This project is funded under the eContentplus programme\(^1\), a multiannual Community programme to make digital content in Europe more accessible, usable and exploitable.

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Happy birthday MIMO! MIMO turned one year old this month. That means we are halfway through the project!

Overall, we are working to plan and the amount of digital content being produced is rising daily. We hope to have some new pictures on this website for you to enjoy soon! We even discovered a new type of instrument recently! Curious? Then read on!
Intermediate Results

As we are at the end of year one, all partners have been asked to submit a report for work package 1 outlining their progress on the current state of digitisation within the MIMO project.

The following chart gives a brief overview of our achievements so far:

- Number of digital images available: 30,672
- Number of newly photographed instruments: 21,135
- Number of sound files available: 613
- Number of video files available: 100

Our partners at Cité de la Musique, leader of Work Package 2, have successfully set up the MIMO platform and the test harvesting has begun. Additionally, working in conjunction with the Work Package 3 team, they have developed an online translation tool for translating all the keywords into the six MIMO languages.

A team of experts working on work package 3, lead by Margaret Birley at the Horniman Museum in London, has taken on the task to work on the MIMO classification system. This is based on the Hornbostel-Sachs classification system of musical instruments, first published in the *Zeitschrift für Ethnologie* (Heft 4 u. 5), in 1914.

Inevitably (and this was known by both authors at the time the system was originally written) new types of instruments would either be discovered or invented, thus necessitating an update to the 1914 classification. The team has delivered a first draft used for classifying all the musical instruments belonging to the collections of the MIMO partners. This will include new categories, such as a section on electronic instruments, being developed by Maarten Quanten at the Musical Instrument Museum in Brussels, and newly discovered items.
Developing a Classification of Electric and Electronic Musical Instruments according to the Hornbostel and Sachs Criteria

Over the last decade or so a number of museums of musical instruments have gathered a considerable collection of electric and electronic instruments. Without doubt these will, in the not too distant future, become the objects of musicological research, for example in the context of recent avant-garde music. Classifying these devices, however, is a difficult task, as we have discovered in the past few months, especially as the Hornbostel and Sachs system was the one selected for use by MIMO, as this is still the most comprehensive system available.

The first fundamental problem occurs when taking early electronic studio equipment into consideration, as many of these devices were not designed to self sufficiently produce sounds. Positioning items such as sequencers, filters or ring modulators, for example, in the Hornbostel & Sachs tree would imply ignoring its most essential basic rule of subdivision, i.e. that the system was designed to create an ordering among acoustic sound producers. Electric sound signals, however, are bound to totally different criteria of production and physical rules.

Another difficulty we encountered concerns so-called electric or amplified instruments. Should an electric guitar be listed among chordophones or the electrophones? It resembles a guitar in appearance and the manner in which it is played but its physical principles of sound signal production are more like the ones used in a Hammond Organ and that is considered to be an electrophone. Furthermore, we actually consider the similarities of electric instruments to both the traditional acoustic ones and the newer electronic devices to be too overwhelming to create ‘boxes’ at the highest level of subdivision of the Hornbostel & Sachs tree.

An even more fundamental question occurs: what is sound production, what is an initial sound? In the case of an electronic instrument, the actual sound - being a succession of air pressure maxima and minima - is initiated in a transducer, a loudspeaker! So, are all electronophones actually membranophones?

In the article “Synth in a Box - Classifying electric and electronic musical instruments according to principles developed by Erich Von Hornbostel and Erwin Sachs,” we aim to provide a reflection on the development of a fifth category in the taxonomy. We also intend to develop critiques on other taxonomies such as The Games Classification System and to create outlines for alternatives. We aim to complete the text by the end of October, after which we will publish our results.

Maarten Quanten, Musical Instrument Museum, Brussels
New Instrument Type Discovered

A new category has had to be created within the system of musical instrument classification.

While carrying out some fieldwork, ethnomusicologist Tobias Weber from the Ethnological Museum in Berlin was looking through eBay and discovered a musical instrument for which the classification system that is being developed by members of the MIMO consortium has no suitable class name. The team has to create new categories for newly discovered items such as the “Membrane Transverse Flute“, as it was described by the vendor, which Tobias came across on eBay.

The instrument produces a nasal sound in a unique way. The mouth piece leads the air through a tiny pipe into a chamber, which is closed at one end by an elastic membrane. As soon as the air pressure in the chamber is high enough the membrane stretches and allows air to stream into the cylindrical pipe. This air stream is interrupted periodically by the vibrations of the membrane, thus causing the air column enclosed inside the pipe to vibrate. The mechanism of producing a sound excludes definitely the name “flute” as a proper designation. It reminds more of a reed pipe, a class of blown instruments which is characterised by its sound production based on vibrating reeds, through which air has intermittent access to the subsequent column of air. As the interruptive mechanism is composed of a membrane instead of reeds Andreas Richter, ethnomusicologist at the Ethnological Museum in Berlin, suggests that we use the term “membranopipes” for this new class of instruments. This will then be subsumed into the category aerophones, alongside instruments such as flutes, reed pipes and trumpets.
Website Statistics

Along with the project itself, access on the MIMO website has grown considerably. We had a steady number of around 200 visits per week over the summer with most of the visitors coming from Germany, followed by UK, Belgium and the US.

<table>
<thead>
<tr>
<th>Country/Territory</th>
<th>Visits</th>
<th>Visits</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
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<td>23.27%</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
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</tr>
<tr>
<td>Belgium</td>
<td>954</td>
<td>9.88%</td>
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<tr>
<td>United States</td>
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<td>9.43%</td>
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<tr>
<td>Spain</td>
<td>182</td>
<td>1.89%</td>
<td></td>
</tr>
</tbody>
</table>

Overview: A total of 9,652 visitors from 01.01.2010 until 01.09.2010

And we have an increasing amount of registered users, rising by about four to five new subscribers per week.
What Next for MIMO?

In addition to the ongoing work of digitising the partner museums’ collections and creating the infrastructure that will enable this to be seen online, one of the key challenges facing the MIMO team is how to ensure that this material will remain available to the public when the project ends, in August next year.

For this reason a sub group of the partnership has been working on the development of an agreement which, as an initial step, will commit all contributing partners to ensuring that all content created within the life of the project will remain online for a minimum period of 5 years after the conclusion of the current funding period. Furthermore, new metadata with images, sound and video files will be added, as it becomes available. The consortium intends to formally adopt this agreement in late October 2010.

Once this is in a place, the next step will be to explore alternative funding and the possibility of bringing new collections online via the MIMO infrastructure, perhaps even resulting in a new project. Over the coming weeks and months, the sub group will be developing guidelines which outline the minimum requirements that new partners will have to fulfil in order to add their material to the MIMO platform and enable this to be viewed via Europeana.
Promotional Activity in the Coming Months

September: ISGMA 2010

7th Symposium of the International Study Group of Music Archaeology (ISGMA)

"Sound from the Past - The Interpretation of Musical Artefacts in Archaeological Context"

MIMO presentation by partners from the Ethnological Museum Berlin, Germany.

http://www.musicarchaeology.org

Event Date: Mon, 2010-09-20 (All day) - Sat, 2010-09-25 (All day)
Venue: Tianjin Conservatory of Music, Tianjin, China

October: Stockholm MIMO Exhibition

The Stockholm Music Museum is opening a MIMO exhibition in October that will run for at least 4 months. It will have a display case in the concert hall's foyer with three or four instruments, photographic examples of how MIMO will show instruments on the website as well as photos showing the "behind the scenes" work in progress, and texts explaining the project as a whole. Leaflets will be distributed to the visitors of this exhibition.


Event Date: Starting October 2010
Venue: Stockholm Musik Museet, Sveden

October: Europeana Conference

"Deutsches Kulturerbe auf dem Weg in die Europeana"/ German cultural heritage on its way into Europeana

MIMO presentation by partners from the Ethnological Museum Berlin, Germany.

Event Date: 4th/5th of October 2010
Venue: Berlin, Germany
November: GfM 2010

Annual meeting / Jahrestagung

Event Date: Tue, 2010-11-02 (All day) - Sat, 2010-11-06 (All day)
Venue: Deutsches Historisches Institut in Rom (German Historical Institute Rome)

November: ICOM / CIMCIM

22nd General Conference

Theme: Museums for Social Harmony

Meet the project coordinators of University of Edinburgh and further CIMCIM members (International Committee of Musical Instrument Museums and Collections).

Visit the CIMCIM website.

See the conference programme.

Event Date: Sun, 2010-11-07 (All day) - Fri, 2010-11-12 (All day)
Venue: Shanghai, China

November: MIMO presentation

A MIMO presentation will be given to the students of the MA in Musicology and Musical Heritage, University of Florence, within the course of History of Musical Instruments.

http://www.unifi.it/mdswitch.html

Event Date: Monday, 8th of November 2010
Venue: University of Florence, Italy

November: Viol - International Symposium on Musical Instruments

XXXVIII. Wissenschaftl. Arbeitstagung und 31.Musikinstrumentenbau-Symposium

"Repertoire, Instrumente und Bauweise der Violen da gamba"

Meet the MIMO partners from the Germanisches Nationalmuseum, Nuremberg.
For further information see [here](#).

Event Date: Fri, 2010-11-19 (All day) - Sun, 2010-11-21 (All day)
Venue: Stiftung Kloster Michaelstein, Germany

**November: Concert in Florence**

Distribution of the brochure and a short introduction to MIMO before a concert, where some instruments of the collections will be played.


Event Date: 20th of November 2010
Venue: Galleria dell'Accademia, Tribuna del David, Florence, Italy