

Tutorial/Workshop Session 2: Laurent Pugin & Claudio Bacciagaluppi: TEI and Musicology @yrochat + @xaentenza

[Note: Laurent Pugin & Claudio Bacciagaluppi are not from Bern University :-) Members of the Swiss RISM Office <http://www.rism-ch.org/>]

- 1) How is TEI applied to musicology and research?
- 2) MEI (correspondance of TEI, Music encoding instead of text encoding, I for initiative)
- 3) Short presentation of our interests

Introduction to TEI <http://www.tei-c.org/index.xml>

- Machine readable
- goal is encoding data along with metadata
- Possibilities of defining tags and linking to standardized ref. tags.
- no computer science skills required (but XML)

OxGarage conversion from text to TEI

then editing in Oxygen (30 day trial for free)

Presentation of projects

- E-Codices, from the University of Fribourg <http://www.e-codices.unifr.ch/fr>
 - (In e-codices, the TEI Header is often bigger than the body because there is no transcription, but only metadata about the document)
 - RISM : Historical music inventories 1500-1800
- In Mozart's Words: <http://letters.mozartways.com/> (correspondance of 1400 pieces)
- Carl-Maria-von-Weber-Gesamtausgabe (WeGA): <http://www.weber-gesamtausgabe.de/de/Index> (rendition in typography, XML,)
- Kapellmeisterbuch: A musical diary about what was played when <http://d-lib.rism-ch.org/kapellmeisterbuch/>
- Hofmeister XIX <http://www.hofmeister.rhul.ac.uk/2008/index.html>

Do you choose to make a database or make transcription in TEI?

Things change with semantic web. Still important to have a transcription of the source, see what was written, take different parameters into account.

Music encoding

Graph: <https://twitter.com/yrochat/status/350547779287924736>

COMPOSE ----- WRITE

Music / Graphic notation / Neume notation / tablature / Scordatura / Score

PLAY----- READ

WAV/AIFF MP3/ACC MIDI/Smoke **kern Music21 MusicXML/LilyPond

Samples Selected sample Events Music Symbols Music Symbols + Layout indication

MEI is the small sister project of TEI

XML-based music encoding

MusicXML (Michael Good, CodaMusic) >> Bought by Finale

- Interchange format for software applications (Finale, Sibelius)
- Deeply inspired by MuseData

IEEE 1599 (Università degli Studi di Milano)

- Designed to describe heterogeneous music contents comprehensively (linking between notation and audio)

CMME (Ted Dumitrescu, Utrecht University)

- encoding format for digital editions of Renaissance music
- Developed in conjunction with an edition software application

MEI (Perry Roland, University of Virginia)

- Deeply inspired by TEI

- Community-driven, modular and with focus on philosophy
- (hosted by Mainz academy)

Others: MusicML, MusiXML, MusiqueXML, Xmusic, etc. ("the biggest difficulty for these guys was to find names containing "music" and "xml"")

The Music Encoding Initiative: <http://www.music-encoding.org>

Why did become MEI it's own community: music notation works in a different way as alphabet: symbols, rules (two notes grouped together with a *b*), etc.

Example of note encoding:

`<note pname="b" oct="4" dur="4" dots="1"/>` (un "si" noire pointée, troisième ligne, <https://twitter.com/yrochat/status/350550335661670400>)

Other example: <https://twitter.com/xaentenza/status/350550597784715264>

Multiple hierarchies <https://twitter.com/yrochat/status/350550704701714432>

The line between content and representation is difficult to draw

Multiple hierarchies (a general problem in XML) > Very common in music

Example and sound sample of Baude Cordier's music (Codex Chantilly)

http://en.wikipedia.org/wiki/Baude_Cordier

Ars nova- Partout qu'on passe suis composé

The text of the song tells you how to read the notation

"Spiral galaxy" (George Crumb, 1972) spiral musical notation

<https://twitter.com/xaentenza/status/350552396742660096>

Josquin des Prés (c. 1450/1455 - 27 August 1521) : black notation to signify death ("la déploration sur la mort d'Ockeghem" score and sound sample)

<https://twitter.com/yrochat/status/350553046029316097>

http://en.wikipedia.org/wiki/Josquin_des_Prez (starred)

"If you want to encode these into something machine-readable, how do you do that ?"

Sometimes you have a notice made to help play the music. How to include that ?

Writing and representing MEI

Aruspix <http://www.aruspix.net/>

The examples given (some pics on Twitter) were here to remember what is music notation. Now the workshop is moving to applied examples where the scores have been encoded into MEI.

The demo is impressive. You can compare different versions of the same score, and interact with the measures and notes and find which parts appear or don't in the different versions.

The score is interactive. It's svg format.

Is there web version? Some project exist (McGill ?)

Typical workflow <https://twitter.com/yrochat/status/350556760353955840>

Microfilm

OMR in Aruspix

MEI for original source encoding editing in Aruspix

MEI for critical edition encoding

Rendering music encoding on the Internet

There is no standard way for rendering music on the net.

Plug-in for binary files

Plug-in for MusicXML files

Early music specific tools

Javascript libraries

VexFlow

Notefligh HTML5 score viewer

ABCJS parser, editor and reder for ABC (folksonsgs notation)

What makes music rendering complex (a lot of layers to take into account !!! For example the beams http://en.wikipedia.org/wiki/Beam_%28music%29 depend on the alignment of the notes which depend also on their duration, for example dots, sharps, etc.)

TEI SIG on music <http://www.tei-c.org/Activities/SIG/Music/index.xml>

MEI and the TEI Genetic Module

Search engine ?

Not one way of searching

Rythme Pitch

Search the LIber Usualis (1961, 2000 pages)

<http://ddmal.music.mcgill.ca/liber/>

Example : agnus dei

<http://ddmal.music.mcgill.ca/liber#type=pnames&query=edcdeee&result=1&p=157>

Music NGram viewers <http://www.peachnote.com/> (it doesn't work with the pink panther !)