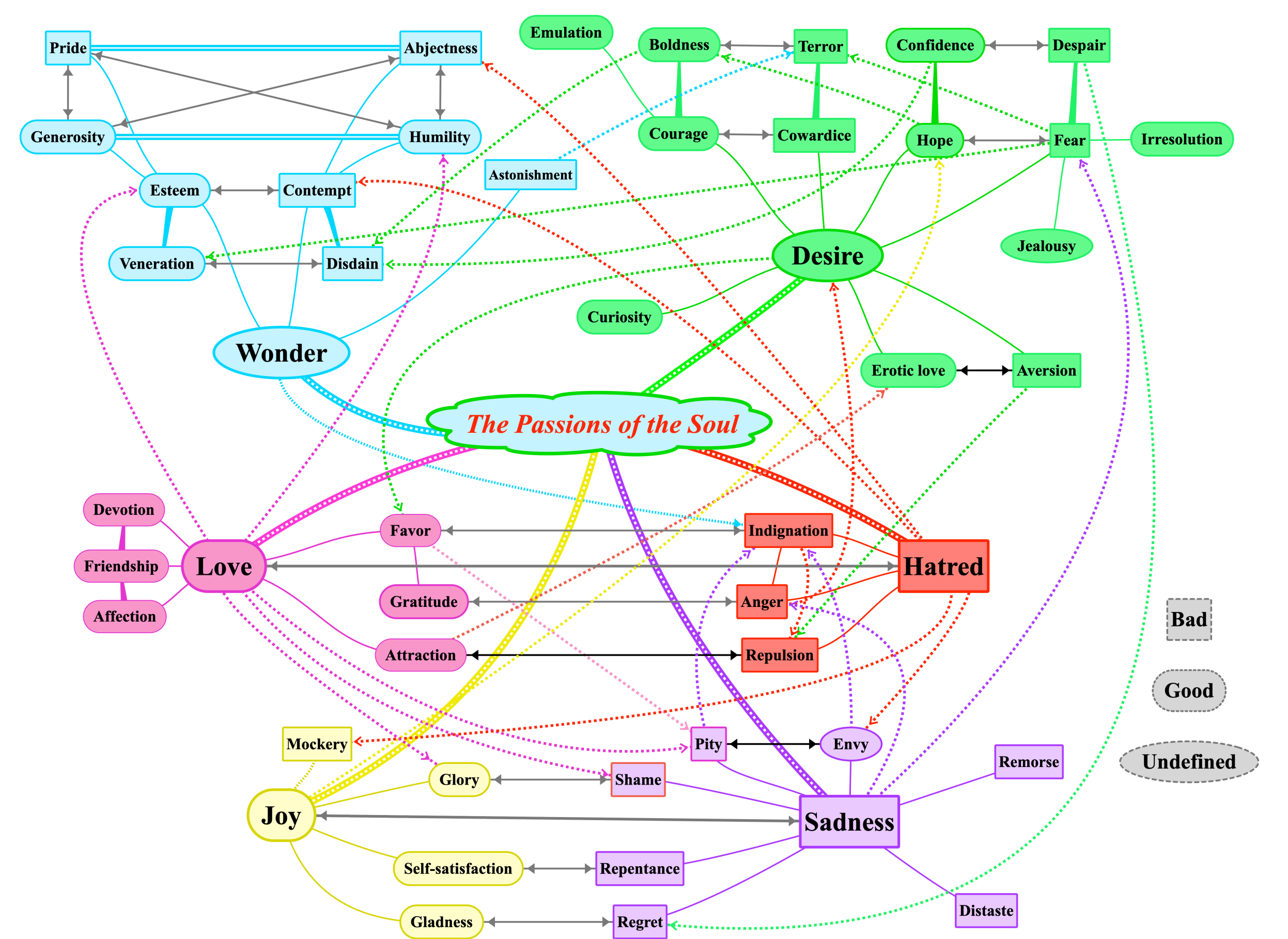
Our team has created a corpus of 18th-century musicologically curated opera arias in order to mine the compositional techniques related to the expression of emotions, as epitomized in Metastasio's successful librettos and Descartes' philosophy. The unprecedented size of the database allows for music analysis based on machine learning.



10-fold crossvalidation of an AutoML pipeline Training set: 0.74 ± 0.03



## How were emotions musically expressed in 18th-century opera?



We will experiment with transformers and other neural-based methods for music emotion modeling, including computational creativity, language and signal processing. The ability to statistically model music creation will lead to a deep understanding of the cognitive mechanisms underlying music emotions.

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