Did you know that music written between the late 13th century and 1600 was composed in a different notational system to modern music? This system - called mensural notation - is not only different in appearance, but in the actual values of the notes.

A second complication is that during the Renaissance period, a piece of music was not fixed to any specific notes – so how a contemporary performer sings it is an interpretation.

WHAT WAS THE PROBLEM?

In printed editions of music, the editor has a choice: to either show the original notation or a single modern interpretation of it.

We have also seen a change in how music researchers approach those original pieces of music. While in the 19th century, musicologists strived to publish one authoritative edition of a certain composer, modern musicologists try to understand better how the music was interpreted at the time it was written, taking into account the non-fixed character of early modern music.

The challenges is: how to deal with this different notational system so that musicians can perform this music for us, while scholars can see at a glance both the original notation and the different modern interpretations?

HOW WAS THE PROBLEM SOLVED?

A research project developed a tool called CMME to solve this conundrum. This online platform gives researchers the opportunity to edit, publish and analyse early music in one virtual space.

How does it work? From a reproduction of the original source, the editor transcribes the music, making use of the CMME Editor software. The software encodes the music into an especially developed XML mark-up language. The editor can add different interpretations and readings into one single file. Through the CMME Viewer software the viewer can both see and hear the various interpretations.

The reader of the musical score can choose which interpretation of a musical score, liturgical piece or song he or she wants to see, while the original notation is also directly available for viewing.

GLOSSARY

**Computerising** = making use of computational methods to produce high quality scholarly editions

**Mensural music** = a type of musical notation common in the period 1250-1600. The main difference with our contemporary notation lies in the division of note values. In modern music, the subdivision of notes is always binary (a smaller note value is always half of the note value above) while in Renaissance music it can also be composed of three notes, depending on the context.

**Editing** = the act of making available a musical text to a scholarly audience.
The project has been funded in the past by organisations in France and the Netherlands but it is now part of the University of Utrecht with an international advisory board.

**WHAT ARE THE MAIN OUTCOMES?**

The worldwide community researching this type of music is estimated to consist of 200-300 active scholars and the tool is very visible within this community. It is a digital tool that adheres to proper disciplinary methodology, is embedded in the academic infrastructure and is supported by academics at the top of the discipline via its advisory board. At present there are a handful of scholars actively working with the tool, producing editions. Annually, dozens of users interact with the website asking software questions or for special editions.

From a scholarly viewpoint, the direct availability of the original notation and the various editions in modern notation is very important as it relates to the philosophical issues surrounding the editing of music.

So the tool with all its functionality is very important for musicologists creating new editions of older works. However, CMME also enjoys attention from performers of Renaissance music.

**KEY LESSONS LEARNED**

The usage by performers could be described as the ‘societal’ effect of the tool. However, is at the moment this is rather limited because of some problems in the **printing functionality** of the software. Performers cannot easily print the musical scores, and the number of performers using the scores from screen (for example, through an iPad) remains limited. The project team are currently working to solve this software problem.

**FUTURE DEVELOPMENTS**

So far, three different funding opportunities have led to the present stage of the tool. What would the next step be for CMME if new funding was available? For the developers, there are two important items on the wish list:

1. update the software to current web standards
2. broaden the scope of the tool to music from before 1450

One hurdle is that it is difficult to convince research funders to fund CMME because of the limited number of scholars that it reaches.

For the longer-term, CMME is looking towards aligning with a Dutch initiative to create a research infrastructure for the digital humanities: [Common Lab Research Infrastructure for the Humanities](http://clariah.nl) or CLARIAH. The developers are also working with other parties on ideas for a worldwide ‘early music digital research infrastructure’.

**FIND OUT MORE**

Find out about a [Conference organised by CMME](http://cmme.nl) on ‘Early Music Editing: Principles, Techniques, and Future Directions’ at Utrecht University, 3-5 July 2008
See media coverage about CMME securing funding for a particular set of works called The Other Josquin

Research results enabled by CMME

Publications:


Presentations and workshops:

Berchum, M. van (18-06-2013). Workshop digital editing of Early Music with CMME, Universiteit Münster.


References

Images by Claire Timm on Flickr, shared under a Creative Commons license
Based on an interview with Marnix van Berchum by Maurits van der Graaf on 8 January 2014

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