SIMSSA DB: Symbolic Music Discovery and Search

Emily Hopkins

With Gustavo Polins Pedro, Yaolong Ju, Cory McKay, Julie Cumming, and Ichiro Fujinaga

Workshop on SIMSSA XIX, 21 Sept. 2019, CIRMMT, McGill University, Montréal

Representing music

Beethoven
Symphony
No. 3

Representing music

Oboe part

Manuscript

Print edition

Beethoven Symphony No. 3 Collected symphonies

Four hands
Piano
arrangement

Sketches

Representing music

Oboe part

Manuscript

Beethoven Symphony No. 3 Collected symphonies

Four hands
Piano
arrangement

Print edition

Audio

Symbolic File

Scanned images for OMR

Sketches

Search amor

Genre (Type of Work)

- Frottola(1)
- Madrigal(8)

Genre (Style)

Renaissance(9)

Composer

- Festa, Sebastiano(4)
- Pisano, Bernardo(4)
- Tromboncino, Bartolomeo(1)

Instrument/Voice

Voice(9)

Sacred or Secular

Sacred(9)

File Format

- midi(8)
- 🔲 sibelius(8)
- ml(8)

FILTER

9 results for "amor"

11 files match the feature search parameters. Only highlighted files match all search parameters.

Amore amor quando io speravo Composer(s): Pisano, Bernardo 1490--1548 Section(s): Amore amor quando io speravo Genres (Type of Work): Madrigal Genres (Style): Renaissance Collection(s) of Sources: Florence, Italy, Biblioteca Nazionale Centrale, MS Magliabechi XIX.164-167 File(s) Holding Complete Musical Work: sibelius midi o xml File(s) Holding an Individual Section:

Hor vedi Amore che giovinetta donna

Composer(s): Pisano, Bernardo 1490--1548

Please note that features only apply to valid MIDI, Music XML and MEI files, and will exclude file formats from Sibelius, Finale, etc. For an explanation of all features, please consult the jSymbolic Manual.

Chords and Vertical Interval Features Dynamics Features Instrumentation Features Melodic Interval Features Musical Texture Features Average Number of Independent Voices: 1 - 3.804

Contrary Motion:

0.1578 - 0.1924

Importance of Loudest Voice:

0 - 1

Maximum Number of Independent Voices:

- 4

- [

Sea	arch	
am	or	

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Genre (Style)

• Renaissance(9)

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Chords and Vertical Interval Features

Dynamics Features

Instrumentation Features

Melodic Interval Features

Musical Texture Features

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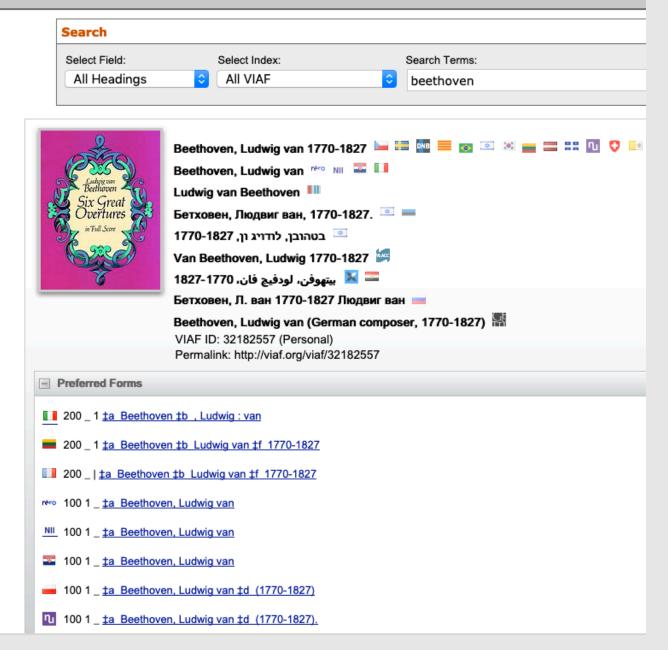
Maximum Number of Independent Voices:

· 4



The Upload interface

Can we get high-quality metadata and still keep things easy to use?



Upload: Adding a Musical Work

Title

What is the title of the work? Click the green button to add variant titles or nicknames. Please include opus number or catalogue numbers if applicable (e.g., Op. 55, D960, BWV 202)

Title *:

e.g. Symphony No.3 Op. 55

Variant Titles:

e.g. Eroica



Sections:

e.g. I. Allegro con brio



Contributions

Who created the work? Use the drop-down menu to choose between different kinds of contributions. Add more contributors with the green button.

Upload form -- Genre(s) and Medium of Performance

Genre(s)

What type of piece is this? (e.g., song, symphony, motet)



However!

What happens when someone has new information that isn't captured by the authority file or the controlled vocabularies?

Upload: Adding files

Work Please attach files below that represent the whole musical work (i.e., all movements or sections). File: Browse... No file selected. Software: -----Sections Please attach files that represent individual sections below. Choose the section from the dropdown menu. File: Browse... No file selected. Software: Section: \checkmark -----Allegro con brio Marcia funebre. Adagio assai Scherzo. Allegro vivace - Trio Finale. Allegro molto - Poco Andante - Presto

Linked data

Triple:

Beethoven—composed—Symphony No. 3

Linked data

Triple:

Beethoven—composed—Symphony No. 3

Quad (with provenance):

Beethoven—composed—Symphony no. 3—according to—this historian

Download interface & Research corpora

- Downloading symbolic files & associated features
- Building research corpora

Download interface & Research corpora

- Downloading symbolic files & associated features
- Building research corpora



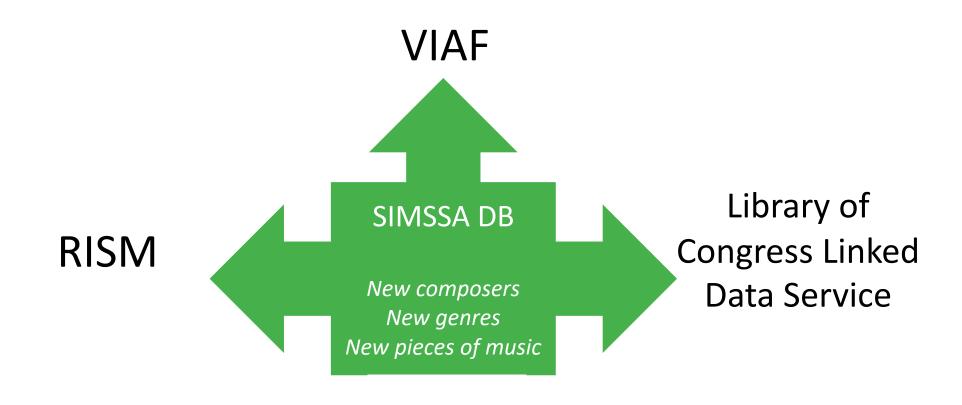


Contributing back to common resources

SIMSSA DB

New composers
New genres
New pieces of music

Contributing back to common resources



Coming soon

- Expand the feature-based content search to include David Garfinkle's search tool PatternFinder
- More user testing of all features
- Initial release

Thank you!



https://github.com/ELVIS-Project/simssadb @simssaproject emily.hopkins@mcgill.ca



Social Sciences and Humanities Research Council of Canada Conseil de recherches en sciences humaines du Canada











Centre for Interdisciplinary Research in Music Media and Technology





compute | calcul canada

