Integral Analysis in VIS

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1. Intervallic Analysis
Intervallic Analysis:

• Historically pertinent
• Straight-forward and perceptible connection to music
• Highly objective analytical approach
• Can apply to vertical and/or horizontal aspects of music or both
• Appropriate in the analysis of one or many pieces of music
• Issue of selective analysis
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1. Intervallic Analysis

2. Analysis “by hand”
Analysis “by hand”:
• Encourages good familiarity with corpus
• Effective but labor intensive
• Typically applied to one piece or a small corpus

1. Intervallic Analysis

2. Analysis “by hand”
1. Intervallic Analysis

2. Analysis “by hand”

3. Automated Analysis
Automated Analysis:

- Makes large corpus studies possible
- Allows for discernment of trends over time, genre, composer, or other large-scale classifications of music
- Forced us to reevaluate all of our assumptions and be aware of the finer points of our analytical approach
- Automation changed our scope, but not our fundamental approach

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1. Intervallic Analysis
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4. Integral Analysis
Integral Analysis:
• Allows for the comparison of entire analysis profiles between pieces providing a similarity score for each pair
• Addresses selective analysis problem in a new way
• Lends itself to several useful visual representations of data

1. Intervallic Analysis
2. Analysis “by hand”
3. Automated Analysis
4. Integral Analysis
Josquin, Lassus, and Morley Duet Intervallic Dissimilarity Dendrogram
Josquin, Lassus, and Morley Duet Intervallic Dissimilarity Heat Map

Legend:
More Similar -
Less Similar -
New Directions with Integral Intervallic Analysis

• Reveal latent structure in corpora
• Create expected analysis profiles for composers, genres, time periods, etc.
• Inform questions of uncertain attributions
• Quantify the intervallic differences in compositions in 2 versus 3 or more voices
Thank You!

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