The Music Encoding Initiative

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MUSIC ENCODING
MEI
INITIATIVE

A
community-driven effort
to define guidelines for
encoding musical documents
in a machine-readable
structure.

Why not...

MusicXML?

Finale?

?

Lilypond?

SMDL?

MuseData?

MUP?

Sibelius?

NIFF?

MIDI?

Humdrum?

DARMS?

Plaine and Easie?

IEEE1599?

SCORE?

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Donald Byrd *(Indiana University, Bloomington)*; Richard Freedman *(Haverford College)*; Ichiro Fujinaga *(McGill University)*; Andrew Hankinson *(McGill University)*; Johannes Kepper *(Musikwissenschaftliches Seminar Detmold/ Paderborn)*; Erin Mayhood *(University of Virginia Library)*; Stefan Morent *(University of Tübingen)*; Daniel Pitti *(Institute for Advanced Technology in the Humanities, University of Virginia)*; Laurent Pugin *(RISM Switzerland)*; Daniel Röwenstrunk *(Musikwissenschaftliches Seminar Detmold/Paderborn)*; **Perry Roland** *(University of Virginia Library)*; Craig Sapp *(Center for Computer-Assisted Research in the Humanities, Stanford)*; Eleanor Selfridge-Field *(Center for Computer-Assisted Research in the Humanities, Stanford)*; Christine Siegert *(OPERA Project, Bayreuth)*; Axel Teich Geertinger *(Royal Danish Library)*;

Community Developed

Joachim Veit *(Carl-Maria-von-Weber-Gesamtausgabe, Detmold)*; Raffaele Viglianti *(King's College, London)*, Bernhard R. Appel *(Beethoven-Haus)*; J. Stephen Downie *(University of Illinois at Urbana-Champaign)*; Oliver Huck *(Universität Hamburg)*; Fotis Jannidis *(Universität Würzburg)*; Frans Wiering *(University of Utrecht)*

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Module Name	Module content
MEI	MEI infrastructure
Shared	Shared components
Header	Common metadata
Analysis	Analysis and interpretation
CMN	Common music notation
CMNOrnaments	CMN ornamentation
Neumes	Neume notation
Mensural	Mensural music notation
Corpus	Metadata for music corpora
Critapp	Critical apparatus
Edittrans	Scholarly editions and interpretations
Facsimile	Facsimile documents
Figtable	Figures and tables
Harmony	Harmonic analysis
Linkalign	Temporal linking and alignment

Open Source

http://code.google.com/p/music-encoding

Encoding Notation in XML

`<note pname="c" oct="4" dur="4" />`

 or

Encoding Notation in XML

```
<measure>
  <staff>
    <layer>
        <note ... />
        <note ... />
    </layer>
  </staff>
</measure>
```
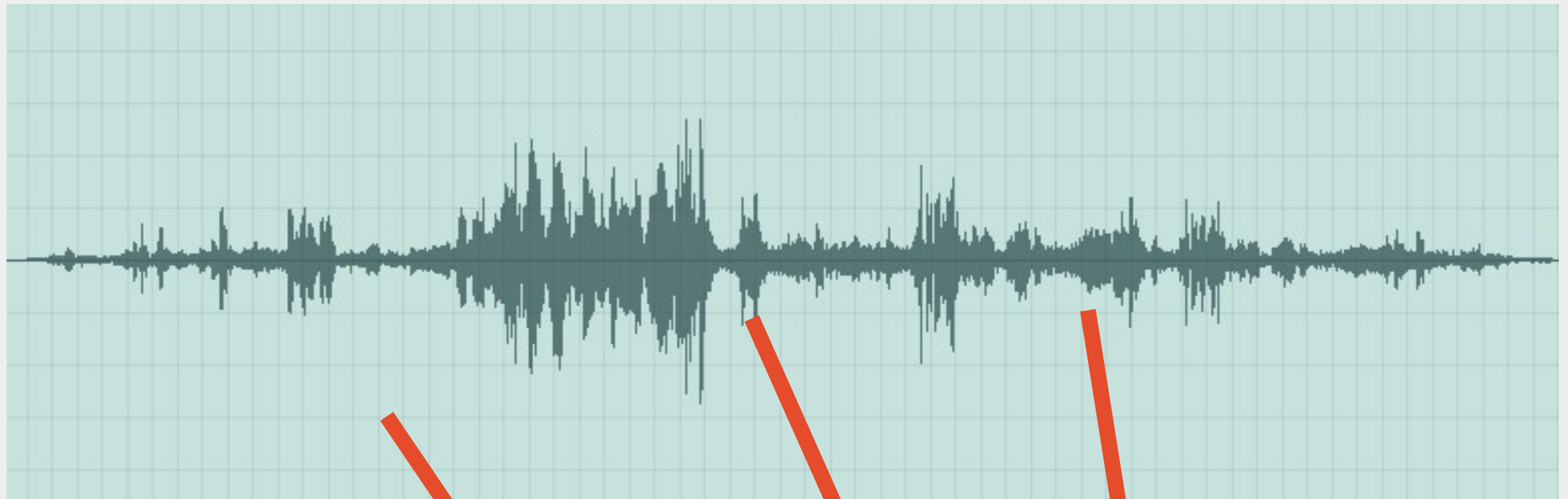
Music to Audio Alignment

Music to Image Alignment

Non-Common Music Notation

Music & Audio Alignment

Music & Audio Alignment

```xml
<timeline mediacontent="chopin_nocturne.mp3">
    <when xml:id="w1" absolute="00:00:01.00"/>
    <when xml:id="w2" absolute="00:00:04.05"/>
    <when xml:id="w3" absolute="00:00:05.00"/>
</timeline>

<measure n="1" when="w1"/>
<note pname="f" dur="4" when="w2" />
<chord when="w3" />
```

Music & Image Alignment

Music & Image Alignment

```
<facsimile>
 <surface>
  <graphic xlink:href="322_original_image.tiff"/>
  <zone xml:id="z1" uly="58" ulx="21" lry="64" lrx="23" />
  <zone xml:id="z2" uly="63" ulx="35" lry="65" lrx="36" />
 </surface>
</facsimile>

<measure facs="z1" />
<note facs="z2" />
```

Notation + Audio + Image Alignment

```xml
<timeline mediacontent="chopin_nocturne.mp3">
    <when xml:id="w1" absolute="00:00:01.00"/>
    <when xml:id="w2" absolute="00:00:04.05"/>
</timeline>
...
<facsimile>
 <surface>
  <graphic xlink:href="322_original_image.tiff"/>
  <zone xml:id="z1" uly="58" ulx="21" lry="64" lrx="23" />
  <zone xml:id="z2" uly="63" ulx="35" lry="65" lrx="36" />
 </surface>
</facsimile>
...
<measure facs="z1" when="w1" />
<note facs="z2" when="w2" />
```

Non-Common Notation

```
Neume

<neume name="clivis">
  <nc>
    <note pname="c" oct="4"/>
    <note pname="f" oct="3"/>
  </nc>
</neume>


Mensural

<mensur sign="C" slash="1"/>
<rest dur="longa" />
<note dur="minima" pname="g" oct="3">
```

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MEI

is the

glue

that holds

everything together

Next Release: **MEI 2012**

http://music-encoding.org