CIMCIM
ICOM international committee for museums and collections of instruments and music

PROCEEDINGS

# Prospects and Challenges of Museum Accessibility, Diversity, and Equity

Proceedings of the 62nd Annual ICOM–CIMCIM Conference, 30 August–1 September 2023, Rijksmuseum, Amsterdam and Speelklok Museum, Utrecht, The Netherlands

Edited by
Marie Martens
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Edited by Marie Martens, Sarah Deters, and Giovanni Paolo Di Stefano

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## About CIMCIM

CIMCIM is the acronym for Comité International pour les Musées et Collections d'Instruments et de Musique (International Committee for Museums and Collections of Instruments and Music; Comité Internacional para Museos y Colecciones de Instrumentos y de Música). It is one of the 34 international committees of ICOM, the International Council of Museums, and was established in 1960.

CIMCIM aims to promote high professional standards in the use and conservation of musical instruments in museums and collections.

As an international committee, CIMCIM works within the framework of ICOM to foster connections amongst, advocate for, and advise museums and collections of musical instruments and music of all kinds.

As an organisation that promotes high professional standards, CIMCIM supports ICOM's Code of Ethics in providing a global platform to discuss state-of-the-art, best-practice solutions related to tangible and intangible musical heritage, particularly in the context of museums.

As a worldwide and inclusive committee, CIMCIM aims at a mutual understanding of different cultural practices and viewpoints with respect to musical instruments and music to support active dialogue and exchange between all stakeholders.

CIMCIM meets normally every three years during the ICOM General Conferences and in each of the other two years organises a special meeting, usually including symposium papers, and museum visits. Meetings are held in different countries of the world aiming to represent the diversity and worldwide distribution of its membership.

Professional matters where international cooperation is advantageous are discussed in detail in CIMCIM's Working Groups, which are set up as needs arise. The deliberations of Working Groups are usually published as CIMCIM Publications.

CIMCIM membership is open to individual and institutional members of ICOM. Under special circumstances, non-members of ICOM can be co-opted. Benefits of membership include invitation to annual meetings, the *CIMCIM Bulletin*, voting rights at business meetings (held during the annual meetings), and the opportunity to participate in Working Groups.

Services offered by CIMCIM to members and non-members alike include a series of publications and CIMCIM-L, an e-mail discussion forum devoted to topics of relevance to the use and care of musical instruments in museums.

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# Foreword

Greetings CIMCIM Community,

Aside from the ICOM Triennale Meeting held in Prague last year, CIMCIM's 2023 annual meeting marked our first opportunity since 2019 to gather in person as a committee.

CIMCIM meetings have a longstanding history, dating back to the committee's founding in 1960. Thanks to our website archives, members can find information about those early meetings:

- 1960: Paris, as part of the ICOM General Conference
- 1961: New York, hosted by the Société internationale de musicologie (SIM) / International Musicological Society (IMS)
- 1962: Lisbon, hosted by the Gulbenkian Foundation, a Portuguese institution established in 1956 dedicated to the promotion of the arts, philanthropy, science, and education,

While packing the archives of Yale's musical-instrument collection during a recent move, I came across a trove of documents related to CIMCIM's foundation and early history, including correspondence sent by post – before emails, mobile phones, and online meetings existed. Many of you may also have similar documents in your institution's archives, and perhaps these also are in the ICOM International Committee archives in Paris.

On 10 July 1959, at the Gemeentemuseum in The Hague, eighteen people signed a Resolution during a five-day meeting to create an international organisation for cooperation between musical instrument collections. As described in the 1973 Spring Newsletter:

> *"For many years curators of musical instrument collections struggled with the restoration, conservation, comparison of instruments for identification, the whereabouts of different instrument types, and other problems of their work more or less alone, except for occasional visits to other museums. All felt the need for some organization which would permit a greatly increased exchange of information through some regular contact. Accordingly a group of curators met in the Hague in 1959, where they discussed many of the pressing problems and formed such an organization."*

The following year, the organisation we now know as CIMCIM was formed. Minutes from the initial meetings list participants from twelve countries: Austria, Belgium, Denmark, France, Germany, Israel, Spain, Sweden, Switzerland, the United Kingdom, the United States, and The Netherlands, including institutions from both Amsterdam and The Hague. The minutes discuss various challenges, such as finance,

space, and personnel, as well as "gratifying progress in the form of the re-establishment of existing collections and the rebuilding of collections damaged in the war", noting: "It would be useful to find an appropriate way of collaborating between the Museum establishments and colleagues of the same or related subjects". The minutes also note existing institutions, including ICOM, AIBM (Association Internationale des Bibliothèques, Archives et Centres de Documentation Musicaux / International Association of Music Libraries, and SIM (i.e., IMS mentioned above), UNESCO, and the Galpin Society. ICOM was identified as "the most favourable and suitable" organisation for affiliation, supported by an invitation from the then ICOM Director to establish such a group.

While preparing for our meeting in The Netherlands, I found additional documents confirming that during the ICOM 1962 assembly (4–11 July), a two-day CIMCIM meeting (2–3 July) was held at the Gemeentemuseum Den Haag, which was celebrating its centenary that year. Notably, ICOM published a study and collaborated with UNESCO on topics that still strongly resonate with our 2023 meeting, including measures to prevent the illicit trafficking and theft of cultural goods, and to facilitate artistic outreach and the circulation of exhibitions. Sixty-one years ago, the ICOM meeting in The Hague included excursions – to many of the same destinations featured in our 2023 programme, Amsterdam, Utrecht, and Amersfoort – to give "an impression of the characteristics and organization of the Dutch museums". Sessions addressed issues such as: precautions against the theft of art objects; general problems concerning the conservation of cultural objects; and "The role of museums of history and folklore in a changing world, the function of museums: Research Centres or Show Places?"

CIMCIM also established three working groups in its early years, one of which undertook the ambitious project of compiling its first directory: *A Directory of the World's Musical Instrument Collections*. This initiative spanned over a decade and depended primarily on postal correspondence. Thanks to Giovanni Paolo Di Stefano's leadership, CIMCIM is now developing and updating this valuable resource. Of the twelve cities that hosted early CIMCIM working group meetings, The Hague and Antwerp – both featured in our 2023 programme – are particularly noteworthy.

A letter dated July 1962 from Robert Conant, (Curator at Yale) to John Henry van der Meer, "keeper of collections at The Hague", reflected warmly on that year's meeting:

> *"It all now seems like a dream, and I can scarcely believe that we have been on our trip. But certainly it is a happy dream, because you and your colleagues did so much to make our visit in the Netherlands such a pleasant one."*

Sixty-one years later, I would like to express my heartfelt thanks to all the organisers of the 2023 meeting for their extensive efforts and dedication to making this year's gathering equally memorable. The call for papers inspired the largest number of submissions I have experienced with all accepted papers relating to the conference theme – an excellent indicator for a dynamic and engaging meeting.

Many thanks to the planning committee for their hard work and commitment over the past year: Jurn Buisman, Sarah Deters, Marian van Dijk, Emanuele Marconi, Marie Martens, Claire McGinn, Pascale Vandervellen, and especially Giovanni Paolo Di Stefano, Chair of the 2023 Conference Committee. We are also grateful to the main organising institutions for their generous support – the Rijksmuseum Amsterdam and Museum Speelklok in Utrecht – and to our supporting partners: Museum Geelvinck, the Orgelpark, Amsterdam, the Pianola Museum, and the Prins Bernhard Cultuurfonds / Prince Bernhard Culturale Fund.

Thank you all for your valuable contributions and enthusiastic participation. Reflecting on our committee's rich history, I trust the 2023 meeting sparked fresh ideas and meaningful connections that will carry CIMCIM's legacy forward with renewed energy. Together, we continue to build on the foundations laid long ago as we look to the future.

*Best regards,*
*Christina Linsenmeyer, CIMCIM Chair*

# Preface

Sixty-five years have passed since the "Colloque des chefs de collections d'instruments de musique", organised at the Gemeentemuseum in The Hague in 1959, which set the stage for the establishment of CIMCIM in 1960. Following this landmark event, CIMCIM returned to the Netherlands on three subsequent occasions in 1962, 1972, and 1989. In the last 35 years, the management of musical instrument collections in the Netherlands has undergone significant transformation. Among these changes stands the noteworthy transition, a decade ago, of stewardship from the former Gemeentemuseum, now known as the Kunstmuseum Den Haag, to the Rijksmuseum in Amsterdam, which has since become the leading public museum in the country for musical instruments.

The 2023 CIMCIM conference, held in Amsterdam, Utrecht, Amersfoort, and Heerde, provided a platform to address pressing issues in the contemporary museum community, with a particular focus on accessibility, inclusivity, and equity. These themes resonate deeply in today's global context, as evidenced by the remarkable response to the conference, which attracted a significant number of participants from around the world. As custodians of museums and collections of instruments and music, we have a profound responsibility to ensure our institutions remain open, inclusive, and reflective of the multifaceted societies we serve. Accessibility encompasses more than just physical aspects; it extends to intellectual, emotional, and technological dimensions, ensuring equitable engagement for all, regardless of background or ability. Embracing diversity underscores the importance of acknowledging and incorporating a multitude of identities, perspectives, and narratives, thereby enriching the vibrant tapestry of our global cultural heritage. In turn, equity demands the dismantling of historical barriers that have marginalised certain voices and communities, working towards a future where opportunities and resources are fairly distributed.

The conference board, which I had the privilege to chair, devised a rich programme that eschewed the traditional twenty-minute paper format in favour of concise communications, allowing many colleagues to present updates on their recent or ongoing projects, as detailed in these proceedings.

In closing, I extend my heartfelt gratitude to the numerous partners whose collective efforts made this conference a success: the esteemed colleagues of the conference committee, the diligent conference staff, and the museums and organisations – Museum Speelklok, Museum Geelvinck, Orgelpark, and the Pianola Museum – that collaborated with the Rijksmuseum to make this event possible.

*Giovanni Paolo Di Stefano,*
*Rijksmuseum, Amsterdam*
*Chair of the CIMCIM 2023 Conference Organising Committee*

## Museum Speelklok, Utrecht

It was a great privilege to receive colleagues from CIMCIM at Museum Speelklok on August 31, 2023. Mechanical musical instruments are an exceptional category within musical instruments because they make live music without the help of musicians. The ingenious technology of the often unique inventions plays a major role. Moreover, many instruments are the result of collaboration between clockmakers, furniture makers, visual artists, organ builders and musicians, meaning that the instruments cover a very broad field of research. Our Clay clock from 1738 is a good example of this. In Museum Speelklok we want to demonstrate the instruments to the public in working order as much as possible. This requires a lot of maintenance and restoration, which we can fortunately carry out in our own workshop, located near the museum. We look back with great pleasure on the lively discussions and exchange of valuable ideas that arose during the tours in the workshop and in the museum.

It was great to experience how everyone is looking for opportunities to bring the historical instruments to life for a wide audience, using the latest digital techniques. We are happy to use this incredible wealth of knowledge and expertise for our research projects.

*Marian van Dijk,*
*Director of the Museum Speelklok*

## Museum Geelvinck, Amsterdam / Heerde

It was a privilege for us that Museum Geelvinck, together with the Rijksmuseum Amsterdam and Museum Speelklok, co-hosted the CIMCIM Annual Meeting 2023. For our museum, it was an especially significant conference, because the theme was accessibility, diversity, and equity, important topics in our museum's policy, which we have already been working on for decades.

Although the conservation of our collection of historic keyboard instruments is central to our museum's policy, we consider the preservation of the living musical heritage linked to these instruments as the existential key for its continuity in the long term. This applies not only to musicians and composers for these instruments, but also to technicians who keep historic instruments playable, professionally restore them, or make exact replicas. To increase democratic accessibility, we focus on music within its historical context, removing traditional boundaries between Western classical music and non-Western music (world music). In doing so, we create space for discussion that extends beyond the realm of music for its own sake. For instance, with our "Beethoven is Black" project, we addressed the underrepresentation of musicians of colour within the professional classical and early music sectors. We encourage participation from non-Western communities by programming piano concerts with music by classical composers from these communities, performed by professional musicians with roots in these communities; this policy successfully attracts audiences from these communities. By linking the rather Eurocentric early and classical music concert programming explicitly with highlighting influences from other musical cultures and their background stories, we implicitly advocate for equity between Western and non-Western cultures.

Personally, I was most happy to chair session 8 "Transfer of Collections from Private to Public Spaces". This session brought forward stories where ultimately everything turned out well, and stories where, unfortunately, this was not the case. This topic is close to my heart, because we not only see small musical instrument museums around us struggling to survive – several having gone under in recent years – but also because Museum Geelvinck is itself searching for ways to ensure its continuity.

The welcome reception of this CIMCIM Annual Meeting 2023 took place at the venue of our partner the Pianola Museum, which houses over 150 player-pianos and other instruments, as well as an extensive book collection and archives, and a collection of some 40,000 pianola rolls. The final session of the conference was held at our museum's venue in Heerde (NE-Veluwe): Kolthoorn House & Gardens, which is also my home (I was born in what is now the library of the museum). Today, our museum cares for some 450 complex, semi-immobile keyboard instruments, mainly early pianos from the late 18th and first half of the 19th centuries, and reed organs from the 19th and 20th centuries; the latter being a recent addition, as we have taken under our wings the core collection of the former Harmonium Museum Nederland.

We thoroughly enjoyed the CIMCIM visit, which gave us the opportunity to showcase our efforts with Afro-Surinamese music, whose stories link back to slavery times, as well as to present some of our recently restored and playable early stringed keyboard instruments.

*Jurn Buisman,*
*Director of the Museum Geelvinck*

## CIMCIM Call for Papers
## Prospects and Challenges of Museum Accessibility, Diversity, and Equity

Following ICOM's new Museum Definition, highlighting that museums, in addition to being "open to the public", are "accessible and inclusive", CIMCIM's 2023 Annual Meeting offers a platform to discuss how museums can facilitate access to their collections, and compare practices across different institutions and countries. Indeed, the idea of accessibility of museum collections has changed over time based on a variety of historical, ethical, and cultural factors. What are the policies that make musical-instrument collections accessible to a wider and more diverse public? How can museums showcase their collections to best suit all types of audiences? What are the solutions museums can implement to also make their musical collections accessible to visitors with disabilities? How do museums deal with the objects that cannot be displayed? What are the strategies to make the sound of instruments in museums more accessible to musicians and to the public? How are digital technologies helping to improve access to collections? These are some of the questions that the conference might address from different angles.

Therefore, the topics of interest of the conference include but are not limited to:

- Approaches to inclusivity and diversity in museum spaces
- Projects concerned with equity, such as women's histories, queering collections, and decolonial work
- Accessibility of museum spaces, including storage facilities
- Digitisation projects and digital accessibility of musical instrument collections
- Restoration, playable reconstructions, and replicas of musical instruments in museums
- Transfer of collections from private to public spaces
- Provenance research

Contributions are invited in the following formats:

- Papers
- Interactive presentations (posters in digital or paper format, feedback/ experience, reports, short workshops)
- Panel discussions

# Papers

## Approaches to Inclusivity and Diversity

# Seeking for Accessibility, Inclusivity, Equity, and Diversity in the New Museography of the National Museum of Music, Portugal

*Edward Ayres de Abreu*
**Museu Nacional da Música / INET-md, Portugal**

## Introduction

The National Museum of Music is undergoing significant transformation as it will move to new premises, to be opened in late 2024. Despite encountering various initial challenges, the museum's team, in collaboration with external advisory and scientific councils, has developed a fundamentally different exhibition programme from what was previously in place for showcasing musical instruments. Within this context, the museological focus of the museum's transformation has shifted towards exploring alternatives to traditional organological organisation, as well as avenues for enhancing accessibility, inclusivity, equity, and diversity within the museum. Specifically, this endeavour has spurred reflections on several key areas:

- enhancing the museum's appeal to diverse audiences, including those with hearing impairments by exploring sensory experiences beyond just hearing and sight, such as smell and touch
- opening the museum to a wide array of musical languages and practices, and even challenging the very concept of music itself, encouraging visitors to question the boundaries of music and its multifaceted nature
- integrating and contextualising non-Western instruments in a manner that avoids segregation and colonialist perspectives
- amplifying the voices of female musicians to counteract the male-dominated narratives prevalent in historical discourses.

This article provides a summary of the main outcomes of these reflections and outlines some selected actions that address the challenges identified.

## Context

Temporarily installed (some thirty years ago) in the premises of a Lisbon metro station, the National Museum of Music is now poised to establish its own premises in the north wing of the esteemed Palace of the Royal Building of Mafra, a distinguished example of Portuguese Baroque architecture, recently proclaimed a UNESCO World Heritage Site. The museum's relocation to Mafra was preceded by a political decision

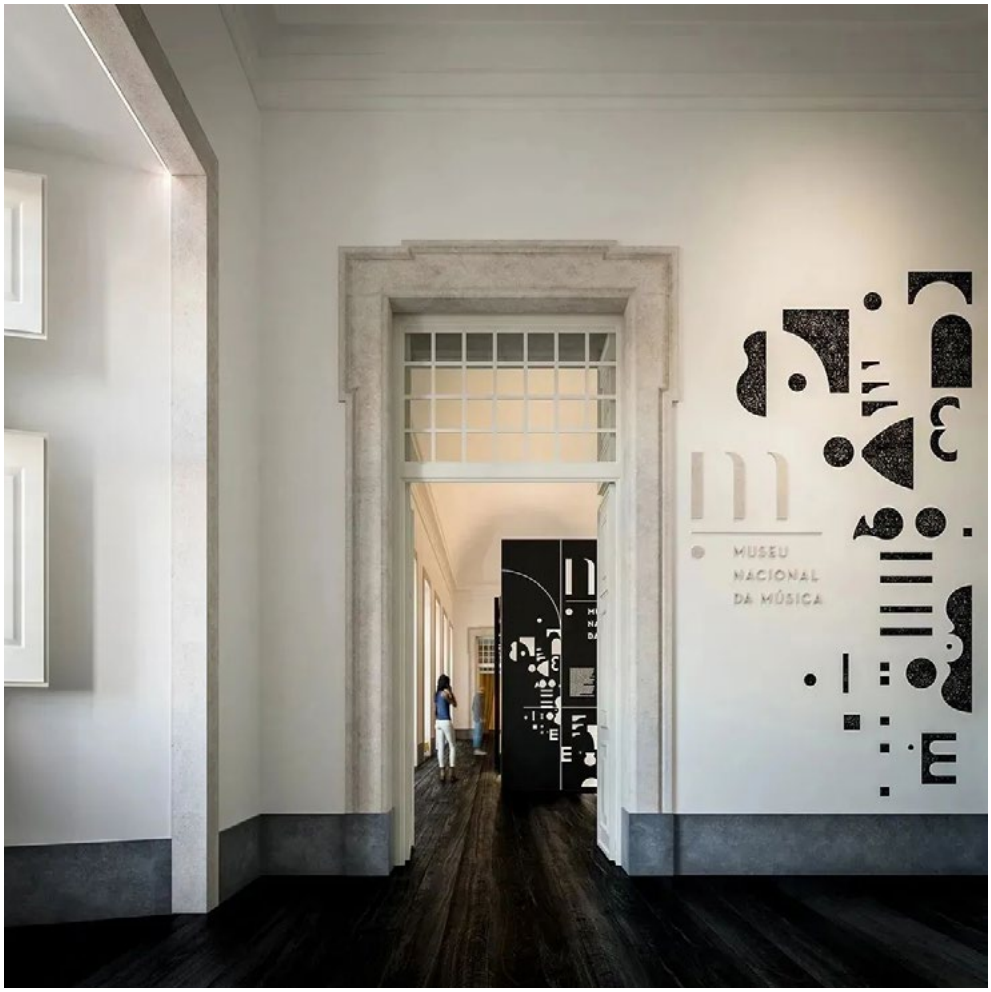



Figure 1: The entrance to the first room of the new museum, according to the project conceived by the ateliers Site Specific and P-06. Photo: P-06 / Museu Nacional da Música

taken nine years ago; hence, upon assuming the role of museum director in September 2022, I inherited an already finalised architectural plan. However, I was afforded the opportunity to reimagine its museography – this project having reached completion two weeks ago after a series of brainstorming sessions and through intense design thinking processes. External scientific and advisory committees were enlisted alongside all the museum's staff, and we are preparing to initiate a participatory community project to assist in shaping and refining the exhibition texts. Within this framework, our deliberations centred on exploring alternatives to the traditional organological organisation as envisioned by scholars such as Hornbostel and Sachs, a model we collectively deemed uninspiring for a modern "music museum".

For sure, despite our desire for radical transformation, three significant constraints were inevitably encountered: the distinctive yet incomplete collection, characterised by several extraordinary instruments, thirteen of which are classified as national treasures, but also lacking key specimens; the limited scientific understanding of the collection; and the unique architectural challenges posed by the preexisting structure of the Royal Building of Mafra, which, while elegant, presents limitations in terms of visitor circulation, among other considerations. In one way or another, this transformation has led to a complete redesign of the museum.

## All music – for all

Initially, we envisioned a more vibrant and dynamic museum, finding it paradoxical that a museum dedicated to music should be devoid of sound, as is often the case today. Furthermore, we aimed to ensure that this musical experience would be as

Figure 2: A preview of the “Plural Listening” multimedia auditorium, with several sound speakers, large screens, and a tactile vibratory system in the centre. The architectural rhythm of the windows is punctuated by curtains of vibrant yellow, in line with the liveliness we seek to impart to the new museum. Photo: P-06 / Museu Nacional da Música

inclusive and accessible as possible, reaching individuals with various impairments, including those who are blind or deaf. As a result, our project incorporates twelve hands-on experiences, featuring tactile devices including musical instruments and mechanical models, together with braille plaques. Multisensory experiences will be explored as well, including olfactory elements – in a room evoking the atmosphere of an instrument-making workshop. Additionally, we are developing some interactive resources and a museum app equipped with audio guides, audio descriptions, video descriptions, and customizable routes tailored to specific disabilities.

In line with this holistic approach, we anticipate one of the most enriching experiences for all visitors to be the “Plural Listening” auditorium. This space offers an immersive multisensory experience facilitated by a Dolby Atmos system, four large LED screens, and a tactile vibratory device that allows visitors to perceive music through their hands and feet. Inspired by the work of Portuguese pianist and composer Simão Costa, who has focused on engaging audiences with hearing disabilities through the concept of “transduction” – a word derived from the Latin “trans” (“through”) and “ducere” (“to guide, to lead”) – rather than mere “translation”, our project aims to convey the essence of musical information in alternative forms.

Furthermore, we have prioritised the museum’s openness to diverse musical genres, moving away from an exclusive focus on classical music heritage. This commitment to diversity is essential for fostering a fair and inclusive environment for all visitors. While a significant portion of our collection comprises classical music specimens due to historical reasons, (and it is true that this should naturally be celebrated and displayed), we have made a deliberate effort to showcase contrasting musical universes and challenge the artificial boundaries between genres. Therefore, in the “Plural Listening” auditorium the very concept of music is interrogated. From

Figure 3: The appearance of a display case. The instruments will not be organised organologically, but rather structured around different thematic cores and promoting contrast and unexpected relationships. In addition, an app will offer multimedia content. Photo: P-06 / Museu Nacional da Música

Renaissance polyphony to contemporary urban soundscapes, as well as folk music, fado, rock, hip-hop, rap, and poetry from around the world, visitors are encouraged to question the boundaries of musical expression and explore the richness of diverse musical traditions.

## Eroding otherness

Another pivotal aspect of our development revolved around exploring avenues for promoting equity and diversity. One of the most pressing topics for us was the integration and contextualization of non-Western instruments in a manner that avoids segregation and colonialist stereotyping of "otherness." We grappled with the question: how can we present these instruments in a way that honours their cultural significance without perpetuating harmful narratives? Ultimately, we chose to dedicate the first room of the museum to an exploration of the very concept of the "museum" itself. Here, we explored the notion of the "exotic," which played a central role in the early history of museums. Lambertini and Keil, the main initial collectors of our museum, were drawn to objects perceived as exotic, whether from non-European cultures or rural European settings, and this dichotomy ("us" versus "others") laid the groundwork for our museum's history – and, to a large extent, it describes the history of collecting as a whole. While inviting the public's attention to this as a starting point for interpreting what collecting is, what curation is, and what memory is, we anchor the entire visiting experience in a critically active posture.

Subsequently, the exhibition is structured around various musical contexts, with several nuclei devoted to "expressions of the transcendent", "popular knowledge",

and “power dynamics”, amongst others. While time constraints prevent a detailed discussion of each aspect here, it’s essential to note that, despite the predominantly European nature of our collection, we also made a deliberate effort to incorporate a few non-Western instruments throughout all these thematic rooms. This serves to underscore the diverse approaches to music found throughout Western history, drawing parallels (or highlighting differences) with other cultural traditions. At times, we seized upon these narrative opportunities to challenge Western perceptions of non-Western instruments, particularly when such perceptions were rife with misunderstandings and reinforced stereotypes.

Another critical issue that emerged was how to amplify the voices of female musicians, countering the entrenched male hegemony prevalent in historiographical discourses. In addition to showcasing the role of women in the history of music through instruments and iconography, we made a concerted effort to feature female composers and performers in the musical examples provided in the audio guide. Addressing the argument that historical instruments lack music written by women from the same era, we assert that our museum aims to be vibrant and dynamic: some of these historical instruments, or their replicas, are still playable, allowing contemporary musicians – women composers, women performers – to showcase repertoire that resonates with their experiences and perspectives.

## Biography

**Edward Ayres de Abreu** studied at NOVA (Musical Sciences, Masters and PhD) and at AESE Business School (Executive MBA). As a musicologist, he was distinguished with the 2nd Prize of the Otto Mayer-Serra Competition (2017) from the University of California, Riverside. He founded and directed (2009-2022) the MPMP Património Musical Vivo, a platform distinguished with the Sequeira Costa Music Award (2018). He is a member of the Board of the Portuguese Society for Research in Music. In September 2022, he took on the role of Director of the National Museum of Music, Portugal.

# The Video Guide of the Musée de la musique in Paris: A New Tour Guide Designed for Universal Accessibility

*Caroline Bugat*
**Musée de la musique – Philharmonie de Paris, France**

## Visit to the Musée de la musique in Paris

The Musée de la musique in Paris offers a tour in music. Since January 2022, a web app, available on the visitor's smartphone or on a device provided by the museum, makes the collection accessible to all visitors, including people with disabilities. An integral part of the visit, this new video guide is essential for exploring the works in the collection and it is included in the entrance fee at no extra charge.

Within the Philharmonie de Paris, the Musée de la musique presents a collection of more than 8,000 instruments and art objects, with almost 1,000 on exhibit in the permanent exhibition space, including national treasures and legendary instruments. Six chapters take visitors through the history of music in Europe and around the world, from the 17th century to the present day.

Visits to the museum can be extended or enhanced by guided tours, as well as conferences or concerts using the instruments in the collection. Live performances take place in the museum every day, providing constant opportunities for dialogue between musicians and the public. On certain Sundays, Promenade Concerts take place in all the rooms of the museum.

More than 300,000 people visit the museum every year.

## From audio guide to video guide

Previously, all visitors were given an audio guide with over four hours of content. The decision to upgrade the system to a video guide was motivated by three elements: improved accessibility, possibility of watching videos of instruments from the collection in concert, and greater adaptability. The new system retains the content of the audio guide, including a children's tour and music played on the instruments from the collection.

The video guide is a smartphone-type device encased in a sturdy shell. The museum has a fleet of two hundred devices on loan. It is connected to a web-app that uses local wi-fi. This means that no content is stored on the device. Visitors can also access the web-app on their own smartphones, by connecting to the wi-fi network using QR codes.

The system also has the rare ability to synchronise the video guide with the audiovisual material displayed on the museum's monitors by composing a specific number.

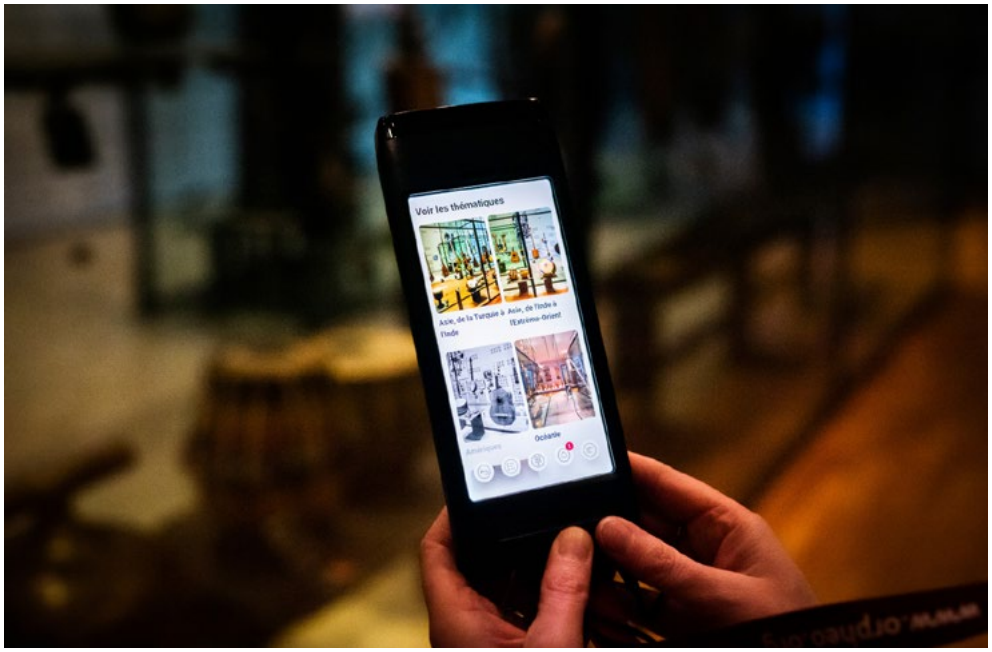



Figure 1: The video guide. Photo: © Nicolas Lascourrèges


Figure 2: wi-fi access by QR codes. Photo: © Nicolas Lascourrèges

For several years now, the museum has been conducting an intensive audio and video recording campaign of the playable instruments in its collection. Several hours of content are available. This very rich “sound” vision of the collection is to be shared with all the visitors.

The video guide therefore offers the possibility of showing those videos of the instruments filmed in concert. This provides essential information about the instruments, how they are played, and how they work.

The video guide opens up a host of functions: zooming in on a photo, displaying text, liking your favourite instruments, and so on. It is also possible to configure parameters such as contrast, text size and the choice of a dyslexia-friendly font.

During the visit, the visitor can also “like” works of art or instruments on the app. By entering their email address before returning the video guide, they will receive an email inviting them to access post-visit content.

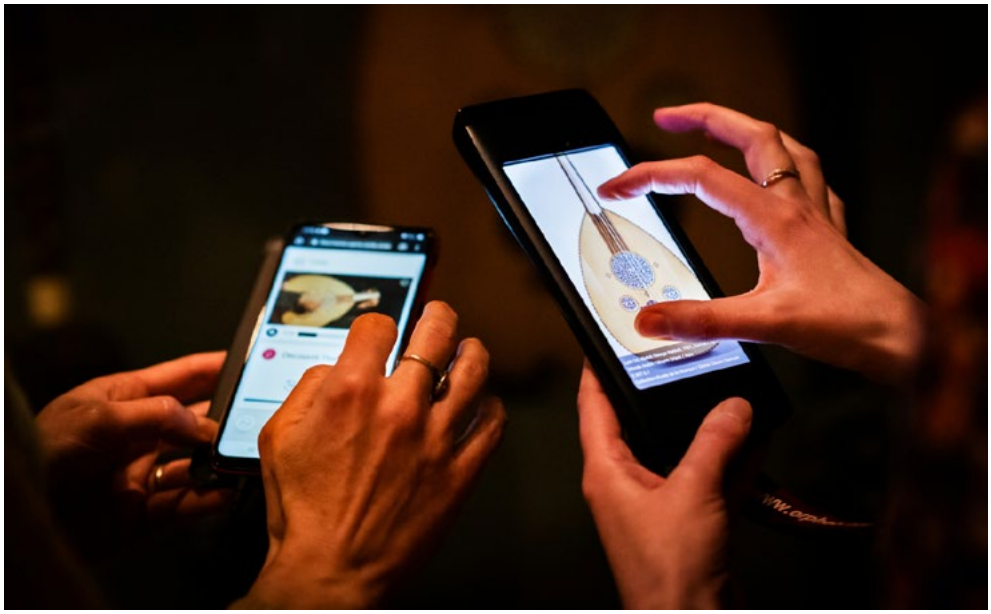
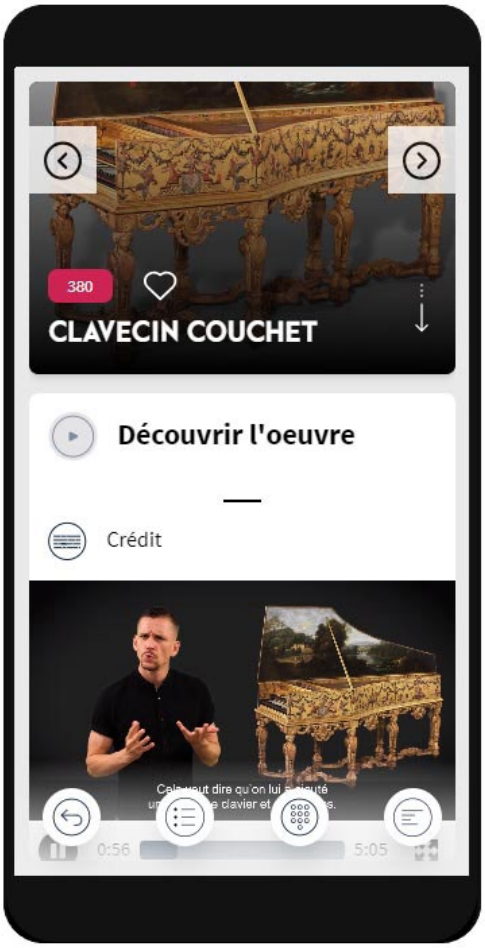


Figure 3: Zooming in on a photo. Photo: © Nicolas Lascourrèges

Finally, the video guide gives access to specific and adapted itineraries in order to open up the museum to all visitors, whatever their situation. These tours are gateways to the collection for different types of visitors, including people with disabilities.

## Toward equal access

Figure 4: The French sign language tour.




The museum has been involved in accessibility issues for many years. In 2013, it was awarded the "Patrimoine pour tous" (Heritage for All) prize by the French Ministry of Culture. When the decision was made to change the audio guide, the team naturally seized the opportunity to develop a more accessible guide, thanks to the new technical possibilities. With the video guide, visitors can choose between several tours, including a tour in French sign language, a tour in easy-to-read French for people with learning disabilities, and a tour in audio description for people with visual impairments. Each tour is composed of dedicated videos and specific gestures and adjustments (contrast control, text size, text display, etc.).

The museum's ambition is to provide equal access to its collection for all visitors, regardless of age, language, or disability.

It is difficult to estimate the number of disabled visitors. 10,500 "disability" tickets are sold each year, but the number of visitors with disabilities is without a doubt much higher. Many people do not have a handicap card to prove their disability and do not feel that the ticket price applies to them.

The video guide offers content in French, English and Spanish, as well as in French sign language. Seven videos have been designed, translated, and interpreted into sign language, giving deaf people access to specific, adapted content. Visitors can also activate the text transcription of all the audio tracks on the video guide.

There is also a series of 21 videos written and produced in easy-to-read and easy-to-understand French. For people with mental disabilities, but also, for example, for people who speak and read French poorly.

Figure 5: During the test. Photo: © Caroline Jules – Culture accessible

For the visually impaired, an audio-description tour is available. It consists of maps and tactile cards reproducing the museum's instruments in relief, with audio descriptions. The tour can be navigated using specially adapted gestures.

## Implementation of the project

It is essential to have the specific tours tested by the people concerned. A group of people with learning disabilities tested the entire easy-to-read and understand route. Their feedback provided essential information for adapting the videos.

Another important point to remember is that reception staff need to be properly trained. They need to be familiar with the different routes and functions, so that they can give visitors the best possible advice. At the entrance to the museum, the video guide and its features must be highly visible, including the ability to access the web-app on the visitor's own device. In certain situations, it will be more convenient for visitors to use their own smartphone, which has already been configured to suit their needs.

Finally, in a project like this, the relationship between the partners must be flexible, close, and warm. The company *Livdeo*, which designed the web app has been an extremely attentive partner in building a solution tailored to our needs. Livdeo's system is also highly adaptable. The museum's team can easily create new tours and modify or add content.

## Conclusion

The video guide's universal accessibility approach was implemented with the utmost care. The aim was to give everyone access to the museum, its works of art and contents using the same application and the same technical solution for everyone.

So far, there has been too little feedback from visitors to assess the changes or additions that need to be made to the system. However, it should be noted that the vast majority of visitors use the video guide, a sign of its essential role in the visit.

We now need to address the issue of the diversity of languages spoken by visitors. Could the development of automatic translation systems be the next step in the development of the video guide? But what are the ethical and quality issues involved in using these technologies?

## Biography

**Caroline Bugat** is a musicologist by training and holds holds a Master's degree in Music Management from the Sorbonne University of Paris. For the past 15 years, she has been working at the Musée de la musique as Head of the Mediation Department. Her work revolves around the management of the team of guide-lecturers and the design, implementation, and evaluation of the education programmes. The public is at the heart of the outreach projects, such as the video guide or the *Touchez la musique* tour (Touch the music), and in the creation of specific tours. The constant concern is to encourage a sensitive and enriching encounter with the works from the collection.

# Digital Replicas as Interactive Objects in an Education Project for Visually Impaired and Blind People

*Benedikt Brilmayer*
**Musikinstrumenten-Museum des Staatlichen Instituts für Musikforschung, Germany**

## Introduction

After the experience of the Covid-19-crisis when several aspects of public cultural life were transferred into digital space and digital products, Mireya Salinas, head of education at the Musikinstrumenten-Museum (D.B.im), developed a project working with digital technologies to offer interactive stations for visually impaired and blind people. The core idea was to create 'digital replicas' of historic musical instruments, accessible for visitors in the permanent exhibition, as well as on the museum's homepage. With the latter aspect it was intended to widen the visitors' experience by enabling them to enact their part as visitors locally, as well as to interact with certain collection objects on their computer or smartphone at any time and location. Granted third party funding brought the museum into the fortunate position to realise that idea. In cooperation with the German Federation of the Blind and Partially Sighted (https://www.dbsv.org/dbsv-in-english.html) next to others, specific objects were selected, aspects of mediation and presentation in the museum discussed, and a tour-concept with the core content of digital replicas of the selected objects was developed. In addition, the digital museum's guide (DMG) was further developed to meet the technical requirements for offering pertinent tools and the museum guides received special training in conducting tours for the project's focus group. It was clear from the beginning that changes in the architecture to the permanent exhibition could not be realised due to monument protection. For example, no orientation system for blind and visually impaired people could be installed. At the start of the implementation phase this project combined the expansion of the visitor experience for visually impaired people with interactive elements and playable digital replicas as well as a spotlight exhibition with additional tactile objects and listening stations. The keyboard and its historical versatility in its appearance was chosen as the organological narrative for most likely being the most prominent musical interface which could be conveyed comparatively easily to the project's main focus group. The project's name KTI is short for "Klaviatur. Tastatur. Interface." (Claviature. Keyboard. Interface.): "Keys are the main idea of the mediation-project KTI for blind, visually impaired and sighted people…" (Salinas 2023) (All translations by the author).

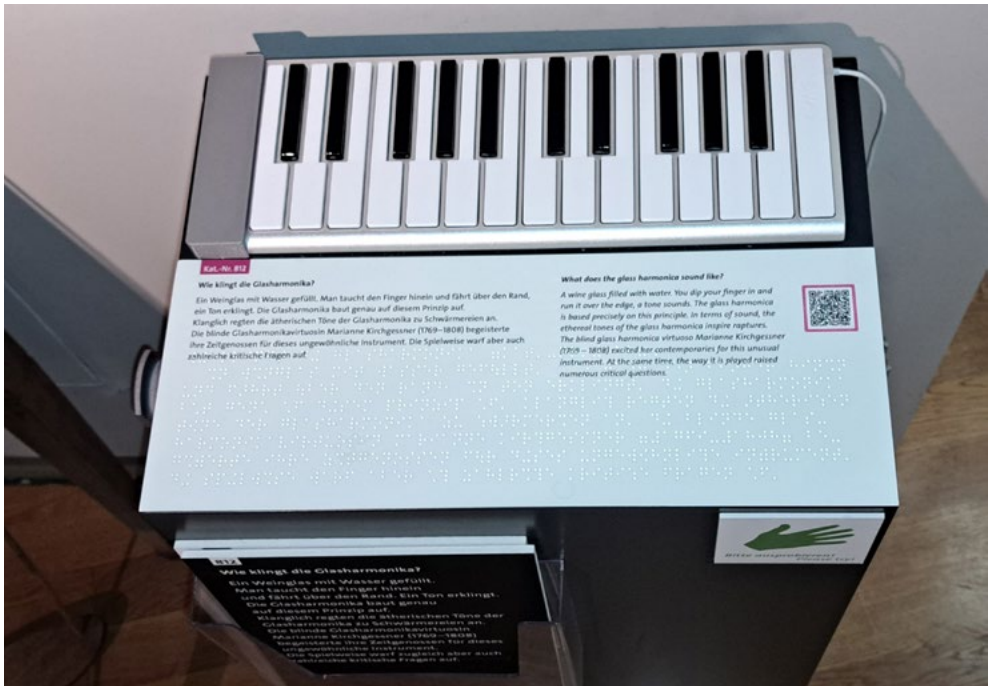



Figure 1: The appearance of the glass harmonica's digital replica. In front of the keyboard, text is printed, also in Braille and the barrier-free accessible QR code can be seen. The cards with large letter print and reversed colour print. The actual glass harmonica is on the left. Photo: Benedikt Brilmayer

## Key(s) for the concept: realising digital replicas

After consulting cooperation partners for exchange of knowledge, experience, and interest, particularly with workshop-participants of the focus group showed that the musical concern mainly was in the different timbres but – admittedly surprising – not in the details of touch and different shape of keyboards. "At the end of the second workshop, five musical instruments with key-based interfaces were selected by a joint vote by experts and the museum team." (Salinas 2023). An anonymous regal (Germany ca. 1680, D.B.im cat. no. 349), the hurdy gurdy by Geourges Louvet (Paris, 1733, D.B.im cat. no. 4087), the clavichord by J.G. Horn (Dresden, ca. 1793, D.B.im cat. no. 5568), the anonymous glass harmonica (Germany, ca. 1810, D.B.im cat. no. 812) and the Mellotron (Birmingham, 1972, D.B.im cat. no. 6111) were chosen. The two main categories for selection were the above-mentioned versatility of the claviature and the more technical factor of the essential process of redesigning those instruments as digital replicas. That required taking samples of all five instruments and making those accessible for visitors to be able to play the samples on small interactive stations distributed in the permanent exhibition. As mentioned above the samples were also accessible (downloadable) via the museum's homepage to enable users to create music at home and independently from a visit on site. Next to that core content, a concise exhibition on the special exhibition floor was conceived as the project's easy-to-access nucleus. It presented a fully working custom built hurdy gurdy as a tactile and playable object, and a playable keyboard offering the whole sample-data of the selected five instruments. Additional objects showing the claviature's interesting and changing history apart from musical instruments, in e.g. early typewriters and telegraphs (Gööck 1984, 166–182. Also Haffke 2019, 64ff.) encompassed the Cembalo Scrivano (Mantelli & Scarzello 2022), which was a loan by the Heinz Nixdorf Museumsforum (https://blog.hnf.de/ein-cembalo-zum-schreiben/). The concise exhibition also included listening stations, where five podcasts, custom produced for the KTI project, enabled visitors to take a seat and listen to experts' talks concerning the selected instruments. Further object-related and musicological information was supplied in a more extensive way on the DMG, as well as in texts, printed also in Braille on the objects' pedestals distributed in the permanent exhibition.

## Aspects of digital replicas

As will be shown later, the design as it was realised within the project, does not meet the definition of "replica" as it is used, for e.g., musical instruments in collection context but is chosen here, to differentiate between the several other digital tools created for and used in the KTI project. As mentioned above, the selected instruments had different claviatures with different aspects of touch and actions, which turned out to be of secondary interest. Therefore, the aspect of original sound was given absolute priority. Samples should meet high standards and were taken from every single key of the selected instruments, although not the entire ranges were to be incorporated in the digital replicas. But the concept of providing the samples on the museum's homepage for free download suggested sampling the whole range. In addition to that, the basic sound of the selected instruments was documented not in the form of an interpretation of an appropriate piece of music but in its plain sonority. The recording process was realised in cooperation with the third department for acoustics and music technology of the Staatliches Institut für Musikforschung PK (State Institute of Music Research) to which the museum is affiliated. The hurdy gurdy and the clavichord were recorded in the institute's anechoic room. The other instruments could not be moved and were recorded in the permanent exhibition room, with respect to the characteristic acoustics in the post-production phase. In this project, the term "replica" clearly refers to the aspect of original sound, which was conveyed as much as possible. The external shape of the "digital replicas," which were distributed as interactive stations throughout the permanent exhibition also was affected by the conditions of space between the objects of the permanent exhibition. For that reason, it was decided that only part of the original instruments' ranges were transferred into the digital replica resulting in a small pedestal (420 x 280 mm) on which a keyboard (Keystation Mini 32 MK3 or CME Xkey 25 silver) with headphones was attached. In front of the keyboard, text was printed (in letters and Braille) with an accessible QR code for enabling visitors to access main information. The printed text also included removable cards with large print and white letters on a black background.

## Discussion

As a curator and (non-professional) instrumentalist the aspect of sense of touch on different musical instruments and its interconnection to creating nuanced music naturally is an important part of everyday work. The fact that this specific detail was deferred at first was not easy to deal with. But the result of the cooperation with the different actors, especially from the German Federation of the Blind and Partially Sighted, showed that recreating the shapes of claviatures or the aspects of touch in detail, would have gone too far. However, some aspects could be transferred after close consultation. The necessity of turning the crank of the hurdy gurdy was realised by the need of pressing the lowest key of the corresponding keyboard. By doing so (and only as long as doing so), the drones sounded, and the other keys played the samples. Hence, the lowest key was tagged with an exclamation mark, which was an elevated sticker. But no additional information was offered to the visitors. Of course, sometimes some help was needed, but surprisingly most visitors got the meaning of the need to hold down that tagged key. It was the other way round with the detailed realisation of the clavichord. Here for example the "*Bebung*" could have been realised by utilising aftertouch of the keyboard or by using a keyboard equipped with a pitch wheel or an external pitch bender. After the consultation process and

a thorough discussion this idea was dropped for presenting a too specific sound influencing function. *Bebung* as an important and at the time of the clavichord well known playing technique, is too little known by the average visitor today as to be able to offer this function without elaborate guidance. With the mellotron and the glass harmonica, the question of editing the recorded samples for cutting the secondary sound was raised. The noise is created by the turning mechanisms which are the capstan driven by a motor (for technical details compare: Anonymous, *Mellotron 400 Owner's Manual*), as well as the pedal and flywheel. It was decided to keep those sounds on the samples because they are characteristic of the instruments and contribute to the idea of conveying the original sound as much as possible.

## Conclusion

The idea of transferring collection objects into digital space to extend the visitor experience for a special target group led to the distribution of digital replicas throughout the permanent collection. With the special focus on the instruments' characteristic timbre and sound several interactive stations were developed and specially designed to include the target group of visually impaired and blind people. The cooperation with different project partners opened up the museum's staff views on their own objects and allowed new perspectives on the process of mediating and communicating knowledge and to encourage visitors to take creative actions (Salinas 2023). The positive acknowledgement is the best indicator and motivation for the staff to continue the work. Although several aspects of playing-technique and touch were rendered secondary or even omitted completely in order to facilitate the mediation process to the project's target group, the visitors' experience has been enriched by interactive stations as well as online. The "curb cut effect", as described by Salinas, is an additional delightful aspect. Sighted visitors also appreciate the interactive stations in the permanent exhibition and integrate them into their journey through the museum. The additional value on both the museum's staff and the visitors' sides by realising projects and ideas in widening the visitor experience for new groups and enabling new ways of accessibility can hardly be overestimated.

## Acknowledgements

The author would like to thank all project-partners for the good and diligent co-operation, especially the members of the German Federation of the Blind and Partially Sighted for their creative impulses and Mireya Salinas for enabling, orchestrating, and communicating this exciting project. We thank the Kulturstiftung des Bundes (German Federal Cultural Foundation) for supporting this project with funding by the Federal Government Commissioner for Culture and Media (BKM) through the programme "NEUSTART KULTUR".

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## Biography

**Benedikt Brilmayer** works as curator and researcher at the Musikinstrumenten-Museum SIM PK (D.B.im). His research interests include bowed and plucked stringed instruments, electronic instruments as well as the multifaceted connection and aspects of transfer of technology in instrument making. As curator, he realised exhibitions about early guitars (2016), electronic instruments (2017), the bandoneon (2019), on E.T.A. Hoffmann (2022) and recently on instrument making in divided Germany. He is one of three speakers of the organological panel of the Society of Musicology in Germany (Gesellschaft für Musikforschung) and regularly teaches at several universities in Germany.

# San Colombano "No-Limits":
## An Inclusivity Project 360°

*Catalina Vicens*
**Museo San Colombano – Collezione Tagliavini, Genus Bononiae / Fondazione Carisbo, Italy**

### Rethinking sound accessibility in a playable collection

The founding collection of the Museo San Colombano was donated by organist and musicologist Luigi Ferdinando Tagliavini. Today, the museum hosts about 100 instruments – spanning over six centuries – many of which are playable. Tagliavini envisioned that their sounds should be made accessible by performances and through listening to the instruments played by the museum curator during guided tours. To hear the instruments in this way enables visitors to develop an appreciation of the varied timbres within the keyboard instrument families, making a visit rich and gratifying regardless of any limitations in being able to see the instruments.

Over the past two years, personalised guided tours for individuals with visual impairments have proved successful as mutually engaging experiences, presenting significant potential for further exploration at the Museo San Colombano. However, some factors have been observed that hinder the complete success of such visits; restrictions on touching the instruments lessen the understanding of the physical nature of the sound source – a most important part of the experience, especially for individuals with visual impairments. Furthermore, the necessity of having the curator as intermediary to play the instruments stands in the way of the visitor engaging in autonomous exploration.

### Touching sound

With the goal of fostering inclusion and promoting cognitive and sensory accessibility in the museum, the "San Colombano No Limits" initiative was launched in 2022 and is currently in development. Supported by the National Recovery and Resilience Plan (PNRR), it is undertaken in collaboration with the Italian Union of the Blind and Visually Impaired of Bologna and the Institute of the Blind Francesco Cavazza.

The project encompasses three levels of interpretative media that can be enjoyed individually or in combination during a museum visit:

- **Tactile graphic panels** offer concise information on the contents of the rooms and historical spaces hosting the collection. Text descriptions are available in both braille and the Latin alphabet in Italian and English, ensuring accessibility for individuals with and without visual impairments. To aid navigation within the exhibition spaces, tactile orientation plans are provided on each floor.

- **Interactive sensory stations** include 3D models of instruments in reduced size, mechanical models of keyboard instruments, tactile reproductions of selected artworks, and musical iconography, all supported by alt texts. Additionally, a keyboard interface will enable visitors to play digital versions of instruments in the collection.

- **The VIA MIA app**, an interactive tactile tour where audio content is triggered by tactile graphic panels, providing users with an immersive experience.

Compared to regular audio guides, the VIA MIA app aims to offer a finite tour that allows visitors to anticipate the approximate duration of the visit to nine exhibition rooms. High quality audio content is triggered by interacting with tactile graphic panels or entering spaces and are experienced through headsets, to avoid acoustic contamination.

The use of bone-conduction headsets turns the audio content into an immersive experience. By enabling 360° sound reproduction, they serve not only as engaging tools but also provide a sense of spatial dimension within the galleries and distribution of instruments. Since the headsets do not cover the ears, users can utilise their sense of hearing for orientation, which is particularly important for individuals with visual impairments. Additionally, this feature makes the tour accessible to individuals with minor to moderate hearing loss.

## Key stories: building upon the histories within the keyboard collection

The interactive tactile tour aims to engage diverse audiences by delving into the museum's key actors and their stories.

Keyboard players throughout history have honed enhanced senses crucial to their craft: hearing and touch. The keyboard itself, serving as a codified set of pitches, has played a central role as a primary interface up to the present day. It has proven to be an easy-to-use tactile interface capable of triggering actions from simple to highly complex, while offering a wide range of sound possibilities. This makes the keyboard a creative medium for those who rely on touch and hearing, including the blind. Composers-keyboardists who lost their sight at an early age, such as Francesco Landini, Conrad Paumann, Antonio de Cabezón, and Louis Braille himself, made significant contributions to the history of European music.

Starting from mid-2024, the app is expected to offer two exhibition tours, each dedicated to exploring museum highlights and the evolution of keyboard instruments, with special attention given to the contributions of keyboard players with visual and other sensory impairments throughout history.

Resonating through hidden stories and promoting a multisensory museum experience, the Museo San Colombano – Collezione Tagliavini strives to broaden its civic engagement, evolving into a platform for representation, discovery, and connection. This promotes inclusivity and enhances learning from diverse perspectives, enriching the understanding of the collection.

## Biography

**Catalina Vicens** has been serving as the curator and artistic director at the San Colombano Museum – Tagliavini Collection in Bologna since 2021. As a musician and researcher specialising in historical keyboards and music from the Middle Ages and the Early Modern Period, she has contributed to documentaries, produced audio installations, and recordings for history, art, and music museums. She has performed at major stages and festivals around the globe and has taught at 10 universities in Europe and North America, with appointments at Oberlin Conservatory and the Royal Conservatory of Brussels. Her research focuses on the history and technology of medieval musical instruments, as well as musical practices, material culture, and intellectual culture in the age of humanism. She is a member of the editorial board of *L'Organo* and serves as an advisory board member of the Sigal Music Museum.

# Welcome to Touch the Historical Sounds: Accessible Visits for the Visually Impaired at the National Museum of Taiwan History

*Chia-Yi Lin*
**National Museum of Taiwan History, Taiwan**

## Services for the visually impaired

The National Museum of Taiwan History (NMTH) opened in 2011 and has since been committed to preserving Taiwan's historical and cultural memory by leveraging its abundant research collections via exhibitions and educational activities to direct the general public's attention to historical and contemporary subjects. The NMTH has accumulated more research collections in the past 9 years and would now like to establish direct dialog with the general public through permanent exhibitions. In November 2019, the NMTH initiated a 15-month closure to undertake partial renewal of the permanent exhibition.

## Design concept for the visually impaired

In the previous permanent exhibition, visitors were able to travel through time and visualise Taiwan's history through the museum collections and recreations of historical figures and landscapes. The NMTH reopened in January 2021, infusing the important concept of "Interaction into the renewed permanent exhibition and hoping to communicate to the general public the story of Taiwan and its people from the perspective of multiple ethnic groups. Therefore, while planning the renewal project for the permanent exhibition, we aimed to provide an environment that facilitates the participation of visually impaired individuals by setting up touchable objects in seven areas of the exhibition. We also simultaneously developed complementary learning and visitor resources, including exhibition signs in braille, introduction leaflets in large print, and descriptive audiovisual guided tours.

## Development of touchable objects and learning and visiting resources

### 1. The team and allocation of work

To establish inclusive exhibit areas for touchable objects and to meet the needs of visually impaired visitors, the author acted as the overall coordinator. The author invited the general public from different domains to form a project team with the NMTH to design the touchable object exhibit areas and to develop learning and visiting resources (L&V resources). In addition, the permanent exhibition curatorial

Figure 1: People from different domains formed a project team to design the touchable object exhibits and to develop learning and visiting resources. Photo: Chia-Yi Lin

Figure 2: Integrating the needs of both those with visual impairments and those without to create a collective learning experience in the touchable objects exhibit area. Photo: Chia-Yi Lin

team was consulted to provide recommendations of touchable objects with historic meaning from the perspectives of exhibition planning and historical discourse. Work was allocated as follows:

- Special-needs education specialist: As a consultant for the development of the touchable objects exhibit areas and L&V resources.

- Tour guides: Contributed their experience interacting with different visitors to modify the audio guide scripts drafted by the expert in special-needs education.

- Exhibition service staff: Interviewed various institutions for the visually impaired to discuss the need for exhibition introduction leaflets to be printed in large font and assisted in the design of such leaflets.

- Design verification testers: Testing was performed by two individuals with congenital blindness, two elderly volunteers aged over 60 years with presbyopia, and one individual with low vision and retinopathy.

## 2. Results of design testing

After the initial design was complete, we conducted tests to verify the design of the touchable object exhibit areas and L&V resources.

In particular, we had many suggestions made regarding the audio description tour guide from the total loss of vision testers. In addition, people with total loss of vision were curious about the "sounds" that could be heard in the exhibition hall. Based on this feedback, we adjusted the contents and delivery of the audio description guide to immerse visually impaired people in the experience of the permanent exhibition.


Figure 3: Testers at different levels of vision loss confirmed the degree of completion of each developed item in the touchable object exhibit areas. Photo: Chia-Yi Lin

## Integrating the audio description guide with the sounds

After receiving feedback from those with total loss of vision on the audio description guide, we made the required adjustments. Meanwhile, we shifted focus from enabling visually impaired individuals to experience the touchable objects to integrating the auditory experience of visiting the NMTH to achieve inclusive and multisensory learning.

## 1. Sounds in the permanent exhibition

We initiated a review to identify the sources of sound in the permanent exhibition and discovered that they mainly came from the collections of historical audiovisual materials in the NMTH. The activities as following:

- "Finding" the sounds: We were aware that after renewing the permanent exhibition, many audiovisual animations and historical sounds had been added. However, we had paid excessive attention to solving the issues of "touching" and "explanation," thereby overlooking the other senses of visually impaired individuals in the process. Therefore, on receiving tester feedback, we realised that the sounds in the exhibition areas included people's conversations, the "auto-played" exhibition sound effects, the sounds of videos, and certain "passive sounds," which were historical sounds played through headsets or after visitors pressed certain buttons.

- "Touching" the sounds: We learned from the process of verifying our design and from the testers' feedback that visually impaired individuals have a high degree of curiosity about and sensitivity to "sound." Therefore, we integrated the "passive sounds" heard along the route of the audio description guide into the guide script, allowing visually impaired individuals to touch the objects that trigger sounds under the instruction of the guide.

- "Using" the sounds We have noted that people with low vision are capable of self-touring the NMTH, whereas people with total loss of vision bring companions. Therefore, when we designed the audio guide scripts, we used illustrations to instruct companions on the touchable exhibits created for visually impaired individuals; through the audio guide, we also explained the sources of the surrounding sounds and their backgrounds to visually impaired persons.

## 2. Sounds in the Audio Description Guided Tour

After our investigation, we identified the following sounds:

a. Auto-played sounds

- "Taiwan, an island of encounters" (Opening film): The opening video is played next to the door of the exhibition hall, narrating the interactions between different ethnic groups after they arrived in Taiwan through animation and historical images. The soundtrack is inspired by the sounds characteristic of different eras in Taiwan.

- Pilgrimage procession: Sounds of musical instruments (e.g., the suona) from art troupe processions can be heard as you move.

- "Taiwan Marching towards Democracy": A historical film with sound which auto-plays to explain the political changes in Taiwan since the Republic of China government took control at the end of World War II in 1945.

b. Passive sounds

- Buddha Police Poster: Explanation buttons are designed to correspond with the touchable objects.

- Women's Clothing from the Paiwan Tribe: There are two buttons next to this touchable object that play the songs of Falangao Amei Tribe during the Japanese colonial era. One is "Song of a Romantic Encounter" (KAT TA KAT TA), and the


Figure 4: Exploring the auto-played and passive sounds in the permanent exhibition. Photo: Chia-Yi Lin

other is “Song of Harvesting Rattan” (HAT YA WKA PAH). The songs reveal the changes in the lives of the Falangao Amei Tribe after the Japanese took control.

- Hand-cranked Siren: A touchable object that allows visually impaired individuals to turn on the siren and hear its sound.

After identifying these sounds, we started to modify the script and the content of the audio description guide with the aim of providing a sensory experience to visually impaired individuals through touch and audio, with the guides as their best companion.

## Upgrading the audio description guide

We specifically designed the script of the audio description guide to enable tour guides to use the script and attend to visually impaired individuals with flexibility. In addition, we organised training courses on “Service Skills in Attending to Visually Impaired People,” and “Audio Description Tours,” to ensure that every tour guide understands the skills required to provide services to visually impaired individuals in order to improve services for visually impaired visitors at the NMTH.

### 1. Design and application of audio description guided tours

Front-line volunteers and attendants in the exhibition halls provide guided tours in the NMTH. Tour guides are responsible for directing visually impaired individuals to touch the objects and must pay attention to their safety during movement from one place to another. Furthermore, we wanted to build the trust of visually impaired individuals toward tour guides in their first meeting. Therefore, we added some instructions in the guide script as a prompt reminder for tour guides, for example, introducing the era and background of each exhibit and the sounds that can be heard along the route.

The script of the tour was modified to allow visually impaired individuals to understand the sounds in the exhibition sites and experience the “passive sounds” while listening to the guide and touching the objects.

Figure 5: Training courses helped promote the awareness of front-line staff related to visually impaired individuals and the services required to attend to their needs. Photo: Chia-Yi Lin

### 2. Developing Professional Competence

Also, we organised the training courses “Service Skills in Attending to Visually Impaired People” and “Audio Description Tours” for the front-line service staff to understand the behaviour and attending skills required to provide visually impaired individuals with high-quality services.

## Conclusion

Since the NMTH opened in 2011, we have been committed to serving diverse social groups through different projects and fulfilling the museum’s social responsibilities while focusing on cultural equality. This time, we formed a project team that included the general public from different domains to design touchable object exhibit areas and to develop L&V resources, which allowed us to develop a new model of inclusive learning in the NMTH. During the process, different opinions were raised by team members from diverse backgrounds. Repeated consultations with visually impaired individuals and cross-discussions were required to formulate a fundamental plan. Design verification was executed at the end to confirm that the results of our design were as intended.

After we invited visually impaired individuals to test the design, we learned that the project team had over-addressed “touch” and “explanation” in the design and had overlooked the other senses of these individuals. We also learned about the impact of the sounds in the exhibition on the testers and revisited our design by rethinking how both visually impaired individuals and the general public can be immersed in different time periods through the permanent exhibition. This design not only allowed visually impaired individuals to understand the historical significance of each touchable object exhibit area but also enabled them to experience the historical sounds, animation soundtracks, and ambient sounds in the permanent exhibition.

Consequently, we were inspired to modify our audio description tour guide service; we designed the guide scripts skillfully, organised training courses to build “empathy” among the front-line staff toward visually impaired individuals and to bring a “sense of security” and “feelings of happiness” to these visitors when they are accompanied by tour guides.

## Acknowledgements

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## Biography

**Chia-Yi Lin** is a research assistant at the National Museum of Taiwan History. Her research interests are mainly on museum accessibility and education, volunteer and internship management, and projects related to inclusion, accessibility, and financial support. In recent years, she has contributed to the construction, implementation, and evaluation of personalised educational programs for museum visitors to promote well-being and social inclusion in museum education contexts.

# Delivery of Museum Experiences for Social Inclusion: Case of a Long-Running Outreach Programme of Hamamatsu Museum of Musical Instruments

*Sawako Ishii*
**Hamamatsu Museum of Musical Instruments, Japan**

## Introduction

The new museum definition enacted by ICOM proclaims that museums are "open to the public, accessible and inclusive" (International Council of Museums, n.d.) However, access is often limited to those who have the means to visit, or already have an interest in the collections. School children, for example, may benefit less from museums than adults as they typically require parents or teachers to accompany them or spark their interest in the collections. Especially in Hamamatsu city, children may find it difficult to visit the city centre where the Hamamatsu Museum of Musical Instruments (hereinafter referred to as "the museum") is located. There are few public transportation options available. Given the city's vast size, covering 1,558 square kilometres, it takes about two hours by car to reach the city centre from the northernmost elementary school, for example. In addition, many children are likely to hesitate to attend museums due to their impression that exhibits are "hard to understand" or due to the numerous rules and expectations that must be followed while visiting, such as not touching exhibits, or maintaining quiet behaviour. The museum has sought ways to overcome these challenges and make its collection and activities more accessible to children. As part of this effort, the museum started to visit schools in the city, aiming to bring the exciting museum experiences directly to school children. This paper reports on the museum's long-running outreach in elementary schools and discusses its significance in eliminating barriers to engaging with the museum.

## The outreach programme "Mobile Musical Instrument Museum"

The educational outreach programme, named "Mobile Musical Instrument Museum", was initiated in 2000 and reached almost 69,135 students in 162 elementary schools by the end of 2023. In recent years, two or three staff members annually visit approximately six schools in the city, delivering lectures in every classroom about six musical instruments from various countries and regions around the world.

The museum has recognised this programme as part of Integrated Studies, a curriculum specified in the government guidelines for the course of study for elementary schools. According to the guidelines, the areas covered during this time of study are not limited to specific subjects. The topics addressed may include contemporary issues such as international understanding, information, the environment, welfare, health, and so on. (Ministry of Education, Culture, Sports, Science and Technology

2017, 180). Among these topics, the "Mobile Musical Instrument Museum" has been considered to contribute to education for international understanding (Hamamatsu Museum of Musical Instruments 2005, 5).

In line with the concept of presenting diverse lives and cultures through musical instruments from around the world (Shima 2022, 32), each instrument is presented not only in terms of its music, but also with regard to its materials, purpose of use, embedded aesthetics and other aspects, all of which are closely linked to the ways of life of the people who use it. For example, the *morin khuur* is introduced in relation to the symbolism of a horse, as well as the traditional nomadic lifestyle in Mongolia, which holds deep cultural associations with horses. In Japanese elementary schools, second-grade students read a story in their Japanese language class that is inspired by folktales about the origin of the instrument. This programme connects its content with their knowledge gained from the story, reminding them of the intimate relationship between people and horses in traditional Mongolia. When introducing the *angklung* and the *palo de lluvia*, children are prompted to observe the materials used to craft them (Fig. 1). The *anklung* is made of bamboo, typically found in humid climates, while the *palo de lluvia* is crafted from cactus, which thrives in arid regions. This contrast informs children that musical instruments have historically been made of natural materials that were available in their place of origin. In this manner, the "Mobile Musical Instrument Museum" aspires to provide children with the same opportunity for cross-curricular learning as they would have when visiting the museum in person.

The programme incorporates creative elements designed to maintain the children's attention and engagement. Staff members demonstrate the musical instruments and actively engage the children through quizzes, questions and other interactive conversations (Fig. 2). After the lecture, children have a chance to play the instruments themselves (Fig. 3). This allows children to interact with real musical instruments, providing them with a comparable experience to what they would have in a museum – surprising, enjoyable, and memorable. This exposure often sparks further curiosity, leading them to visit the museum in person.

Figure 1: Classroom activity during the programme. Photo: Hamamatsu Museum of Musical Instruments

Figures 2 & 3: Classroom activities during the programme. Photo: Hamamatsu Museum of Musical Instruments

## Children's reactions

The outreach programme has received many favourable reactions from children. One of the second-grade students' comments reads, "I had fun playing many kinds of musical instruments. I would like to visit the museum one day" (Fig. 4). In fact, many of the children visit the museum after participating in the programme, often bringing their parents along. With the programme having been running for over twenty years, we have even encountered parents who took part in it when they were in elementary school. Another comment from a sixth-grade student states: "I learned that there are many kinds of musical instruments in the world. It is amazing that they have different characteristics depending on the climate and environmental conditions of the country they were made in. By playing them myself and listening to their sounds, I felt the atmospheres of the countries they come from. I hadn't been interested in or known about musical instruments before, but I found it really fun to play them. It made me want to listen to the sounds of different musical instruments more" (Fig. 5).

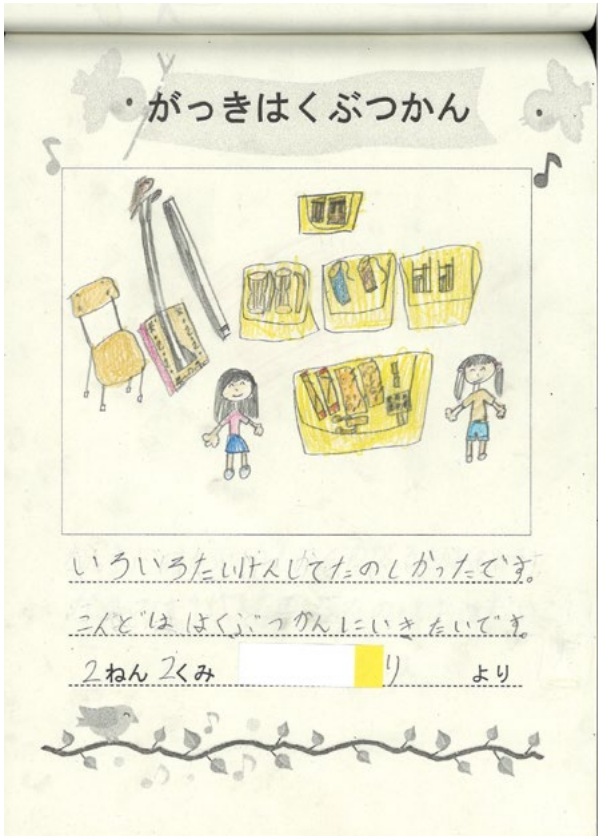


Figure 4: Reaction sheet from a second-grade student.
Photo: Hamamatsu Museum of Musical Instruments

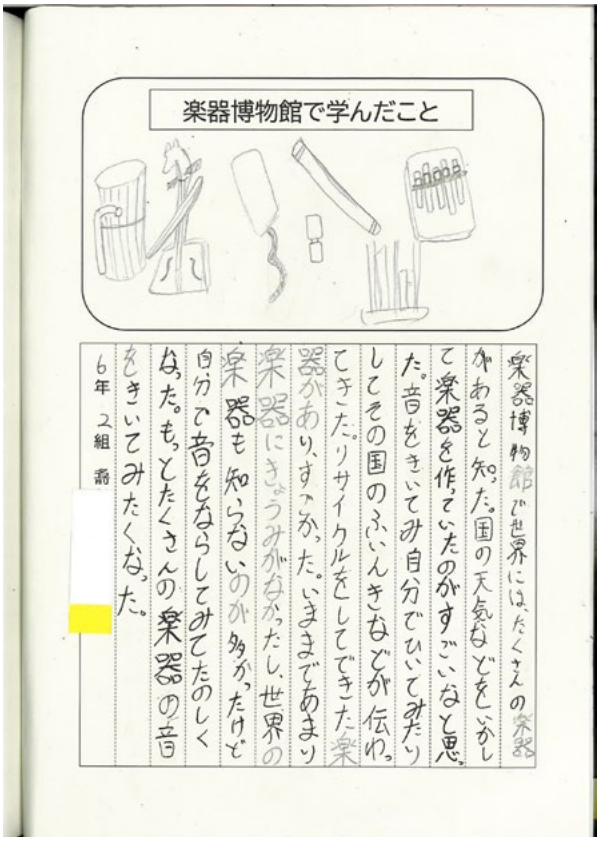


Figure 5: Reaction sheet from a sixth-grade student.
Photo: Hamamatsu Museum of Musical Instruments

This comment illustrates that even a child who had not been interested at first, built curiosity about musical instruments, their sounds, and cultural and environmental backgrounds.

The programme plays a significant role in increasing the number of musical instrument fans who will hopefully be future museum visitors.

## A gateway to the actual museum

The "Mobile Musical Instrument Museum" was originally launched to ensure fair and equal opportunities for school children in the city to experience musical instruments and the museum, rather than focusing on inclusion. However, with the concept of social inclusion becoming prominent within the museum field, the museum now considers that the long-running programme could be a practical approach to inclusive museum practices. The programme has included school children, who are likely to be socially disadvantaged individuals due to limited access to the physical museum, among those who benefit from the museum activities.

However, the programme does not fully replicate the museum experiences that visitors would have in the gallery. While the programme uses hands-on learning materials, museum visitors are exposed to an exhibited collection of musical instruments. Nevertheless, we consider the programme to be a gateway to the museum, offering a taste of the museum experiences. Children encounter unfamiliar instruments with surprise and excitement in the programme, similar to what they would experience in person at the museum. Like the museum, the programme serves as a gateway to the rich musical cultures of the world, supplementing music education in Japan, which is primarily grounded in Western music theory. In fact, we also value

experiences that children might not be able to have at the museum, such as spending a lot of time in meaningful conversations and interactions with museum staff. This fosters various perspectives toward musical instruments, viewing them not only as tools to play music but also as objects of historical and cultural significance, which can be appreciated when they see the exhibited musical instruments.

In terms of content, one thing we need to carefully consider in the future is how we narrate musical instruments. For instance, as mentioned earlier, a sixth-grade student commented that it is amazing how musical instruments have different characteristics depending on the climate and environmental conditions of the country they were made in. This implies children may think all the natural materials used in the instruments reflect the natural environment of the country or region they originate from, but this is not always the case, as some materials may be imported from other regions. To improve the programme, we should not only focus on how to engage children but also on ensuring that our communication does not lead to misinterpretation or stereotypes.

## Conclusion

The case of the "Mobile Musical Instrument Museum" offers valuable insights into how museums can foster stronger connections between diverse audiences, their collections and activities through physical outreach. Many individuals, including but not limited to children, have the potential to become museum visitors, even if they have not previously recognised a connection with music or musical instruments. The museum is aware of the necessity to reduce the obstacles they face. Challenges arise in adapting and modifying content and approaches depending on the category of intended audience the museum aims to reach, but the museum may also consider collaborating with other social institutions and organisations to address these difficulties. Through these improvements, this programme could serve as a model for other museums to broaden their reach and impact as social institutions contributing to an inclusive society.

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## Biography


**Sawako Ishii** is a curator at the Hamamatsu Museum of Musical Instruments in Japan. She has curated special exhibitions about the Japanese stringed instruments biwa (2021) and shamisen (2023), and the special exhibition "Discover! The Zoo of Musical Instruments" (2022). She obtained an MA in Arts Studies and Curatorial Practices from the Graduate School of Global Arts, Tokyo University of the Arts. She was awarded the Ikuo Hirayama Cultural Art Fund in 2020. Her main interests are cultural practices of Iranian migrants in Japan.

# Project “Beethoven is Black”:
## A Policy for Cultural Diversity and Equity

*Jurn A.W. Buisman*
**Museum Geelvinck, The Netherlands**

## Introduction

In the Netherlands, music forms an inseparable part of our identity. You can hardly enter a shop or restaurant without being welcomed by digitised music. However, possibly due to the ubiquity of music constantly around us, interest in our musical past – classical and early music – seems to be declining. Despite various attempts to attract both a younger and more culturally diverse audience, concert halls for classical music are mainly populated by the aged with a “white” background.

Historically informed performance (HIP) is a niche that finds it even more difficult to attract a new audience. Besides the Rijksmuseum, Kunstmuseum Den Haag, and Museum Speelklok in Utrecht, small – specialised – musical instrument museums, mainly run by volunteers, are typical for our country. These rarely pull crowds of visitors. In recent years, it has become increasingly difficult to attract new volunteers and existing teams are ageing. For local municipalities these museums are easy targets for budget cuts: their collections, although having national importance, usually would not have local roots. Thus, several small museums with collections of national importance have already perished. Moreover, cultural organisations are under public pressure to adopt a more inclusive stance for citizens with multicultural backgrounds. This is no easy task. Due to the strong link of its historic inhabitants with the colonial past, Museum Geelvinck, a historic house museum which stewards an extensive collection of early keyboard instruments, gained experience in engaging communities with non-Western roots.

## Beethoven is Black

In the Western world, classical music is commonly accepted as a universal value. Other, non-Western music genres are swept together under the term “world music”. Traditional non-Western music is studied within ethnomusicology, which by itself reveals a structural colonial perspective. Following the wave of anger over the death of George Floyd in 2020, the world of ethnomusicology was shaken by a fierce debate about appropriation. On the sidelines of this, the century-old rumour that Beethoven had African ancestry resurfaced on the internet: Beethoven was proudly claimed by black communities. This prompted our museum to initiate the project “Beethoven is Black”, mainly carried out digitally due to COVID-19. The project revolved around how musicians of colour within the professional classical and early music sectors view Beethoven, the figurehead of classical music. On one hand, classical music is

inextricably linked to the hegemony of Western culture and the dominance of the white elite. On the other hand, Beethoven has become a symbol of Western values such as freedom, equality, social justice, and democracy. The project also addressed whether musicians of colour had encountered obstacles in their careers due to conscious or unconscious racism. The project culminated in an internationally conducted discussion with online participants from various countries, all of whom had roots in non-Western cultures: mostly African-American, though also in Asia and South Africa. The interviewer and the moderator were representatives from the Afro-Surinamese community in the Netherlands. No white participants took part in the conversation. Almost all participants had encountered career barriers due to – often unconscious – racist assumptions linked to their skin colour. Perhaps because all participants are active as professional musicians in these sectors, classical and early music was not framed as white. However, the marginalisation of their own musical culture under the heading of world music was strongly criticised. It was observed that unconscious racism in music schools and conservatories is structural. This partly explains underrepresentation of black musicians in professional classical and early music ensembles, although musicians of colour with an Asian background had similar experiences. Since our efforts, this theme has been more prominently addressed within the sector.

## Our experience

Being a historic house museum, we became experienced in cultural dialogue and in dealing with dissonant history, such as slavery and colonialism. We have tried to apply this in how to interpret and present our collection of stringed keyboard instruments. Our efforts to mount exhibitions on "uncomfortable" themes – history that has been deliberately silenced – involving communities, which are rooted in other cultures, allowing them to tell their stories, have been very positively received by those communities and the public. We explicitly avoided portraying Western culture as "guilty"; after all, these communities have become part of Western society, and moreover, history turns out to be not black-and-white; it is far more complex. Communities should not be victimised, either; they are proud that their own culture has become part of our current society. Dissonant history cannot be buried in the past, as it continues to influence today's world. Recognising a community's history and its impact on the present is essential. To set the right tone, and to prevent a community from feeling that ownership of its own history and culture has been appropriated and exploited by the museum, it is significant to involve representatives and institutions from inside the community in the preparation and execution process. This ensures relevance and impact for the community. Making these hidden histories visible provides an eye-opener for the public, attracting media attention and visitors.

Our challenge was to effectively apply this experience to our collection of stringed keyboard instruments. We started to develop concepts where music is placed within its historical context. Music is not presented as *l'art pour l'art*, detached from the societal circumstances in which it originated. Instead, composers are presented as an integral part of their time, a historical context that has a bearing on relevant themes today. This approach can be seen in our exhibition "Chinoiserie – dream image or prelude to revolution?" (Geelvinck Music Museum Zutphen, 2019), which explores the mutual stereotyping of Western and Eastern civilisations in design and music during the 18th–19th centuries and its impact today. The exhibition established a relationship between exposure to other civilizations and the impact this had on major societal changes, such as the French Revolution. The exhibition was accompanied by a concert programme

aligning thematically: classical and contemporary compositions by Western and bi-cultural composers, who use or recycle typical Asian musical characteristics and/or instruments. The musical instruments in this exhibition made music of the past tangible – and in some cases playable – alongside examples of applied art and literary references. The response from the Chinese community in the Netherlands was positive. However, due to political changes and budget cuts, the municipality forced us to close our venue, even though the programme was well on its way. Nevertheless, the concept was successful and attracted attention, providing an eye-opener for our existing audience and creating extensive local support for our museum.

## Involving communities

Musicians, who are well-known in their communities, usually attract their own audience from these communities. This is especially rewarding when classical music programming encompasses compositions in which their traditional music is reflected. We realised such concert programming with the Surinamese, Iranian, Armenian, Russian, and, more recently, Ukrainian diaspora communities in the Netherlands. Disappointingly, it does not seem to stimulate these audiences to return for our regular classical concerts. Nevertheless, we have built a lasting reputation within these communities, making it easier to reach out again for future events related to their cultural background.

## Future outlook

Historically informed performance (HIP) has always focused on Euro-centred early and classical music. This niche is predominantly attended by an ageing white audience. So far, there is little interest from a new, younger generation. Audiences not rooted in Western culture are rarely engaged, although there are exceptions, for example some projects by Jordi Savall and by the Early Music Festival Utrecht. In the 1970s, HIP was popularised by musicians breaking with tradition, such as Frans Brüggen and Gustav Leonhardt. However, this innovative generation established a standard that later became quite rigid, strangling initiative for alternative visions. In the last few years however, emerging professional musicians are breaking free from these constraints and seeking new paths. They experiment with cross-cultural and interdisciplinary arts, blending music, dance, digital, and visual arts. They use period instruments from both Western and non-Western origins to create new works, no longer confined to a single historical period. These musicians are part of a new generation that seems not bound by existing conventions; they embrace the diversity of music genres from various world cultures in an unbiased manner.

This trend may also boost interest in historical instruments. The traditional approach of presenting music and instruments sequentially, with clear distinctions between Western and ethnomusicological regions, is outdated. Such an approach implies qualitative distinctions between the past and present, and between Western and non-Western music cultures. For younger generations, especially those from multicultural backgrounds, such distinctions are irrelevant or even unacceptable. A more equitable and relevant presentation is needed, placing music in socially relevant contexts with the musical instrument as the tangible representation of the showcased historic music. This approach highlights the potential combination with other art forms and digital media. Music as a mirror of societal changes, and musical instruments as creative expressions of these changes, have a powerful visitor impact.

## Introducing a new concept

A large music museum will not materialise in the Netherlands in the foreseeable future. Instead, recycling living musical heritage does offer potential. Therefore, we propose to organise grassroots creative hubs spread all over the country, each with an open storage displaying music and instruments from different Western and non-Western cultural backgrounds; this combined with space for social themes related to music, focusing on the (re)use of traditional musical instruments. This concept was influenced by the ICOM proposed but not adopted New Museum Definition (Kyoto, 2019). We believe it is essential to present music and musical instruments in an equal, inclusive and welcoming way from a diversity of cultural backgrounds. Thus, breaking with the tradition of the museum and concert hall as a temple for art and history, it could appeal to a new generation with greater cultural diversity. Realising this concept in collaboration with local communities from different cultural backgrounds could ensure their support. This way we keep musical heritage, including its instruments, alive. The concept fits well with the image of small museums run by enthusiastic volunteers, so typical for the Netherlands. However, it differs from the current situation as it targets an audience with different cultural backgrounds. In a sense, the concept aligns with the revolutionary ideas from the 1970s, which at the time revived interest in period instruments. Moreover, it also aligns with the intentions of the Faro Convention, which protects cultural heritage and the rights of citizens to access and participate in that heritage (https://rm.coe.int/1680083746). This way, musical instrument collections, both Western and non-Western, now gathering dust in museum storage or on the verge of being deaccessioned, could be saved from oblivion and made again accessible for a larger public. In addition, it would give a significant boost to the revival of related specialised crafts, such as instrument makers, string spinners, and others. Realising this new concept requires courage: first to accept radical policy change, and then to foster adequate collaboration between these museums (and other music related institutions) and local communities with diverse cultural backgrounds. However, if we continue as we did in the past few decades, the future looks quite bleak for the remaining small musical instrument museums in our country.

For more information on our project “Beethoven is Black”, please see www.beethovenisblack.nl and www.geelvinck.nl

## Biography

**Jurn A.W. Buisman**, PhD, is director of Museum Geelvinck (Heerde and Amsterdam, Netherlands) and, together with his spouse, feminist and anthropologist Dunya Verwey, the driving force behind the museum since the late 1980s. Member of CIMCIM, ICLCM, DemHist, REMA–EEMN, ICTMD, Arnold Bake Society, International Casa della Memoria, and others. Secretary General of ICOMOS and ICOMOS Netherlands, Vice-President (Europe) of ICOMOS–IFLA ISCCL, Member of the Supervisory Board of Interpret Europe, Council Member of Europa Nostra, and Board Member of MoWIC. An economist and management information scientist (RUG), he worked as a heritage professional for over 35 years, curated museum exhibitions, supervised restoration and cultural dialogue projects, including for the United Nations, and developed ten editions of the Geelvinck Early Piano Festival.

# Position Papers on Provenance Issues

# Keynote

# Provenance Due Diligence and Practice:
## Challenges for Musical Instrument and Music Collections

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## Why does provenance matter?

Provenance due diligence serves many purposes, which include, but are not limited to, the process of responsible acquisition, complying with ethical and legal standards, fostering a collecting institution's educational mission, and facilitating and informing authenticity and valuation analysis for institutional holdings.

Provenance, the history of ownership and possession, can provide evidence of lawful title (ownership), or the lack of it. Defective title arising from a historical theft, looting, or illegal export or import, can give rise to potential liability under civil, customs, or criminal laws and may also cause reputational harm. Therefore, provenance due diligence should be an essential focus for new acquisitions, existing holdings, loans, and exchanges. Complying with provenance due diligence standards of care often requires rigorous and multi-faceted research.[1]

Disputes over the ownership of cultural objects arise in different contexts including, for example, Nazi-era confiscations and transactions under circumstances of duress, antiquities looting, illegal exportation from source nations in violation of national heritage laws, illegal importation, indigenous claims for the return of cultural items, and suspect acquisitions associated with the colonial era. These different contexts have a collective synergy that is driving the evolving topic of provenance due diligence and standards of care, as well as potential liability for museums, collectors, auction houses, dealers, buyers, sellers, and others in the stream of commerce. Laws regarding stolen property and restitution are inconsistent among nations, complicating this subject further.

In the United States, many museums and other collecting institutions are organised as public trusts and, therefore, are expected to maintain the highest level of accountability and transparency, including appropriate provenance due diligence. When ownership disputes arise, applicable laws generally govern the conduct of the parties and legal outcomes.[2] However, recent policies, guidelines, and reports have emerged regarding "ethical returns" beyond what the law requires, particularly in

1 See e.g., Germany's Provenance Research Manual (2019), https://kulturgutverluste.de/sites/default/files/2023-06/Manual.pdf and its Annex (2020), https://kulturgutverluste.de/sites/default/files/2023-06/Manual-Annex-Download.pdf.

2 See e.g., Cassirer v. Thyssen-Bornemisza Collection Foundation, No. 19-55616, 2024 WL 89381 (9th Cir. Jan. 9, 2024); Reif v. Art Institute of Chicago, No. 23-CV-2443 (JGK), 2023 WL 8167182 (S.D.N.Y. Nov. 24, 2023); Zuckerman v. Metropolitan Museum of Art, 928 F3d 186 (2d Cir. 2019); Reif v. Nagy, 175 A.D.3d 107, 106 N.Y.S.3d 5 (2019).


Figure 1: German, Dutch, and Austrian examples of national processes that resolved questions of ownership of Nazi-era looted musical instruments.

the context of colonial-era acquisitions. For example, the Smithsonian Institution's 2022 "Shared Stewardship and Ethical Returns" policy[3] and the Association of Art Museum Directors' 2022 "Guidance on Art from Colonized Areas."[4] Additional guidelines and reports have been issued, for example, in Austria,[5] Belgium,[6] France,[7] Germany,[8] and the Netherlands.[9]

Object biographies told through provenance evidence analysis are a powerful tool for the curatorial narrative and education, providing a multi-layered lens through which the public may come to understand the object, the people connected to it, and related historical, political, cultural, economic, and other meanings.

In addition, provenance investigations can inform authenticity analysis through confirmation of the chain of custody and ownership; one of the first questions one must answer in evaluating provenance is whether the object under study is an

3 *Smithsonian Directive (SD) 600, Collections Management Policy*, "Shared Stewardship and Ethical Returns," Section 16.1, 22–3, 12 May 2022, https://ncp.si.edu/SI-ethical-returns. All Internet links in this article were last accessed on February 19, 2024.

4 Association of Art Museum Directors' "Guidance on Art from Colonized Areas," 18 November 2022, https://aamd.org/standards-and-practices.

5 Recommendations of the Advisory Committee for Guidelines for Collections in Austrian Federal Museums from Colonial Contexts," (20 June 2023), https://www.bmwkms.gv.at/dam/jcr:ff8b6ec8-464e-47aa-9cdd-1b8ddf0820e8/Recommendations%20for%20Guidelines%20for%20Collections%20in%20Austrian%20Federal%20Museums%20from%20Colonial%20Contexts.pdf.

6 "Ethical Principles for the Management and Restitution of Colonial Collections in Belgium," (June 2021), https://restitutionbelgium.be/en/report.

7 "Rapport_Patrimoine partagé_universalité, restitutions et circulation des œuvres d'art," (25 April 2023), https://www.culture.gouv.fr/fr/Espace-documentation/Rapports/Remise-du-rapport-Patrimoine-partage-universalite-restitutions-et-circulation-des-aeuvres-d-art-de-Jean-Luc-Martinez.

8 "Guidelines for German Museums Care of Collections from Colonial Contexts," (February 2021) https://www.museumsbund.de/wp-content/uploads/2021/03/mb-leitfaden-en-web.pdf.

9 "Advies Koloniale Collecties en Erkenning van Onrecht," (7 October 2020), https://www.raadvoorcultuur.nl/actueel/nieuws/2020/10/07/toon-bereidheid-tot-teruggave-koloniale-roofkunst (English summary, https://www.raadvoorcultuur.nl/documenten/adviezen/2020/10/07/summary-of-report-advisory-committee-on-the-national-policy-framework-for-colonial-collections).

authentic example of what it purports to be and also whether it is a match for an allegedly stolen object. Moreover, the provenance of an object may be relevant to valuation. If, for example, the object was previously associated with a historical figure this can increase the object's worth but if the provenance is suspect or tainted this can strip the object of economic value.

## What does provenance practice involve?

Provenance research is frequently interdisciplinary. Depending on the context and the object, examples of record categories for research may include, but are not limited to: Nazi-era victim claim files, confiscation records, post-World War II Allied records, personal papers and testimony of claimants and their descendants, sales records, dealer, maker, and restoration business and other records, auction records, exhibition catalogues, publication materials, historical photographs and literature, historical inventories, biographies of former owners, genealogical research, and customs records. Legal research may also be warranted involving local, national, international, and/or foreign national cultural patrimony laws, which may govern the lawful movement of cultural objects across national borders.

Provenance practice also involves obtaining access to relevant historical records from sellers, donors, estate executors, lenders, and others, if available (for example, purchase contracts, invoices, certificates of authenticity, appraisals, and export/import documentation).

Consulting relevant stolen cultural property databases and registries is also part of provenance practice in order to confirm that an acquisition or existing holding has not been reported as stolen. Expert examination and analysis of the musical object for physical signs of the object's history of ownership and possession may also be informative, for example, brands, stamps, inscriptions, labels, alpha/numeric codes, other markings, and modifications to the object.

## National processes and commissions

On December 3, 1998, the 44 governments participating in the Washington Conference on Holocaust-Era Assets endorsed eleven principles for dealing with Nazi-looted art and other cultural property.[10] These Principles are non-binding soft law, yet have had significant impacts on conduct and outcomes. Principles 10 and 11 refer to the establishment of "commissions" and "national processes" to implement these Principles, such as alternative dispute resolution mechanisms for resolving ownership disputes with the goal of achieving "just and fair solutions." These processes generally require rigorous provenance analysis. Only six nations have adopted commissions and/or national processes as a result of the Washington Conference Principles and these include: Austria, France, Germany, the Netherlands, the United Kingdom, and Switzerland.

Three examples of national processes employed to resolve ownership issues regarding Nazi-era looted musical instruments are depicted in Figure 1, all previously owned by Holocaust victims. The dispute in Germany between the Hofmann Hagemann Foundation and the descendants of Felix Hildesheimer regarding a 1706 Giuseppe Guarneri 'filius Andreae' violin was the subject of a recommendation for

10 1998 Washington Conference Principles on Nazi-Confiscated Art, https://www.state.gov/washington-conference-principles-on-nazi-confiscated-art/.

settlement by the Beratende Kommission NS-Raubgut (previously the Limbach Commission) in 2016,[11] and the subject of a Commission press release in 2021.[12] The Dutch Restitution Committee issued a recommendation to the Dutch Minister for Education, Culture and Science that resulted in the return of an ivory hunting horn to the heirs of Carel van Lier in 2009.[13] In Austria, Georg Popper's ethnological musical instruments were restituted by the Austrian Museum of Folk Life and Folk Art in Vienna after the recommendations of the Austrian Commission for Provenance Research in 2009 and 2016.[14] Each of these examples required examining the provenance of the instrument in order to make a determination of ownership.

## What are the challenges to effective provenance research?

There are many challenges to provenance research, some of which are discussed below.

*Collecting priorities, preserving evidence, and providing access:* Advancing collecting priorities for the acquisition of important historical dealer, maker, and restorer business records is needed in order to preserve these records in publicly accessible institutions for research purposes.

*Gaps in evidence:* Reconstructing provenance often involves gaps in evidence as a result of wars, the passage of time, and other causes. Washington Conference Principle No. 6 provides, in part, that "consideration should be given to unavoidable gaps or ambiguities in the provenance in light of the passage of time and the circumstances of the Holocaust era."[15]

*Digitisation and databases:* There have been many advancements in digitisation and online access to historical documentation that inform provenance research. Yet many public and private archival materials needed for provenance research are not digitised or readily accessible and are often scattered globally, requiring costly and time-consuming on-site research in many languages. In the 21st century databases have proliferated, established by nations, law enforcement (e.g., Interpol, the F.B.I., the Italian Carabinieri), private parties (e.g., the Art Loss Register and Tarisio Fine Instruments and Bow), and others. Such databases should be transparent and freely accessible for research. There is presently no centralised database dedicated to unresolved musical instrument and music losses, which would be beneficial to both theft victims and good faith acquirers.

*Commercial trade practices and privacy concerns:* Auction houses and dealers often withhold provenance information as a trade practice. The rationale provided for this practice is privacy and confidentiality for buyers, sellers, and others. For example, certificates of authenticity are often redacted to remove historical owner identities. This tension between transparency and confidentiality may undermine provenance research. In addition, privacy and data protection regulations should be balanced with the need for access to provenance evidence. Under the EU's General

11 Recommendation of the German advisory commission on Nazi-looted property regarding in the Felix Hildesheimer heirs versus the Franz Hofmann and Sophie Hagemann Foundation, 7 December 2016, https://www.beratende-kommission.de/de/empfehlungen#s-hildesheimer-hagemann-stiftung.

12 German advisory commission press release, 18 January 2021, https://www.beratende-kommission.de/en/press - s-18-january-2021.

13 Art Dealership Van Lier, 6 April, 2009, https://www.restitutiecommissie.nl/en/recommendation/art-dealership-van-lier/.

14 The Austrian Commission for Provenance Research, Georg Popper https://provenienzforschung.gv.at/en/empfehlungen-des-beirats/beschluesse/.

15 Supra, note 9.

Data Protection Regulations (GDPR), Recital 158 (Regulation (EU) 2016/679),[16] personal data may be processed for the purpose of providing information "related to the political behavior under former totalitarian state regimes, genocide, crimes against humanity, in particular the Holocaust, or war crimes." The withholding or anonymisation of personal data can undermine provenance research when legitimate historical research warrants access.

## Conclusion

Provenance due diligence practices and standards have taken a leap forward in the 21st century. Despite the many challenges to effective provenance research, compliance with evolving standards of care will facilitate responsible musical instrument and music collection management and advance important educational goals.

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ICOM's Code of Ethics for Museums (2017) https://icom.museum/wp-content/uploads/2018/07/ICOM-code-En-web.pdf. A revision to ICOM's Code of Ethics is expected in 2025.

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Washington Conference Principles on Nazi-Confiscated Art (1998) https://www.state.gov/washington-conference-principles-on-nazi-confiscated-art/.


## Biography


**Carla Shapreau** is the curator of the Ansley K. Salz Collection of Stringed Instruments in the Department of Music, University of California, Berkeley, drawing on her background as a violin maker and restorer. She holds a *Juris Doctor* degree and is a Continuing Lecturer in the School of Law, where she teaches art and cultural property law. She is a Senior Fellow in the Institute of European Studies, where she conducts cultural property research. Shapreau leads the *Lost Music Project*, which seeks to reconstruct the history of Nazi-era musical losses and twenty-first century ramifications. She has written and lectured broadly on the topic of cultural property, including co-authorship of *Violin Fraud – Deception, Forgery, Theft and Lawsuits in England and America*, Oxford University Press. Shapreau is a recipient of a National Endowment for the Humanities fellowship and an American Musicological Society Claude V. Palisca Award in connection with her research.


16 Regulation (EU) 2016/679 of the European Parliament and of the Council, 27 April 2016 https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32016R0679.

# Provenance Research Focus:
## Confiscation of Cultural Assets in the Soviet Occupation Zone and the GDR Between 1945 and 1989

*Heike Fricke*
**Musikinstrumentenmuseum der Universität Leipzig, Germany**

### Role and function of museums in the GDR

The Musikinstrumentenmuseum der Universität Leipzig (MIMUL) has one of the most important and extensive collections of historic musical instruments in the world. Its development can be divided into chronological periods that differ fundamentally in their acquisition concepts as well as in their legal framework and social objectives. The most important caesura is marked 1945 after the end of the Second World War: The Soviet Occupation Zone (SBZ) was established, and the GDR was founded in 1949.

The history of the cultural, economic, and social policies of the GDR is still insufficiently researched, the consequences of which led to social marginalisation and disdain for the private collection of art and cultural artefacts. This in turn enabled the export of arbitrarily and unlawfully confiscated objects to non-socialist countries and to West Germany to secure urgently needed hard currency.

Studies that go beyond the existing publications are needed here to examine the practices of criminalising art dealers and collectors in the GDR and the selling of confiscated objects through the Bereich Kommerzielle Koordinierung (commercial coordination, short: KoKo).


Figure 1: Europe – Dissolution of the Eastern Bloc in 1989.

There is a fundamental need for research to reconstruct the organisational and operational structure for the seizure and evaluation of art and cultural assets in the GDR, from central, local, and district levels:

- What party or state leader had what decision-making authority?
- Which state organ carried out the confiscation of assets, which state company was commissioned to sell items and redeem the proceeds?
- What role was played by experts from the museum, library, and university sector?

## Report of the German Bundestag Committee of Inquiry (1993)

As early as 1993, the German Bundestag set up a committee of inquiry to investigate the practices of the KoKo and its close linkage to the Ministry for State Security (Ministerium für Staatssicherheit, Stasi), in the procurement and exploitation of art objects and antiquities in the GDR.

The report illuminates the scope of tasks, working methods, purchasing, export, pricing, transport, and storage procurement of objects via tax procedures, confiscation, customs, and estate administration, and also the hopelessness of legal defence for the victims of confiscation.

In particular, according to a Ministerial Decree of the GDR, the KoKo had to be provided with “antiques and museum stocks from the state fund (...) for export” in the amount of 55 million so-called clearing marks – only for the year 1973.

In the same year, the Minister of Culture of the GDR was commissioned to ensure that all saleable art treasures in the GDR museums were analysed and classified so that they could be sold as soon as possible.

Deutscher Bundestag
12. Wahlperiode

Drucksache 12/4500
(zu Drucksachen 12/654, 12/662)
15. 03. 1993

**Dritte Beschlußempfehlung und dritter Teilbericht**
**(im Anschluß an den ersten Teilbericht — Drucksache 12/3462 — und den zweiten Teilbericht — Drucksache 12/3920 —)**

**des 1. Untersuchungsausschusses nach Artikel 44 des Grundgesetzes *)**

**Beschlußempfehlung**

Der Bundestag wolle beschließen:

Der dritte Teilbericht des 1. Untersuchungsausschusses nach Artikel 44 des Grundgesetzes wird zur Kenntnis genommen.

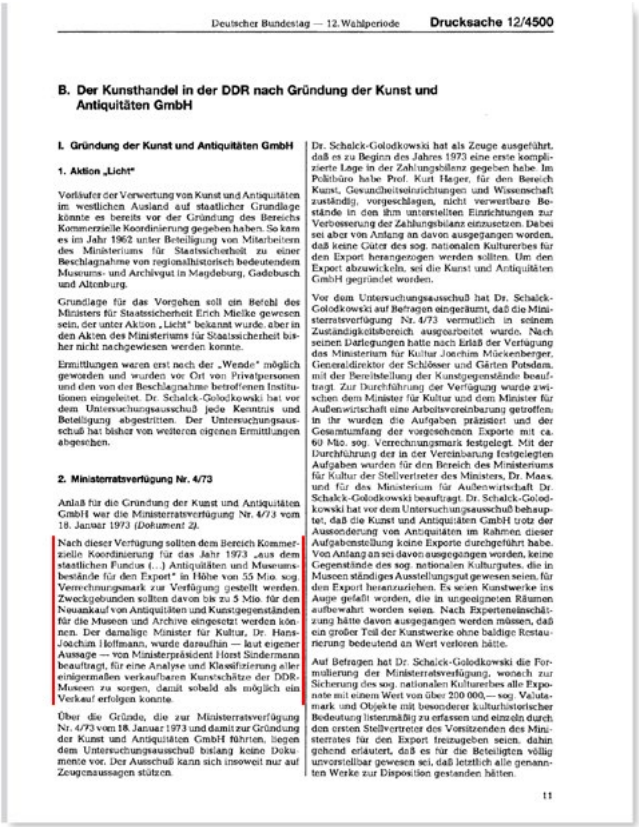
Bonn, den 3. März 1993

**Der 1. Untersuchungsausschuß**

**Friedrich Vogel (Ennepetal)** Vorsitzender
**Joachim Hörster**
**Dr. Andreas von Bülow**
Berichterstatter
**Arno Schmidt (Dresden)**
**Andrea Lederer**
**Ingrid Köppe**
Berichterstatterinnen

*) Eingesetzt durch den Beschluß des Deutschen Bundestages vom 6. Juni 1991 — Drucksachen 12/654, 12/662

Figure 2: Title page of the investigation report of the Committee of Inquiry appointed by the Bundestag. See also: https://musixplora.de/mxp/3070017





**B. Der Kunsthandel in der DDR nach Gründung der Kunst und Antiquitäten GmbH**

**I. Gründung der Kunst und Antiquitäten GmbH**

**1. Aktion „Licht"**

Vorläufer der Verwertung von Kunst und Antiquitäten im westlichen Ausland auf staatlicher Grundlage könnte es bereits vor der Gründung des Bereichs Kommerzielle Koordinierung gegeben haben. So kam es im Jahr 1962 unter Beteiligung von Mitarbeitern des Ministeriums für Staatssicherheit zu einer Beschlagnahme von regionalhistorisch bedeutendem Museums- und Archivgut in Magdeburg, Gadebusch und Altenburg.

Grundlage für das Vorgehen soll ein Befehl des Ministers für Staatssicherheit Erich Mielke gewesen sein, der unter Aktion „Licht" bekannt wurde, aber in den Akten des Ministeriums für Staatssicherheit bisher nicht nachgewiesen werden konnte.

Ermittlungen waren erst nach der „Wende" möglich geworden und wurden vor Ort von Privatpersonen und den von der Beschlagnahme betroffenen Institutionen eingeleitet. Dr. Schalck-Golodkowski hat vor dem Untersuchungsausschuß jede Kenntnis und Beteiligung abgestritten. Der Untersuchungsausschuß hat bisher von weiteren eigenen Ermittlungen abgesehen.

**2. Ministerratsverfügung Nr. 4/73**

Anlaß für die Gründung der Kunst und Antiquitäten GmbH war die Ministerratsverfügung Nr. 4/73 vom 18. Januar 1973 *(Dokument 2)*.

Nach dieser Verfügung sollten dem Bereich Kommerzielle Koordinierung für das Jahr 1973 „aus dem staatlichen Fundus (...) Antiquitäten und Museumsbestände für den Export" in Höhe von 55 Mio. sog. Verrechnungsmark zur Verfügung gestellt werden. Zweckgebunden sollten davon bis zu 5 Mio. für den Neuankauf von Antiquitäten und Kunstgegenständen für die Museen und Archive eingesetzt werden können. Der damalige Minister für Kultur, Dr. Hans-Joachim Hoffmann, wurde daraufhin — laut eigener Aussage — von Ministerpräsident Horst Sindermann beauftragt, für eine Analyse und Klassifizierung aller einigermaßen verkaufbaren Kunstschätze der DDR-Museen zu sorgen, damit sobald als möglich ein Verkauf erfolgen konnte.

Über die Gründe, die zur Ministerratsverfügung Nr. 4/73 vom 18. Januar 1973 und damit zur Gründung der Kunst und Antiquitäten GmbH führten, liegen dem Untersuchungsausschuß bislang keine Dokumente vor. Der Ausschuß kann sich insoweit nur auf Zeugenaussagen stützen.

Dr. Schalck-Golodkowski hat als Zeuge ausgeführt, daß es zu Beginn des Jahres 1973 eine erste komplizierte Lage in der Zahlungsbilanz gegeben habe. Im Politbüro habe Prof. Kurt Hager, für den Bereich Kunst, Gesundheitseinrichtungen und Wissenschaft zuständig, vorgeschlagen, nicht verwertbare Bestände in den ihm unterstellten Einrichtungen zur Verbesserung der Zahlungsbilanz einzusetzen. Dabei sei aber von Anfang an davon ausgegangen worden, daß keine Güter des sog. nationalen Kulturerbes für den Export herangezogen werden sollten. Um den Export abzuwickeln, sei die Kunst und Antiquitäten GmbH gegründet worden.

Vor dem Untersuchungsausschuß hat Dr. Schalck-Golodkowski auf Befragen eingeräumt, daß die Ministerratsverfügung Nr. 4/73 vermutlich in seinem Zuständigkeitsbereich ausgearbeitet wurde. Nach seinen Darlegungen hatte nach Erlaß der Verfügung das Ministerium für Kultur Joachim Mückenberger, Generaldirektor der Schlösser und Gärten Potsdam, mit der Bereitstellung der Kunstgegenstände beauftragt. Zur Durchführung der Verfügung wurde zwischen dem Minister für Kultur und dem Minister für Außenwirtschaft eine Arbeitsvereinbarung getroffen, in ihr wurden die Aufgaben präzisiert und der Gesamtumfang der vorgesehenen Exporte mit ca. 60 Mio. sog. Verrechnungsmark festgelegt. Mit der Durchführung der in der Vereinbarung festgelegten Aufgaben wurden für den Bereich des Ministeriums für Kultur der Stellvertreter des Ministers, Dr. Maas, und für das Ministerium für Außenwirtschaft Dr. Schalck-Golodkowski beauftragt. Dr. Schalck-Golodkowski hat vor dem Untersuchungsausschuß behauptet, daß die Kunst und Antiquitäten GmbH trotz der Aussonderung von Antiquitäten im Rahmen dieser Aufgabenstellung keine Exporte durchgeführt habe. Von Anfang an sei davon ausgegangen worden, keine Gegenstände des sog. nationalen Kulturgutes, die in Museen ständigen Ausstellungszweck gewesen seien, für den Export heranzuziehen. Es seien Kunstwerke ins Auge gefaßt worden, die in ungeeigneten Räumen aufbewahrt worden seien. Nach Experteneinschätzung hätte davon ausgegangen werden müssen, daß ein großer Teil der Kunstwerke ohne baldige Restaurierung bedeutend an Wert verloren hätte.

Auf Befragen hat Dr. Schalck-Golodkowski die Formulierung der Ministerratsverfügung, wonach zur Sicherung des sog. nationalen Kulturerbes alle Exponate mit einem Wert von über 200 000,— sog. Valutamark und Objekte mit besonderer kulturhistorischer Bedeutung listenmäßig zu erfassen und einzeln durch den ersten Stellvertreter des Vorsitzenden des Ministerrates für den Export freizugeben seien, dahingehend erläutert, daß es für die Beteiligten völlig unvorstellbar gewesen sei, daß letztlich alle genannten Werke zur Disposition gestanden hätten.



Figure 3: Findings of the Committee of Inquiry of the 12th German Bundestag on the history, working methods, organisational structure, and handling of the Commercial Coordination Division of the Ministry of Foreign Trade (MAH) of the GDR with its head Dr Alexander Schalck-Golodkowski. Here: the art trade in the GDR after the foundation of the Kunst und Antiquitäten GmbH.

## Classification by saleability

The state-organised confiscation of artworks in the GDR had two groups in mind. On the one hand, there were refugees who wanted to leave the GDR and were unable or not allowed to take their artworks with them. It is also important to distinguish between two types of refugees: those who applied to leave the country and thus reached the West, and those who crossed the border into West Germany, often at the risk of their lives.

On the other hand, there were collectors and dealers who lived in the GDR and whose art possessions were seized by the state through extortion and fictitious criminal tax proceedings. All these procedures are documented in the report of the Committee of Inquiry.

The "Aktion Licht", for example, was a secret operation carried out by the Ministry for State Security (Ministerium für Staatssicherheit, MfS) of the GDR in 1962, in which state security agents confiscated or seized valuables and documents from financial institutions, archives and museum depots throughout the country. The GDR sold a considerable proportion of these on the Western market in order to obtain foreign currency. "Aktion Licht" marked the beginning of the systematic search by the Ministry for State Security for valuables with the aim of realising them.

Museums were therefore not places where works of art were safely stored, but rather had the aim of sorting out those objects that were suitable for sale for foreign currency. Traces of this classification can still be found today in the documents concerning the objects of the MIMUL collection. Our research must therefore not only deal with where the objects in our museum came from, but also where objects that can no longer be found today may have ended up.

## The MIMUL's GDR collection

The MIMUL's GDR collection comprises the inventory numbers 3000–4935, i.e. almost two thousand objects. These are mainly musical instruments, but also automata, sound information carriers, tools, and accessories, some in multi-part collections. In addition, there are further objects from the educational material collection and the so-called Bautzen collection. In all segments of the collection, a high proportion of the items are subject to suspicious provenance – particularly regarding the circumstances of acquisition and loss (see also: https://musixplora.de/mxp/2002577).

The inventory register compiled in the GDR, for example, is not a reliable source. As all museum professionals know, an inventory book has a documentary function in the sense of proving the ownership of objects in the museum and frequently forms the basis for the public asset management.

The inventory register at the MIMUL reflects the acquisition events from the end of the Second World War until 1980, but it was only written in the period between 1978 and 1980. It is currently unclear whether it was reformulated from loose sheets or from a similar, earlier inventory book whose whereabouts are unknown today.

In dozens, if not hundreds of lines of the MIMUL inventory register, there is a suspicion in need of examination of cover-up, manipulation, and subsequent alteration, which, according to current knowledge, possibly happened before 1989 (see also: https://musixplora.de/mxp/5001255).

## Master seminar on provenance research

As provenance research is the duty of every museum, we also train students in this subject area. In the Master's seminar "Sammlungen und Sammler der Organologie" (in the Musicology programme at Leipzig University in the summer semester 2023 with Prof. Dr. Josef Focht and Dr. Heike Fricke), special attention was paid to the GDR collection at the MIMUL, in which the state tasks of acquiring, managing and utilising so-called national property encountered academic research. Today, this provenance research is one of the compulsory tasks of the MIMUL in the State of Saxony – in order to come to terms with its own history of the GDR era, which is highly burdened with suspicions of the unlawful acquisition and loss of collection objects.

For example, the students documented a group of eleven instruments from the educational material collection of the MIMUL. These objects were transferred to the MIMUL from police evidence, which raised numerous questions. First of all, only nine of the eleven objects could be found in the collection. The two instruments that were not found are the string psaltery [D.LE.u] MIMUL LM 183 and the Zanza (Tanzania) [D.LE.u] MIMUL LM 190. In addition, many accessories (like bows and sticks) for the instruments cannot be found or clearly identified (see https://musixplora.de/mxp/6001506)

Why were these musical instruments held as police evidence? When were they transferred to the museum? Answers to important questions like this can be found in the acquisition files. However, the students were denied access to the acquisition documents by the museum administration, so that the precarious facts of the case could not be clarified. Provenance research into these eleven instruments is currently at a standstill.

Today's research ethics expect and need museum administration as a service. That is why we have called for ethical behaviour.

An overview of the historic collections at the Musikinstrumentenmuseum der Universität Leipzig (MIMUL) can be found here: https://musixplora.de/mxp/2003510

| | | | | | | |
|---|---|---|---|---|---|---|
| Xylophon | LM 180 | Umsetzung aus polizeilichen Asservaten (Übergabe-protokoll) | | KLANGLABOR | "Global Beat", aus südamerikanisches Sucupira Holz, 3 Ersatzklangplatten, 1 schwarze Stofftasche mit 4 verschiedenen Schlegel |  |
| Psalter, Streich- | LM 181 | Umsetzung aus polizeilichen Asservaten | | KLANGLABOR | 1 Bogen, Anleitungsheft |  |
| Psalter, Streich- | LM 182 | Umsetzung aus polizeilichen Asservaten | | KLANGLABOR | 2 Bögen, 1 Stimmschlüssel |  |
| Psalter, Streich- | LM 183 | Umsetzung aus polizeilichen Asservaten | | KLANGLABOR | 2 Bögen, 1 Stimmschlüssel, Anleitungsheft |  |
| Rassel, Netz- (Kamerun) | LM 184 | Umsetzung aus polizeilichen Asservaten | | KLANGLABOR | |  |

Figure 4: Excerpt list of objects transferred from the Volkspolizei to the Musikinstrumentenmuseum.

## Acknowledgements

My special thanks go to the staff of the Forschungsstelle Digitale Organologie am Musikinstrumentenmuseum der Universität Leipzig, without whose support this research would not have progressed. I would also like to thank the founder of the research centre, Prof. Dr Josef Focht, for his tireless efforts. And last but not least, my thanks go to the fearless students in our master's seminar.

## Biography

**Heike Fricke** is a musicologist working and teaching at the Forschungsstelle DIGITAL ORGANOLOGY am Musikinstrumentenmuseum der Universität Leipzig, where she conducts the research projects TASTEN and DISKOS. Her recent publications focus on provenance research. She studied musicology and journalism at the Freie Universität Berlin and holds a PhD in musicology. She worked with the musical instrument museums in Berlin and Edinburgh and was awarded an Andrew W. Mellon fellowship in art history by the Metropolitan Museum of Art in New York. Heike has published articles in *Die Musik in Geschichte und Gegenwart*, *The New Grove Dictionary of Musical Instruments*, the *Lexikon der Holzblasinstrumente* and several books, most recently with Josef Focht *Lost & Found: Die Klarinetten des Fürsten* and with Josef Focht and Camilo Salazar Lozada *Georg Kinskys nie gedruckte Geschichte der Blasinstrumente*. She is the editor and owner of the German special magazine *'rohrblatt – die Zeitschrift für Oboe, Klarinette, Saxophon und Fagott'*.

# Mosaic Pieces in Biographies:
## Provenance Research on Musical Instruments Acquired by the Rijksmuseum Between 1933 and 1945

*Lea Grüter, Hester Kuiper*
**Rijksmuseum Amsterdam, the Netherlands**

## Introduction

Since 2012, Rijksmuseum Amsterdam's provenance researchers have focused on the "Museum Acquisitions After 1933" project, tracing the origin of objects in the collection between the Nazi takeover in 1933 and the end of the Second World War in 1945 to determine if they were forcibly taken or lost due to Nazi persecution. By 2023, this project had become a core responsibility integrated into the museum's framework.

Given the significant number of objects involved, the Rijksmuseum prioritises research into its own acquisitions from 1933 to 1945. This temporal proximity to Nazi atrocities allows the museum to utilise its cultural memory. The institutional archives contain detailed inventories showing collecting patterns and its interactions as a social player with the outside world, preserved in correspondence. Viewed through the lens of museum memory, these object transactions can provide insights into the biographies and social contexts of former owners, potentially revealing details of involuntary displacement during periods of persecution.

This is particularly relevant for objects like musical instruments, which often lack clear identifying features in both the objects themselves and archival records, posing challenges in historical tracing. Museum archives are critical direct sources for reconstructing the contextual histories of these objects.

In the following text, we will build upon this idea to provide an overview and delve into a specific case study illustrating how musical instruments came into the possession of the Rijksmuseum between 1933 and 1945. This exploration aims to highlight broader research possibilities and contributions to the field of provenance research.

## Acquisitions in wartime

Between 1933 and 1945, the museum acquired a total of only eight musical instruments: two 18th-century oboes, two large metal bells (transferred from the management of Rijksarchief Noord-Holland in Haarlem in 1934, on loan from Koninklijk Oudheidkundig Genootschap in 1942), a golden rattle (donated by Dr. Ir. Aart Hendrik Willem Hacke, Amsterdam 1893 – Putten 1961), a military drum and a small green glass trumpet (gifted in 1937 by Joachim Adolph Zeyger Graaf van Rechteren Limpurg, Den Haag 1893 – Den Haag 1943) along with a small porcelain

table bell (donated in 1944 by Gerrit Adriaan Arnold August Kalff, Amsterdam 1902 – Amsterdam 1969).

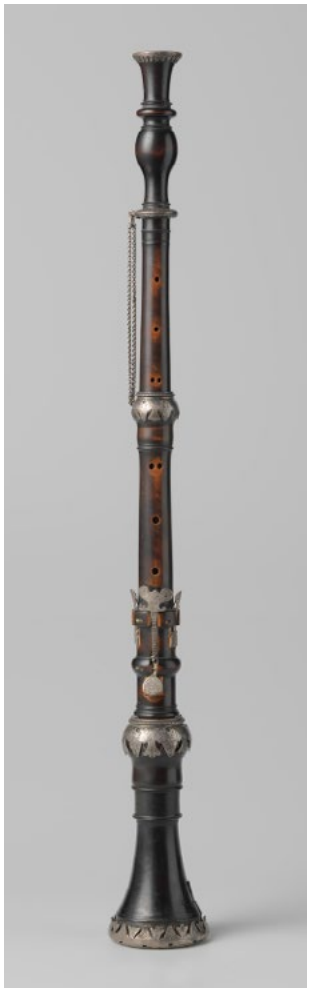
In total, the museum holds 1032 objects or records of musical instruments. Musical instruments were not a core collection area of the Rijksmuseum in the first half of the 20th century. Furthermore, during the economic crisis of the 1930s and the war, the museum received significantly reduced acquisition budgets. Consequently, a substantial part of the acquisitions in this timeframe are legacies and donations. Actively purchased objects during the occupation primarily include prints and drawings bought on the Dutch market.

Of the eight musical instruments, only the two oboes and the porcelain table bell were actively acquired by the museum. However, the latter was part of a larger acquisition of a collection (87 objects) of 18th- and 19th-century Dutch porcelain. The other objects were transfers, loans, and donations.

Although there were few acquisitions of musical instruments at the Rijksmuseum between 1933 and 1945, it is striking that various other acquisitions within this period indicate an overlap in the journeys of art objects and musical instruments. Former owners often had backgrounds in both artistic and musical circles, actively engaging in both realms.

In 1944, for example, the Rijksmuseum acquired a sculpture by the 19th-century artist Anton Grassi, depicting the composer Joseph Haydn. The piece was bought from the museum's own director, C.M.A.A. Lindemann. Correspondence from the archive indicates that it possibly originated from the collection of the Berlin Jewish singer and musicologist Max Friedländer (Brieg/Brzeg 1852 – Berlin 1934) and his wife, actress and concert pianist Alice Friedländer (Vienna 1864 – Los Angeles 1949).

Another example is the acquisition of drawings by the German Jewish artist Raimund Maximilian Carl Gessele (Würzburg 1901 – Amsterdam 1964), who was known in Germany under the pseudonym Harry Hilm as a lyricist, composer, and singer. Gessele and his wife, actress Irma Hilm-Hecht (Herford 1910 – Amsterdam 2004), fled to Amsterdam and were prohibited from working as artists during the war. Despite these restrictions, Hilm supported his family through the sale of prints and drawings.



Figures 1 & 2: Oboe [NL.A.rm] BK-15604. Photos: Rijksmuseum Amsterdam

## Two oboes from an artist couple

The third case illustrating an overlap between music and art, relevant for musical instrument provenance research, involves the Rijksmuseum's acquisition of the aforementioned oboes by Amsterdam-based Hendrik Richters (1683–1727) in 1944 (see Figures 1 & 2). Within the Rijksmuseum's collection, there are several oboes crafted by Hendrik Richters, who, along with his younger brother Fredrik, were among the finest instrument makers of the Baroque era, from the era of Bach and Handel (Di Stefano 2021). They were known for employing advanced techniques in woodturning and ivory crafting. The Richters brothers' works can be found in collections worldwide, from the Kunsthistorisches Museum in Vienna to the Metropolitan Museum of Art in New York. Two oboes by Hendrik, made around 1720, came into the possession of the Rijksmuseum during the Second World War.

This case study vividly demonstrates that delving into research on art dealers and networks in museum archives and biographies can offer valuable insights into investigating the provenance of musical instruments.

Although the art dealer and painter Douwe Komter (Leeuwarden 1871 – Laren 1957) was the one who sold these two oboes to the museum in the summer of 1944, we suspect that they originated from the collection of his wife, Aafke Komter-Kuipers

Figure 3: The couple Aafke Komter-Kuipers and Douwe Komter c. 1913. Photo: Jurjen Vis: Een Friezin vol muziek. Aafke Komter-Kuipers (1876–1943), Fryske Academy 2011, 58

Figure 2: Oboe [NL.A.rm] BK-15605. Photo: Rijksmuseum Amsterdam

(Rotterdam 1876 – Laren 1943) (see Figure 3). She had passed away the summer before, in 1943, likely due to a heart condition she had suffered from for years. Despite her fragile health, she performed as a pianist until an advanced age, composed music, and contributed to musicology publications.

Born in 1876, Aafke Kuipers studied at the Brussels Conservatory as a young woman and made her debut in 1902 as a promising concert pianist with Richard Strauss' *Burleske* in D minor for piano and orchestra. A few years later, she had the opportunity to perform this virtuoso piece once again, conducted by the composer himself, but had to decline the invitation due to her pregnancy. She and her husband Douwe Komter would have two daughters and a son. To support the family, Douwe opened an art dealership at Rokin 44 in Amsterdam, around 1908, where Aafke also worked. They mainly sold Japanese, Persian, Egyptian, Greek, and Roman art of high quality. Museums from the Netherlands and abroad purchased objects from Komter.

In 1926, the successful business was sold. The couple settled in the rural artists' village of Laren. Douwe focused on painting still lifes, while Aafke returned to her great love: music. Her musicological research aligned with the growing interest in old Dutch music and art song until 1750. She also researched music by Frisian composers and lyricists. Despite having Frisian roots, Aafke only learned the language through lessons in order to publish an overview of Frisian music up to 1750, titled *Muzyk yn Fryslân* in 1935 (see Figure 4).

As a speaker and pianist, she often took part in programmes highlighting Dutch and Frisian music history. Her adaptations of psalms by Constantijn Huygens were performed in 1938 in The Hague at the wedding of Crown Princess Juliana.

## The Komter household

Between 1910 and 1920, Douwe Komter had sold various objects to the Rijksmuseum as an art dealer, including a Chinese pottery incense burner, a Chinese dish and a Delft pottery vase. Considering the specialisation of Kunsthandel Douwe Komter

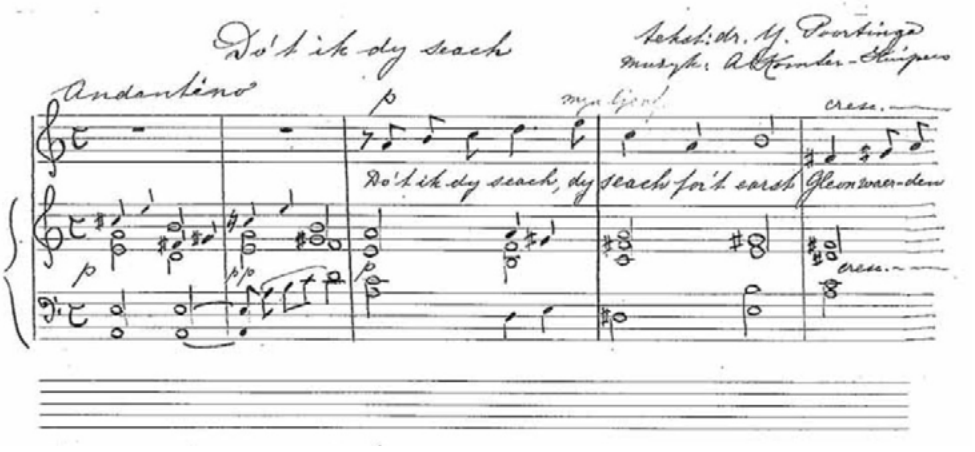



Figure 4: Detail Score of a Frisian piece 'Do't ik dy seach' by Aafke Komter-Kuipers [date unknown]. Photo: Frysk Muzyk Argyf, Leeuwarden, Netherlands

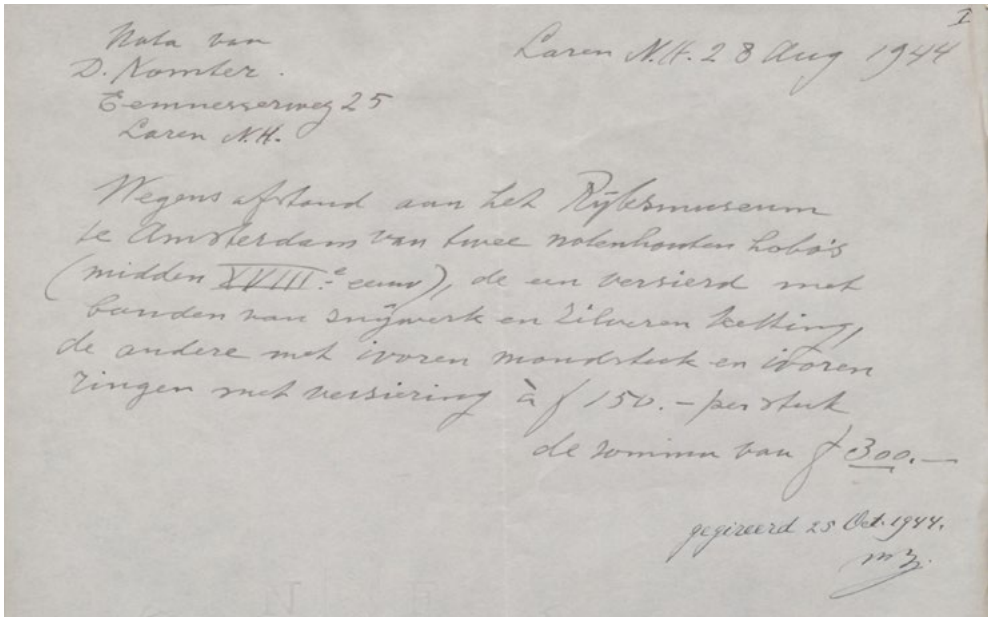



Figure 5: Receipt of the sale of two oboes, 28th of August 1944 from Rijksmuseum to Douwe Komter. Photo: Noord-Hollands Archief Haarlem, archive 476: Rijksmuseum en rechtsvoorgangers, file 1688

in antique and non-Western art, it is unlikely that the oboes originated from his business. He sold the two oboes in 1944, long after the sale of the business (see Figure 5). His wife Aafke Komter-Kuipers had passed away a year before, strengthening the suspicion that the oboes came from her possession.

A few years before Aafke's death, a journalist described the couple's household in a newspaper article, revealing the presence of many musical instruments in their home, in addition to the flute and lute played by their son: "a grand piano, a spinet, an organ, a guitar and a charming square piano" (Leeuwarder Courant 1940). It is unknown whether Aafke, besides the piano, played the oboe or if she owned the instruments due to her historical and musicological interest. Also, we do not know how long the Komter-Kuipers had owned the oboes and how they acquired them.

The two 18th-century oboes, [NL.A.rm] BK-15604 and BK-15605, fall within the musical period Aafke specialised in. The older of the two is made of turned ebony and ivory, while the other is made of stained boxwood with silver fittings. One of the two bears Hendrik Richters's mark, while the other is attributed to the Richters brothers (Van Acht et al. 1997). They are beautiful objects in multiple respects: visually appealing, making them suitable for subjects for a painting. However, as far as it is known, they are not depicted in any of Douwe's tranquil still lifes.

## Conclusion

Provenance research on musical instruments poses challenges due to their limited recognisability, requiring insights from restorers and instrument experts. Understanding their inherent human connection and socio-cultural contexts within broader society is crucial. Museums, as memory institutions, play a vital role in documenting interactions and cultural integration related to musical instruments, opening avenues for exploration into their intricate owner's histories and networks.

Given the fact that artists, musicians, collectors, and dealers like Aafke Komter-Kuipers and Douwe Komter often moved in the same cultural milieu and spanned interests and networks in both music and art, further cross-disciplinary investigations are vital.

Recognising these frequently overlooked spaces of intersections reveals an untapped potential in existing dominant looted art research known as looted art networks and museum archives. This broader perspective on people instead of object categories could help contextualise the crimes of persecution and the expropriation of musical instruments better and put back together mosaic pieces from multi-coloured biographies.

## Acknowledgements

We thank the Fryske Akademy and Frysk Muzyk Argyf in Leeuwarden, Netherlands, for granting us the rights to use the images of the couple and the music sheet *Do't ik dy seach*.

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## Biographies

**Lea Grüter** studied art history, French, critical museology, and cultural heritage in Göttingen, Paris, and Amsterdam. As an expert in the confiscation and restitution of cultural objects during the Holocaust, she explores the memorial challenges of this period. Lea's research focuses on the ethical, political, and societal aspects of provenance research to explore and challenge socio-political and cultural narratives. Since 2017, she has been associated with the Rijksmuseum as a provenance researcher for the period around the Second World War.

**Hester Kuiper** studied art history at Utrecht University, Netherlands. She has worked as a research assistant and curator at various Dutch institutions, including the Mauritshuis (The Hague) and Zuylen Castle (near Utrecht). Since 2012, she has been associated with the Rijksmuseum as a provenance researcher for the period around the Second World War, and coordinator of the provenance project.

# Accessing the Inaccessible:
## Putting "Unlocated" Instruments Online

*Pascale Vandervellen*
**Musical Instruments Museum (MIM), Belgium**

### MIM lost or stolen instruments

Established in 1877, the "Musée instrumental du Conservatoire royal de musique de Bruxelles", presently known as the MIM, was initially housed within the attics of the Conservatoire. Over the years, it was allocated several annexes to accommodate its growing collections, eventually occupying 11 mansions primarily located in the Sablons district and an additional depot near the Nord station during the 1960s. The frequent relocations and dispersion of the collections across various inadequately secured buildings inevitably compromised their security. Compounding these challenges, the prevailing museum policies of the era, which endorsed the use of the instruments by lending them to musicians or instrument makers for replication, coupled with a lack of stringent inventory and register management, led to the loss of numerous pieces.

Today, the MIM's collections, with the exception of keyboard instruments, are consolidated within the historic Old England department store buildings, situated at the intersection of Place Royale and Rue Montagne de la Cour. Recent endeavours by the museum's curatorial team have significantly enhanced the precision of inventory records and facilitated comprehensive stocktaking exercises. These efforts have substantiated the loss of many instruments. Among them, about 150 have been clearly identified, either by descriptions from Victor Mahillon's catalogue, inventory records and iconographic documents, particularly photographs from campaigns conducted by the Royal Institute for Cultural Heritage in the 1950s. A detailed list of these instruments is available on the MIM's website (https://www.mim.be/en/lost-or-stolen-instruments).

Figure 1: High treble viol by Pierre Saint Paul, Paris 1742 [B.B.mim], inv.no. 1395 © KMKG-MRAH

### Restitutions

Despite the fact that the majority of missing instruments from the MIM remain unlocated, some have resurfaced, particularly through public auctions. Additionally, there have been occurrences where individuals, upon recognising the provenance of their instruments, have approached the MIM. Thus, in the period extending from September 2022 until the 2023 CIMCIM annual meeting, two instruments previously missing from the MIM collection were spontaneously presented to the museum by their current "owners".

Figure 2: Wilfried Praet returning the organ pipe to the MIM curator of keyboard instruments, Pascale Vandervellen, in the presence of Bruno Verbergt, Interim General Director of the Royal Museums of Art and History. © KMKG-MRAH

First, a high treble viol crafted by Pierre Saint-Paul in Paris in 1742 (B.B.mim, inv. no. 1395), an item reported stolen in 1980. This instrument was acquired by Annalisa Pappano from a violin maker in Paris in September 2022 and subsequently returned to the museum in the following month (see figure 1).

Then an organ pipe (B.B.mim, inv. no. 0463) originating from the Abbey of Moissac, dating back to the late 17th century. This piece, once part of the Auguste Tolbecque collection acquired by the MIM in 1879, had been absent from the museum for several years. Wilfried Praet, an organ builder, came into possession of the pipe following a concert from an enthusiastic attendee. Amidst the COVID-19 pandemic, Praet undertook the restoration of the pipe. During the cleaning process, he identified an inventory number on the pipe's upper lip that corresponded with an entry in Victor Mahillon's catalogue, prompting him to contact the MIM and facilitate the item's return on June 21, 2023 (see figure 2).

## Complexity of provenance research

The endeavour to ascertain the provenance of musical instruments by purchasers is marked by significant complexity and the necessity for extensive research. Currently, the only comprehensive database for stolen artworks at a global scale is maintained by Interpol. However, its coverage of musical instruments is notably limited, cataloging at this point merely 270 stolen objects worldwide. This inadequacy is compounded by the brevity and occasional inaccuracies of the information provided, rendering it insufficient for thorough provenance verification.

So, it is up to the purchaser to persevere and consult the various musical instruments museums databases. But this time-consuming approach does not even guarantee success, as stolen objects are often not reported in databases. This reflects the prevailing reluctance within the museum community to acknowledge the theft of items. This reluctance is rooted in the recognition that admitting to such losses equates to acknowledging vulnerabilities in the security measures safeguarding the collections. Many museums prefer to remain silent, which obviously does not help in recovering stolen instruments.

## Proposal

In conjunction with the CIMCIM 2024 annual meeting, which focused on enhancing the accessibility of collections, the MIM proposes an innovative strategy to make currently inaccessible items accessible. This strategy includes the digitisation and online publication of information about instruments whose whereabouts are currently unknown. Moreover, it advocates for both museums dedicated to musical instruments and private collectors to courageously publicise information about stolen instruments.

To alleviate the necessity for prospective buyers to individually navigate the websites of various museums, a unified approach among all museums housing musical instruments is recommended. This collaborative strategy aims to streamline the process of provenance verification, thereby making it more efficient for all stakeholders involved. The ultimate objective of this initiative is to significantly diminish, if not completely eradicate, the market for stolen instruments and the practices associated with their concealment. By fostering a culture of transparency and cooperation, this proposal seeks to address the challenges of tracking and recovering stolen musical instruments, thus contributing to the preservation and accessibility of musical heritage.

## Acknowledgements

Anne-Emmanuelle Ceulemans, Géry Dumoulin, Fañch Thoraval, Wim Verhulst, Saskia Willaert.

## Biography

**Pascale Vandervellen** obtained a PhD in art history and archeology from Paris IV/ La Sorbonne and Université libre de Bruxelles in 2007. She has worked at the Musical Instruments Museum (MIM, Brussels) since 1995 and is currently in charge of the keyboard instruments. Since 2019, she is also a scientific collaborator of the Laboratoire de Musicologie of the Université libre de Bruxelles (LAM) and a member of the ICOM–CIMCIM executive board. She has conducted extensive research and published several books and articles related to keyboard instruments. Her latest book, *The Golden Age of Flemish Harpsichord Making: a Study of the MIM's Ruckers Instruments*, won the Nicholas Bessaraboff Prize of the American Musical Instrument Society and the Arthur Merghelynck Prize of the Royal Academy of Belgium.

# Sound Accessibility

# Music Museums in the Age of 3D Reproduction: Access, Potential, Challenges

*Gabriele Rossi Rognoni (1), Gabriele Ricchiardi (2), Federico Xiccato (3)*

**1. Royal College of Music Museum, UK; 2. University of Turin, Italy; 3. Freelance Engineer, Italy**

## Introduction

Performance-based research, through a collaboration among historians, makers, scientists, and musicians, is one of the primary areas of activity of the Royal College of Music Museum and the RCM Wolfson Centre in Music and Material Culture. However, the risks implied in activating some of the instruments represent major challenges to any performance-based project.

In early summer 2023, the RCM Museum obtained a grant from the Wolfson Foundation and DCMS (Department for Culture, Media and Sport) to explore the use of 3D printing to create accurate reproductions of several woodwind instruments from the collection and analyse current modelling and printing techniques and materials for their use by advanced students and to support performance and research. The study has been developed in partnership with the University of Turin, Department of Chemistry.

Over the past few years, the use of 3D printing has become pervasive in multiple areas such as education, modelling and prototyping, medicine, construction, and creativity. The creation of small and portable printers and the diffusion of easy-to-use online services have brought this technique into people's houses and made them accessible and affordable.

An overview published in 2023 shows the steadily increasing role that 3D modelling and printing is taking in museums for activities that include, for example, exhibition and displays (from the production of supports for exhibition to tactile models), conservation treatment of cultural heritage and transportation of collections (to produce customised packaging) (RIT – Image Permanence Institute. 2023)

The world of musical instruments has been equally impacted through the production of cheap educational prints of educational instruments and toys, to the production of affordable lines of good-quality instruments (particularly woodwinds and brass) and the development of innovative designs for string instruments (particularly electric ones) and even pianos.

The multitude of independent projects – many of them discussed and available online – is typical of a technique in its early stages. Accordingly, several projects have started exploring the potential of this technique in relation to musical heritage, adopting different techniques and purposes, from documentation, to conservation, from education to commercial enterprises.

## Methodology

The purpose of the project is to create copies of a small, but diverse selection of instruments focusing on three stages:

- The instrument as it is now.
- The instrument as it likely was at the time of its construction.
- A scaling of the instrument to a standard pitch to facilitate its musical use in current practice.

After an initial exploratory phase, the decision was taken to exclusively focus on woodwind instruments and particularly instruments made of ivory, as the mechanical behaviour of this material leads to a particularly strong risk of physical damage as a consequence of extended performance. Two instruments made of boxwood were also selected to contrast the findings of the first group and expand the typological variety of the copies.

As 3D printing requires a full and detailed digital geometric model to start with, the decision was made to create these through CT scanning obtained by a Nikon XT H 225 ST machine located in the research facilities of the Natural History Museum – a few metres from the Royal College of Music. Due to the technical limitations of the machine, instruments had to be scanned in 'sections' of ca. 10–15 cm which were then automatically or manually 'stitched' to create virtual models of the individual pieces of the instruments. The tomographic scan is a valuable piece of information about the conservation status of the instrument, and it allows very accurate evaluation not only of the conservation status, but also of the possible alterations and of the fabrication method of the instrument. However, it is not a suitable input for 3D printing. The latter requires a digital representation of the geometric boundaries of the object, usually represented as a triangular mesh. The extraction of metrologically accurate surface meshes from CT data is not trivial: it requires a calibration of the extraction method with reference measurements, and it is subject to several technical artefacts caused by technicalities of the acquisition method and the intrinsic physical properties of the materials being scanned.

Once a model has been extracted, it can be printed as it is or digitally restored by means of standard three-dimensional computer modelling tools. In this project, digital restoration of damages such as shrinking, bending and cracks was experimented. However, one of the goals of the project is to explore with the musicians the characteristics of historical instruments avoiding the modifications and adaptations that are often introduced in hand-made copies. Therefore, any modification of characteristics that looked original has been avoided.

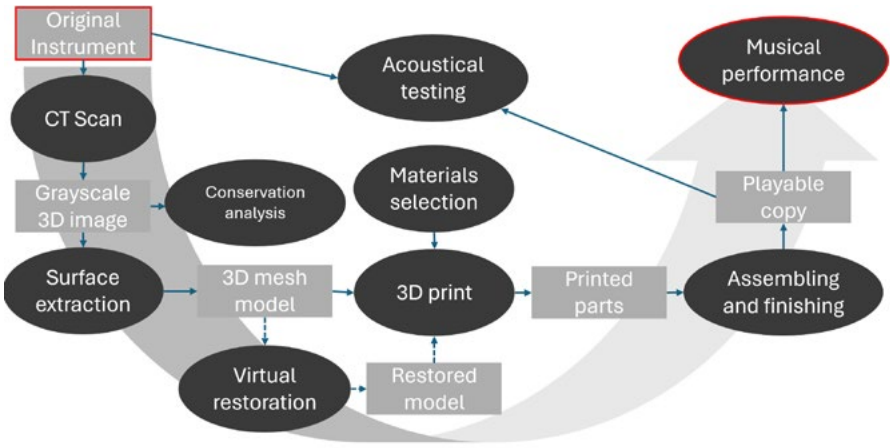


Figure 1: The proposed workflow for the digital reproduction of instruments.

The models were then sent to several professional services specialised in 3D printing located in the UK, Italy, and Belgium (ARRK, 3dPrintUK, WEERG, Shapeways). In all cases, the instruments were printed in exactly the same number of parts as the originals (e.g. block, head, middle joint and foot for the recorders) and the parts were then assembled manually with traditional techniques, using cotton thread and wax for the tenons. Out of the selected group of instruments, one alto recorder by Jacob Denner was used to compare the performance of different materials and printing techniques as well as the quality/cost ratio offered by different services. Mechanical and acoustical exchangeability of the original and 3D printed parts was often used as a quality test of the parts, and it will provide a valuable tool for the physical acoustical study of the printed copies in the future.

A subsequent phase of the project – not yet started – consists in the comparative acoustical analysis of the original and copies, focusing specifically on materials, finishes (including elements such as roughness of the surfaces, and mass) and perceptive analysis from the perspective of musicians and audiences.

A further set of instruments – produced for practical purposes – will be obtained by scaling the dimensions to equalise the pitch to 415 Hz. The purpose of this is to facilitate the use of otherwise accurate reproductions of historical instruments in the context of today's early music performance. Comparative analysis will also be undertaken on these instruments to quantify the impact of this operation on timbre.

Finally, together with the dissemination of results, a feasibility study will explore the most effective way to share the datasets created through the project and an eventual business model for the commercialisation of the copies.

## Results

At the time of writing this text, the scanning phase of the project is concluded and so is the post-production / virtual restoration of the scans of most of the instruments. The printing – including experimentation of material and finishes – is ongoing, as well as the first tests with musicians, while the formal acoustical and perceptive evaluation is planned, but not yet started.

At the beginning of the project, the following instruments were identified from the RCM collection [GB.L.cm] based on their quality and musical interest and good state of preservation sufficient at least to compare the sound of the original with the copies. Instruments were also chosen in order to represent different types of woodwinds, in order to explore the different challenges presented by each type. Three recorders were chosen to explore the differences that emerge from working on instruments by different makers and made of different materials (ivory and boxwood). Based on these criteria, the following list was identified:

| Instrument | Maker | Place and date |
|---|---|---|
| Cornet (RCM0062) | Anon. | ?, c.1650 |
| Clarinet (RCM0101) | G.H. Scherer | Butzbach, c.1720 |
| Recorder (RCM0063) | J. Denner | Nürnberg, c.1720 |
| Double recorder (RCM0098) | I. Öcl | Berchtesgaden, c.1725 |
| Recorder (RCM0067) | P. Villars | Paris, c.1750 |
| Recorder (RCM0096) | J.W. Oberlender | Nürnberg, c.1750 |
| Flute (RCM0102) | I. Scherer | Paris, c. 1750 |
| Oboe (RCM0075) | J. Grundman | Dresden, c.1791 |

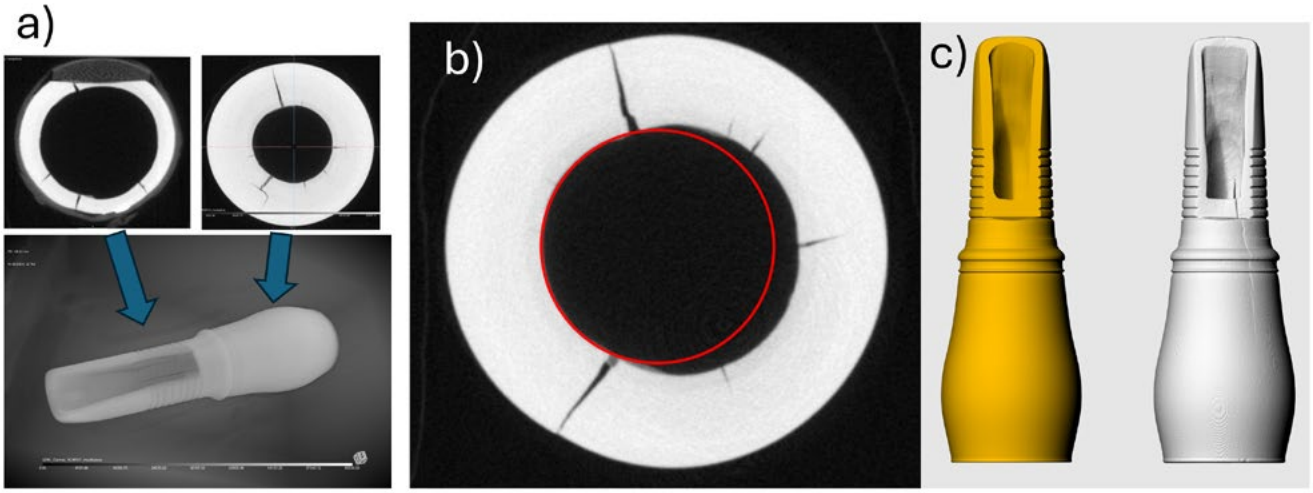


Figure 2: State of conservation and virtual restoration of the Scherer clarinet. Insets: (a) cracks in the barrel, (b) deformation of the mouthpiece because of the former, (c) restored (yellow) vs. unrestored (grey) models of the barrel/mouthpiece.

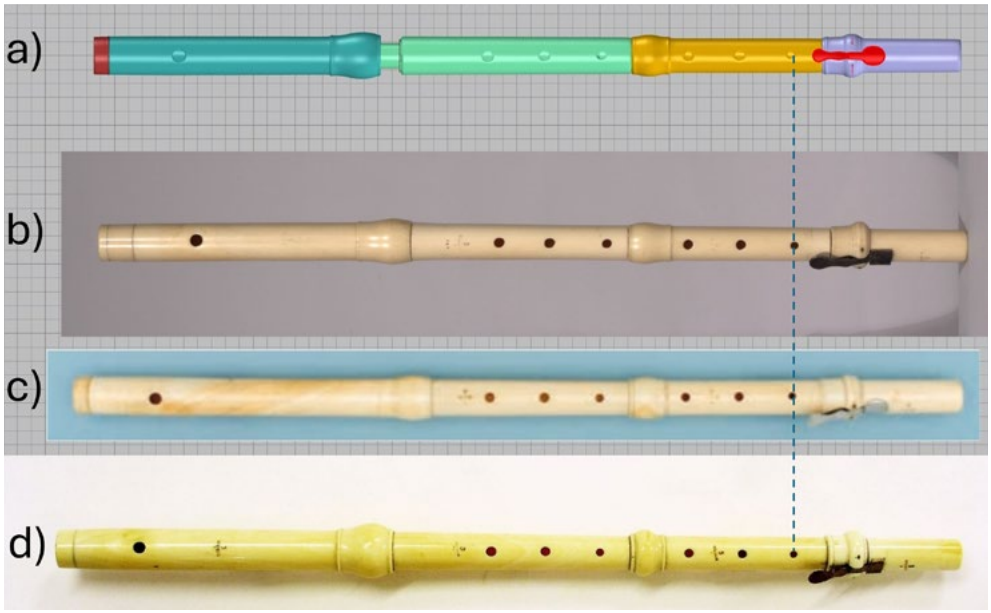


Figure 3: Graphical comparison of the unrestored digital model of the RCM0102 Scherer flute (a) with other flutes from the same maker: b) Dayton Miller Collection [US.W.c], DCM0330, c) Spohr private collection [D.F.spohr]; d) University of Edinburgh collection [GB.E.u], n.5404. Images b), c) and d) are approximately scaled taking into account the pitch of the instruments.

The scanning of each instrument required approximately 6–10 hours, often having to take multiple scans of smaller portions of each piece, which were then 'stitched' together, in order to reach a satisfactory definition.

The guidelines developed by the Germanisches Nationalmuseum and EZRT (Development Center for X-ray Technology) of the Fraunhofer Institute for Integrated Circuits (IIS) as part of the Musices project (dir. Frank P. Bär) were also taken into consideration, although the protocol specifically focuses on CT scanning for documentation and investigation, rather than 3D printing (Fuchs et al. 2019).

The level of post-production required depended on the state of conservation of the original. In some cases, such as the recorder by Villars, the instrument was in almost pristine conditions and required no virtual restoration. However, some digital refinement was still necessary, such as the virtual removal of the cotton thread around the tenons. In other cases, such as the Scherer clarinet, hidden damages such as severe cracking and shrinkage of the internal surface of the bore of the barrel and the upper joint only became apparent through the analysis of the scans. In these cases, the desired geometry of the pieces was extrapolated by an interpretation of the physical movements that led to the current state and therefore an attempt to reconstruct the dimensions of the original bore.

In the case of the flute by I. Scherer, the analysis of the scans, coupled with comparisons with other instruments from the same maker and acoustical considerations

Figure 4: Prints of the Denner RCM0063 recorder in various materials. From left to right: the original instrument; MJF Nylon-12, sanded; grey MSLA resin; SLS glass-filled Nylon-12; MSLA ceramic-resin composite. Photo: G. Rossi Rognoni

on the tuning raised some doubts about whether one of the joints belongs to the rest of the instrument. While the instrument is visually coherent and musically efficient (although with some imperfections in intonation), the CT highlighted issues with one of the joints that might indicate that it was either shortened or replaced.

While further analysis is ongoing to ascertain which of the two options is the most likely, an ideal joint, fully compatible with the other pieces, is being designed and will empirically contribute to the assessment.

Until now, printouts of the clarinet by G.H. Scherer and of the recorder by Denner have been commissioned using SLS (Selective Laser Sintering) Nylon-12 and MJF (Multi Jet Fusion) Nylon-12, glass filled nylon and BASF Ultracur 3D RG3280 ceramic-resin composite.

Further materials are currently being tested, limited to those that are safe for prolonged skin contact. While all materials have given generally satisfactory results, tests with SLS Nylon PA2200 showed a very rough surface. This was considerably better with Glass Filled Nylon. The best results, at this initial stage, have been obtained with BASF Ultracur 3D RG3280, whose density is the closest to ivory and whose qualities of sound, smoothness and visual similarity to the ivory originals exceed by far those of other materials. This ceramic resin, however, has a generally higher cost.

## Discussion

The main focus of this project is on music performance. The goal therefore is to provide performers with instruments that are as close as possible to the sound, feel and response of the originals – including their idiosyncrasies and imperfections, without the risks associated with playing historical woodwinds.

Also, instruments of these kinds would normally have been produced in several sizes by their makers enabling ensemble- and accompanied performance. Neither performance is easily achievable today with surviving instruments and in consideration of modern standard pitch of 415 Hz for early music performance.

So far, copies have succeeded in raising the curiosity and enthusiasm of professional musicians who are willing to engage with the copies in performance and in the future studies on perception.

Few commercial enterprises have already started commercialising prints of historical instruments with increasing success, but this is so far the largest attempt led by a public institution to test this technique and promote its usage for general education. The upcoming performances and tests will be able to confirm whether scanning and printing techniques are ready to support advanced and professional early music performers. If this is the case – as first attempts seem to confirm – 3D printing would have the potential to revive the relationship between players (and particularly woodwind players) and historical collections that had to be drastically curbed in the 1970s and 80s after realising the damages that regular performance might cause to historical instruments.

Finally, although the impact of these (partially) automated techniques on human makers should be carefully monitored and assessed, it seems unlikely at this stage that 3D printed copies should pose a threat to craft-made reproductions, as the latter benefit from the careful experience developed by individual makers through decades of experience resulting in tailored instruments that should generally respond better to the specific needs of professionals. Nevertheless, 3D printing might offer affordable and extremely accurate reproductions with the potential to transform the impact of the instruments held in collections on the world of historically informed performance.

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## Biographies


**Gabriele Rossi Rognoni** is Curator of the Royal College of Music Museum in London and Chair of Music and Material Culture at the same institution where he also coordinates the activity of the Wolfson Centre in Music and Material Culture. He was President of ICOM-CIMCIM, Curator of the Medici Collection at the Galleria dell'Accademia in Florence, Fellow of the Metropolitan Museum of Art in New York, and Wissenschaftlicher Mitarbeiter at the Institut für Musikforschung Preußischer Kulturbesitz in Berlin. His research interests focus on the intersection between humanities and hard sciences and on the social study of music through non-textual sources such as musical instruments and iconography.

**Gabriele Ricchiardi** is Associate professor of Physical Chemistry at the Department of Chemistry, University of Turin and Director of the NIS inter-department Centre for materials research at the same University. His research activity is devoted to materials science studies in a variety of fields ranging from industrial materials (catalysts, adsorbents, glasses) to cultural heritage (ancient pigments, materials for musical instruments). He founded the "3D Early Winds" (3DEW) collective with engineer Federico Xiccato and flautist Manuel Staropoli, pioneering 3D-printing of ancient wind instruments since 2016.

**Federico Xiccato** is a freelance engineer and organologist based in Castelfranco Veneto, Italy. He specialises in computer modelling of complex mechanical parts, ranging from modern roller coasters to early musical instruments.

# Unique Findings of Traditional Musical Instruments in the 21st Century:
## Dižā Kokle in the Museum and a Replica for the Community

*Rozīte Katrīna Ponne*
**The Ethnographic Open-air Museum of Latvia, Latvia**

## Introduction

In 2019, the members of the Riga Latvian Society accidentally discovered a collection of traditional musical instruments. The musical instrument collection was made in the first half and during the mid-20th century and consisted of 19 pieces. These instruments, created between 1925 and 1947, were made by master, soldier, and musician Eduards Krauksts (1896–1969) and have been lying in the attic of a mansion for almost 70 years. They were given to the society by his son Viesturs Krauksts. Among the collection, the most exciting piece was a *dižkokle*. Kokle craftsman Eduards Krauksts named his instrument "dižkokle", "dižkaukle" and "bāgs" which is the largest kokle in the Baltic states and possibly in the world. The instrument, made in 1947, has survived until the present day.

## The finding of the grand kokle

The journey of the discovery of *dižkokle* started with a pivotal photograph depicting an elderly gentleman skillfully manoeuvring the *dižkokle* (later: the grand kokle) (Figure 1), a modernised type of the traditional Latvian string instrument. Ernests Spīčs, a folklore researcher and choreographer found a tune noted by Eduards Krauksts while researching Latvian traditional tunes. Ignited by this newfound topic, Ernests Spīčs continued to search for more information about E. Krauksts.

Following months of correspondence, Ernests Spīčs finally convened with V. Krauksts. As Viesturs recounted memories of his father, he shared a trove of photographs, among which the kokle player E. Krauksts was to be seen playing a never-seen instrument. It was at this moment that Ernests Spīčs posed a straightforward query: what is this instrument that E. Krauksts was playing? In response, V. Krauksts disclosed that the instrument, made by his father, was still within their very attic, thus inaugurating a transformative odyssey of discovery.

In the history of traditional musical instruments in Latvia, such a grand instrument – the kokle – was found for the first time. Kokle itself is a Baltic psaltery. The grand kokle is a modernised traditional instrument that has 15 strings, however the oldest kokles known had 5 to 6 strings. However, as time went on, the number of strings gradually increased. Kokles with 5 or 6 strings in the shape of a small boat or coffin were popular in northeastern Aukšzemė in Lithuania and Augšzeme or Selonia in Latvia, Latgallia, in southeastern Estonia – the Seta region, in northwestern Russia, and was also used by a small Finnic people group – the Vepsians (Apanavičus 1994, 32).

Figure 1: The original grand kokle. June 2023. Photo: Gatis Diezins / The Ethnographic Open-air Museum of Latvia

Baltic-German Enlightenment philosophers and researchers have also noticed the kokle. German philosopher and thinker Johann Gottfried Herder (1744–1803) wrote: "Every nation expresses some thought of God. In the hands of God all peoples are like a huge kokle on which God plays, every nation is one kokle string, but all together they make an amazing concert" (Bula 2000, 49).

Crafted in 1947, in the aftermath of the tumultuous war years, the imposing instrument unveiled its remarkable dimensions – remarkable length of 2.09 metres. Its construction from pine wood, a hallmark material for such traditional instruments, added to its allure. However, what truly distinguished this instrument was its unconventional choice of strings – crafted from repurposed German telegraph lines, emblematic of the lack of resources born of post-war scarcity.

The visionary behind this remarkable creation was Eduards Krauksts, a stalwart collector of folklore, whose life was forever altered by the harrowing experiences of conflict. Surviving a devastating assault that claimed the lives of his entire regiment, Krauksts emerged with a profound realisation of the need for purpose. Driven by this epiphany, he embarked on a mission to preserve and celebrate Latvian cultural heritage through the meticulous crafting of traditional musical instruments. Luckily, a notebook of the master was found together with the collection and provided essential information about the instruments. For each instrument, Krauksts had noted the size, the sound, and described and explained the meaning of the marks on the side of the grand kokle.

Regrettably, under the shadow of the Soviet occupation, the master was compelled to curtail his artistic endeavours a decision underscored by the deliberate destruction of his workshop. His resolve stemmed from a history of encounters with authorities while touring western Latvia with his kokle ensemble. As Krauksts' son recalls: "What might happen if he would have stayed in the same city? Most probably he might have been brought to the KGB building." (Ponne 2023).

Nevertheless, Krauksts kept the instruments at home, and his family did not know about them even after his death.

## The creation of the replica

The discovery of the instrument sparked an immediate imperative – we need to hear how it sounds because nothing like this was ever heard before. Being the first to stumble upon this treasure, members of the Riga Latvian Society embarked on a project of high importance: crafting a faithful replica of the instrument. Rihards Valters (born in 1992) was selected as the artisan for his skills and expertise.

Valters stands as a beacon among the emerging cadre of talented artisans in Latvia. In addition to his mastery of crafting kokles, he also adeptly fashions drums and monochords.

Valters' background in design education sets him apart from other Latvian artisans. For instance, already in 2016, he made a new design – a kokle with a silhouette reminiscent of a boat – a testament to his penchant for infusing tradition with contemporary flair.

Figure 2: Traditional kokle players after a workshop. In the middle – the grand kokle replica. December 2023. Photo: Gatis Diezins / The Ethnographic Open-air Museum of Latvia

With respect to the design and craftsmanship of Krauksts, Valters undertook the replication process, despite the uncertainty surrounding the eventual sound of the instrument. His dedication to preserving tradition was exemplified by his decision to engage other esteemed kokle masters across Latvia in the collaborative making process.

A well-known kokles master and expert Jānis Rozenbergs lent his expertise to the endeavour by tuning the strings, a crucial step in ensuring the instrument's sonic integrity. To fund this ambitious project, the Riga Latvian Society secured vital financial backing from the Latvian Culture Fund, underscoring the societal significance and cultural resonance of this undertaking.

## The decorations of the grand kokle

Adorning both facets of the grand kokle are remarkable carvings, crafted by the skilled artisan. Such intricacies are seldom encountered within the Baltic psaltery tradition, marking this instrument as a unique embodiment of artistic expression. Traditionally, the symbol of the sun on the instruments has different meanings; one is that it symbolises the potential for transcendent journeys between realms – bridging the earthly and the ethereal. Symbolically, playing the instrument is akin to a meditative ritual, facilitating a conduit to altered states of consciousness and ancestral connection (Muktupāvels 2009, 26).

Throughout history, these adornments have been a ubiquitous feature across diverse masters and eras, serving as a timeless emblem of spiritual significance (Figure 2). However, a new era dawns as the contemporary generation of musical instrument makers in Latvia embarks on audacious strides towards innovation. Embracing a spirit of bold experimentation, they infuse their creations with diverse colours and ornamental motifs, ushering in a vibrant era of instrument design and cultural expression. In this sense Krauksts could be seen as one of the first to create a completely new design of the traditional ornaments.

Figure 3: The tuning of the grand kokle replica by Malvine Mantiniece. June 2023. Photo: Gatis Diezins / The Ethnographic Open-air Museum of Latvia

Master Krauksts' ingenuity extended beyond mere ornamentation; he inscribed both sides of the instrument with verses from Latvian folk songs. One facet resonates with the tale of hunting, where the imagery of deer and bears in preparation for the chase intertwines with familial bonds and the two young brothers who have six young dogs ready for the hunt.

Conversely, the opposing side reverberates with the story of the spirit of the summer solstice – a festivity that has a special place for all Nordic folks. This folksong text beckons young hearts to forsake sleep and partake in the mesmerising night of dances and singing and wait for the sunrise, a quintessential motif of the Midsummer tradition.

Remarkably, the discovery of Krauksts' musical instrument register proved instrumental in decoding the symbolic language embedded within his creations. This invaluable resource unveiled the nuanced meanings behind his meticulously crafted symbols, which are rooted in Latvian folk songs.

Krauksts' meticulous documentation of the kokle-building process stands as a testament to his unwavering dedication to his craft. Through the register, he meticulously catalogued every instrument he fashioned, an enduring legacy that persisted and is now part of the Ethnographic Open-Air Museum of Latvia collection.

## The art of grand kokle playing

The grand kokle, steeped in historical context, once found its resonance within the typical kokle ensemble setting. However, the astute observations of esteemed ethnomusicologist Prof. Valdis Muktupāvels observes a paradigm shift, suggesting that the grand kokle replica possesses the versatility to shine both as a solo and ensemble instrument.

Intriguingly, the absence of sound recordings leaves the sonic identity of the grand kokle shrouded in mystery, presenting a blank canvas upon which the future of the kokle can be painted anew. The compass of the replica spans from A1 to E3 which makes it akin to its plucked-string counterparts, such as the harp, with each string resonating individually (Figure 3).

## Conclusion

Nowadays, Krauksts' original kokle has found a new home within the Ethnographic Open-air Museum collection. The replica embarked on a journey of discovery, its

inaugural concert in May 2022 serving as a catalyst for exploration. Drawing together Latvia's finest kokle virtuosos, each artist crafted a musical offering tailored to the unique character of the instrument, heralding a new era for the grand kokle.

Indeed, the unfolding narrative of the grand kokle replica represents a continuum of exploration and innovation – a testament to the enduring spirit of musical discovery that resonates across time and tradition.

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## Biography


**Rozite Katrina Ponne** is the head of the Education and Information Department at the Ethnographic Open-air Museum of Latvia. Her main research topics include ethnicity, cross-cultural relations, Baltic psaltery instruments and their impact on Latvian ethnicity. Rozite has been researching the role of the traditional kokles (psaltery) in the Latvian diaspora in Germany, the USA, Australia, and the UK and has been an active member of the Kokles community as a musician, researcher, and participant in the project "Dižā kokle".

# Reconstructing a Reconstruction?
## The History of a Taskin-Harpsichord and Its Restoration(s)

*Olaf Kirsch, Carola Klinzmann*
**Museum für Kunst und Gewerbe Hamburg, Germany**

## Introduction

The Museum für Kunst und Gewerbe Hamburg (Museum of Applied Arts) holds a two-manual harpsichord as part of the Beurmann Collection of historical keyboard instruments. This gorgeous instrument is richly ornamented in typical late 18th-century French style with chinoiseries in lacquer work on the outside and paintings on the inside of the lid and on the soundboard (Fig. 1) (Beurmann 2000, 114–123; Beurmann 2012, 168–181).

Figure 1: Harpsichord, Pascal Taskin, Paris, 1787, Museum für Kunst und Gewerbe Hamburg, Prof. Dr. Andreas Beurmann Collection, [D.H.km] inv. no. 2000.532. Copyright MK&G, photo: Roman Mishchuk

Figure 2: Outside of the lid, Copyright MK&G, photo: Roman Mishchuk

## Description

The red and black lacquered case sides and the exterior of the lid are decorated with gold and silver coloured chinoiserie (Fig. 2). On the inside of the lid there are two paintings. One shows St. Cecilia playing the organ surrounded by five music-making angels. The other one, in 17th-century Flemish style, shows a scene in a garden where groups of figures amuse themselves by walking, chatting, dancing, and playing boules.

## Attribution

The ascription of the instrument is quite tricky, as is shown by the following:

An inscription on the name batten reads “ANDERIAS RUCKERS / ANTVERPIÆ, 1636”. The misspelling of the maker’s forename and the atypical placement of the date are a first indication that something odd is going on here. A second inscription, which is stamped into the wrestplank, claims that Pascal Taskin had “refait”, i.e. rebuilt, the harpsichord in 1787. However, even before the instrument was acquired by Prof. Andreas Beurmann in 1995, it became apparent that it was obviously not a “ravalement” of an original Ruckers harpsichord, but most probably an instrument built completely new by Taskin in the late 18th century. This theory was substantiated upon examination of the construction of the corpus.

On top of that, further examination brought other inscriptions to light, which were found inside the case. A paper glued at the inner curve of the bentside and a similar inscription on the batten between the upper and lower keyboard states:

“Mis au diapazon normal par Ch[arles] Muller / égaliseur de la maison H[enri] Herz sous la direction / et pour Mr Jacques Herz 1866 Paris”.

So, the harpsichord was actually once “rebuilt” to some extent, but this was not by Taskin in 1787, but by the workshop of the Paris piano builders Jacques and Henri Herz in the second half of the nineteenth century. This modernisation concerned technical features as well as a reworking of the lacquer decoration of the instrument.

## Research project

In a recent study and conservation project, the instrument could be examined in detail. Jean-Claude Battault from the Musée de la musique in Paris, together with the harpsichord builders Christopher Clarke and Ulrich Weymar, undertook an organological analysis (Battault et al. 2018). The aim was to document the present state of the instrument, and beyond this, if possible, to attribute the instrument's features to different historic layers, to trace back the process of its construction and reconstruction, and to finally develop a strategy for adequate conservation. Afterwards, the instrument was restored to a reliable and fully functional playable condition by the workshop of Ulrich Weymar.

This restoration included the reconstruction of the knee-lever mechanic and the peau de buffle register in a historically authentic manner.

## Examination

In addition, further scientific examination took place in the museum's conservation department to get deeper insight into the historical building and rebuilding process of the instrument with special attention to the painting and the lid construction. Various scientific methods could be applied such as X-ray, analysis of cross-sections, FTIR-spectroscopy and others.

## Results

The lid has been enlarged multiple times. By X-raying the lid, it was possible to detect some astounding details not only in the construction but also in the paint layer (Fig. 3).

The front lid section is made of two glue-laminated wooden boards, while the larger section consists of three boards. Three notches are visible on the side toward the back wall. Maybe there were hinges inserted previously.

A narrow wooden strip has been nailed to the larger section of the lid. The nails are clearly visible in the X-ray (Fig. 5).

Presumably at a later date, the lid was widened again to nearly 94 cm, making it the same width as the instrument.

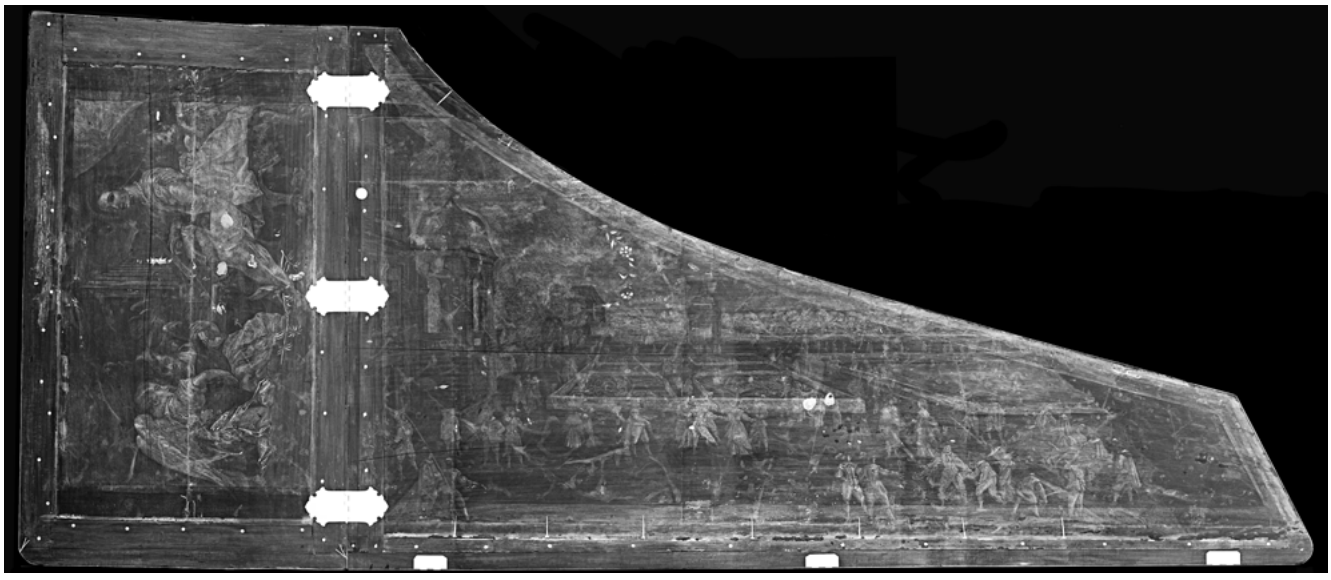

Figure 3: X-ray of the lid. The paint layers on both sides are viewable as well as the construction. Photo: TÜV NORD EnSys, Frank Meissner

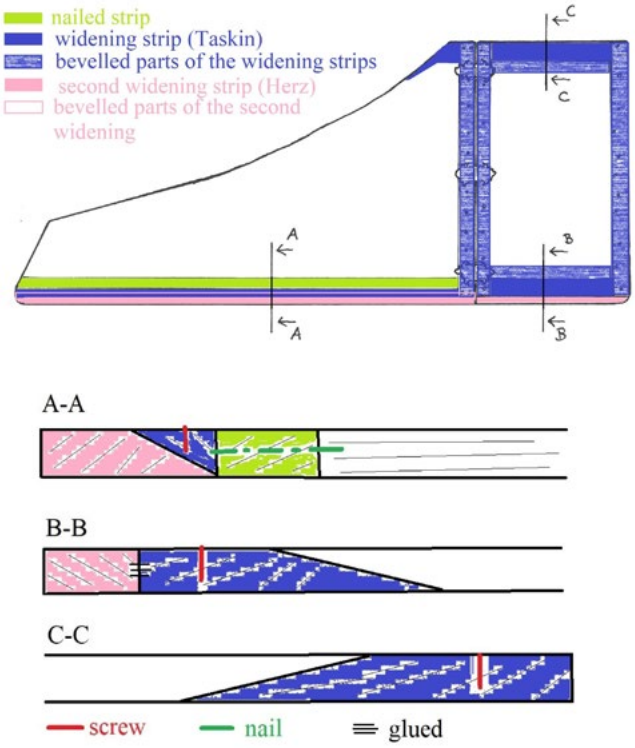


Figure 4: The drawing shows the construction details of the attached strips. Drawing: Carola Klinzmann

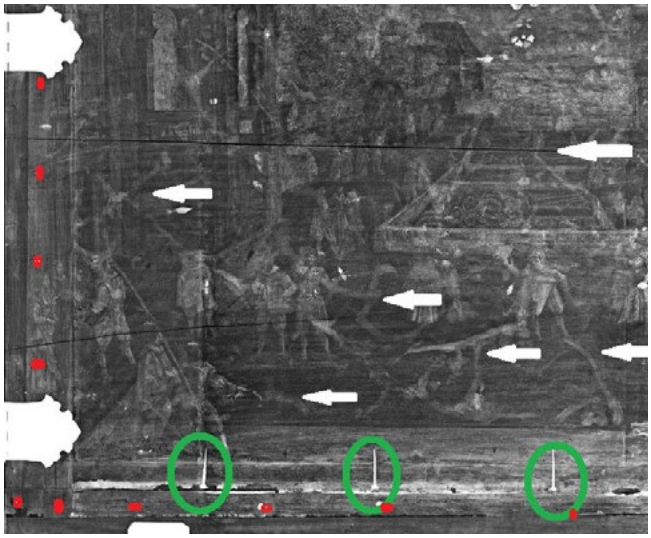

Figure 5: X-ray, detail of the lid: white arrows showing the “splotches” of the marbled pattern; the nails can be seen in the green circles; the screws are marked in red.

The strips used for widening the front lid have bevelled edges, which provide more gluing surface. The strips were also screwed on. However, the purpose of the screws is not clear, as they do not grasp anything on some of the sides (Fig. 4).

In the 19th century, during the restoration in the Herz workshop, a further strip was added to the lid to cover the reinforced spine of the instrument.

## Decoration

The X-ray revealed not only subsequent structural changes but also another paint layer that had not been detected previously (Fig. 5).

Bright “splotches” are visible on the X-ray. Presumably it was the first paint layer and surely it was a marbling technique, now covered by the visible paint layer. We can thus presume that the outer surface of the original lid had a marbled pattern like Flemish 17th-century harpsichords (O’Brian 1990, 167).

## Conclusion

In summary, it is evident from the X-ray analysis that Taskin must have reused an older lid for his instrument.

Therefore, even if this harpsichord is apparently not the result of a “ravalement” of an instrument by Ruckers, as claimed by Taskin, its lid was obviously rebuilt by reworking an older one, probably of Flemish origin. Given this result, it would be interesting to know if this is a unique case or if other lids exist that were rebuilt in a similar manner.

## Acknowledgements

This project was made possible by the generous support of Heikedine Körting-Beurmann, Thomas Pietsch, and the Justus Brinckmann Gesellschaft.

We would like to thank the following for their technical support: Jean-Claude Battault, Christopher Clarke, Prof. em. Friedemann Hellwig, Christine Laloue, Dr. Frank Meissner, Paul Schmidt, Ulrich Weymar.

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## Biographies

**Olaf Kirsch** is Curator and Head of the Musical Instrument Collection at the Museum für Kunst und Gewerbe Hamburg (Museum of Applied Arts, MK&G). He studied historical musicology and philosophy at the University of Hamburg and piano at the Hochschule für Künste Bremen. Besides his engagement at the MK&G, he offers seminars at the Hochschule für Musik und Theater Hamburg. As project manager and chairman of the Komponisten-Quartier e.V. from 2013 to 2015, he established the first section of the museum with exhibitions for Georg Philipp Telemann, Johann Adolf Hasse, and Carl Philipp Emanuel Bach.

**Carola Klinzmann** has been Conservator of Furniture and Wooden Objects at the Museum für Kunst und Gewerbe Hamburg (Museum of Applied Arts, MK&G) since 2020. Before that, she worked for 20 years at the Museumslandschaft Hessen Kassel (MHK now HKH). In 1997, she received her diploma in conservation in Cologne. Prior to a three-year internship at the Museum für Kunst und Gewerbe Hamburg she received an apprenticeship diploma as a cabinetmaker in Hamburg in 1987.

She was the coordinator of the VDR (Verband der Restauratoren/German Association of Conservators-Restorers) working group "furniture and wooden artefacts" from 2013 until 2017.

# Reconstructing the (In)tangible Heritage

*Mirte Maes*
**Museum Vleeshuis, Belgium**

Almost fifty years ago, a CIMCIM conference was organised at Museum Vleeshuis, Antwerp (Belgium) (Ruckers Genootschap, 1971; 1978). The discussions held during that conference marked the beginning of a long-term, fierce debate on the approach to historical musical instruments in museum collections. One central question was raised and has since been repeated: should historical harpsichords be thoroughly restored, or rather copied? Today, the question often remains unanswered. For instance, the Andreas Ruckers double-manual harpsichord, made in 1615 and preserved in the Vleeshuis collection, has neither been restored nor copied (De Paepe, 2018). However, in its present condition, the instrument is difficult to understand for today's audience. How can we finally bring a satisfactory resolution to this everlasting debate?

Figure 1. Andreas Ruckers Harpsichord, Museum Vleeshuis [B.A.mv], AV.2113. Photo: Museum Vleeshuis

## A new approach

Museum Vleeshuis, however, advocates another possible response to the raised question. Not only are restoring the harpsichord or copying it considered, but a third option seems to offer a way out. This third approach focuses on craftsmanship and intangible heritage. A case study of the Ruckers harpsichord is used to explain this third approach. It does not centre on the instrument itself through restoration or replication but rather pays attention to the instrument's message. That message contains unwritten, embodied knowledge, also known as craftsmanship. The harpsichord carries a specific craft tradition, particularly the skills and mindset of the maker, Andreas Ruckers. However, these traces of skills, cultural exchanges, and the embodied knowledge in the instrument remain silent. Unfortunately, silent traces cannot be seen or fathomed at a glance.

The proposed approach, therefore, aims to learn to read, understand, but also to capture, safeguard, and spread the silent traces and ungraspable, intangible knowledge. Thus, the instrument itself is not the only goal for the museum; instead, it is an indispensable tool for knowledge, connection, and creation. This approach concentrates on the permanent discourse that helps to read the instrument and stimulates the process of learning, understanding, and experimentation. This discourse will result in knowledge, connection, creation, and perhaps a newly constructed instrument.

## The vital role of documentation and communication

The acquired knowledge, connections, experience, and craftsmanship, however, can only be transmitted and safeguarded when well-documented. Therefore, documentation is essential in the process. Similarly, well-documented know-how cannot be transmitted without efforts concerning communication and networking. Only together can we read, discuss, and understand the traces of embodied or intangible knowledge accurately and nuanced. Only together can we connect all the snippets of knowledge and all the fragmented traces into a coherent whole. The collective search not only connects knowledge but, foremost, people.

Thus, the responsibility of museums lies in supporting the two elements necessary to make the learning process meaningful: documentation and communication (in addition to providing the tool: the instrument). Museum Vleeshuis wishes to take up this role as a documentation and networking facilitator for musical instrument making. As an illustration of this process, we have mapped out a flowchart, highlighting the tasks of the museum (Werkplaats Immaterieel Erfgoed, 2022).

## A humanising approach

The envisioned approach and philosophy could be summarised as a humanising perspective of the musical instrument. By emphasising the process of discovery and learning, by scrutinising the unique traces and messages transmitted by the instrument, the instrument is treated as a very human object with a complex and personal story. However, the researcher too is expected to be thoroughly human: only patience, an eye for detail, and openness can give access to the silent traces in the instrument. Thus, being human together, interpreting in a nuanced way, discussing silent traces, and experimenting with intangible heritage are core elements of the recreation project proposed. For centuries, sciences have advanced merely by

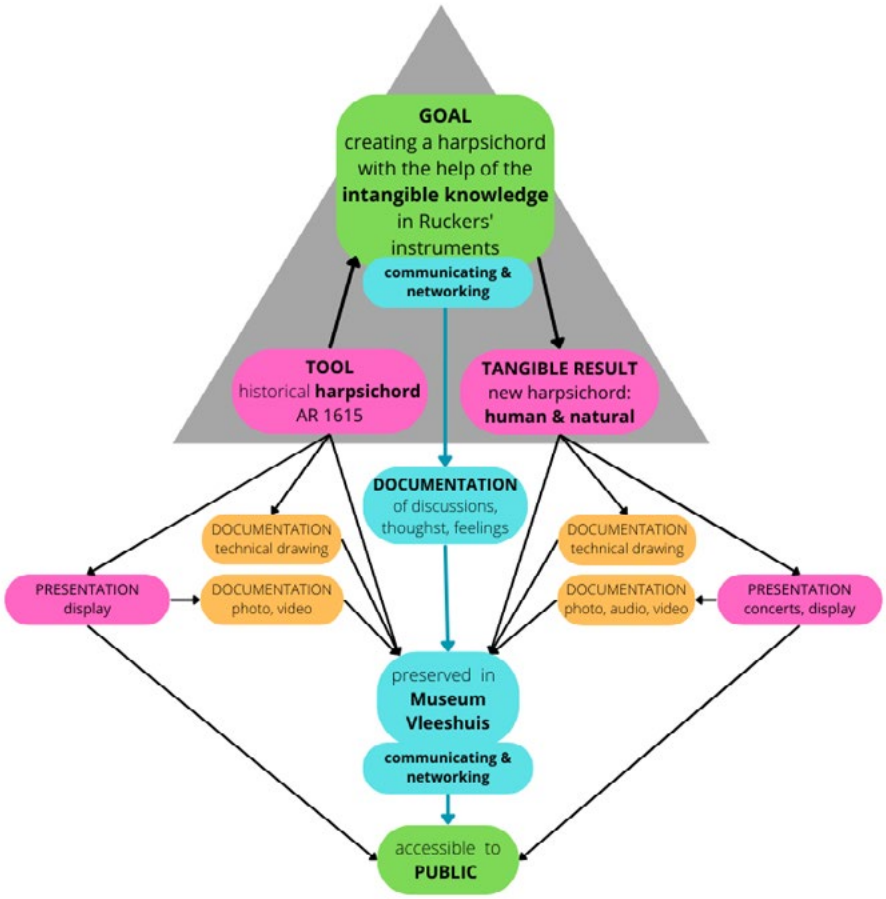


Figure 2. Flowchart of the proposed approach to historical harpsichords in music museums.

collective experimentation and nonstop conversation. Only in this way, harpsichords today can represent an added value in the field of knowledge to instrument making. A human reconstruction, made with carefully learned craftsmanship, discovered by chasing traces, can only be a most interesting creation, and therefore food for a new discussion and new questions concerning musical instruments in museums.

## Translating vision into action

An important question arises: how can we put these ideas and this flowchart into practice? How will Museum Vleeshuis proceed with the Ruckers project? This is evidently a challenging question to which we do not yet know the exact answer. We have already undertaken some pilot projects involving other instruments, aiming to document and exchange craftsmanship and embodied knowledge. Furthermore, we are actively spreading our ideas, seeking feedback, and generating enthusiasm within the instrument-makers network in Flanders. We trust that all of these efforts contribute to a successful continuation of the proposed approach to reconstruction projects, and we will present our project, along with all the insights gained, to you in a few years.

In conclusion, Museum Vleeshuis aims to contribute to the regeneration of craftsmanship, engage with enthusiastic makers, and establish a prominent and interactive place for musical instrument-making heritage in music museums.

## Acknowledgements

My special thanks go to my dear colleagues for their invaluable advice and inspiration.

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## Biography


**Mirte Maes** holds a master's degree in Musical Instrument Making (School of Arts | Royal Conservatory, Ghent) and a master's degree in Cultural Studies (Catholic University of Leuven). Since February 2022, she has been the curator of Museum Vleeshuis in Antwerp, Belgium. Her daily work focuses on collection management, intangible heritage and craftsmanship, and sustainable development. As a researcher, she has a particular interest in 17th- and 18th-century bowed bass instruments.

# Reconstruction of the 1640 Ioannes Ruckers Virginal in the Rijksmuseum, Amsterdam

*Manu Frederickx (1,2,3), Tamar Hestrin-Grader (2,4), Frank Hollinga (2), Mané van Veldhuizen (2) Giovanni Paolo Di Stefano (5), Paul van Duin (5), Nouchka De Keyser (5)*

**1. Metropolitan Museum, USA; 2. HOGENT, Belgium; 3. Ghent University, Belgium; 4. University of Leiden, Netherlands; 5. Rijksmuseum, Netherlands**

## Introduction

Since 2018, researchers from HOGENT KASK & Conservatorium have conducted extensive research on a 5-voet muselaar in the collection of the Rijksmuseum (NL.A.rm, BK-KOG-595) This virginal, on permanent loan from the Koninklijk Oudheidkundig Genootschap, was built in 1640 and is attributed to the Antwerp maker Ioannes Ruckers (Figure 1). Like many instruments of this age, it underwent many changes and is no longer playable. Restoring it to playing condition would compromise its preservation, both as a record of historical instrument building practice, and as an object of cultural heritage.


Figure 1: 5-voet muselaar attributed to Ioannes Ruckers, 1640, NL.A.rm, BK-KOG-595. Photo: Rijksmuseum, Amsterdam

In an international collaboration with the Metropolitan Museum of Art and the Universities of Leiden, Amsterdam, and Ghent, funded by the HOGENT with financial support of the Johanna Kast-Michel Fund via the Rijksmuseum Fund, a detailed technical study using state-of-the-art analytical and imaging techniques, such as macro X-ray fluorescence scanning (MA-XRF), X-ray computed tomography (X-ray CT), and proteomics, was conducted in order to translate the information embedded in the original instrument into more readily communicable forms, to be used as the basis of a working methodology for a reconstruction.

The results of the study were compared to historical sources on woodworking, instrument making, painting, and printmaking, and to other extant instruments, to form hypotheses about the original construction and decoration techniques and materials. Similar to methods used in Historically Informed Performance Practice and in experimental archaeology, these hypotheses were used to make two reconstructions of the instrument in its original state, using, as much as possible, techniques, tools, and materials like those used in the 17th century, thus providing new insights into the Ruckers workshop's practices, and into our contemporary understanding of historical objects and the ways they were created. A complete record of all the analyses and the conclusions drawn from them will be found in forthcoming publications. This paper can only give a brief overview of the analyses and touch upon the issues of accessibility in relation to object-based research.

## Current state of the virginal

The instrument's current state was documented in detail. Among the more important alterations are the conversion of the original short octave to a fully chromatic bass, requiring the widening of the keywell and nameboard and the replacement of the left-hand bridge. Although much of the original painted soundboard decoration is missing, the date 1640 is still clearly legible. The serial number 5/46 (O'Brien 1990, 50) can be found on the bottom and on the keyboard frame. A geometric cardboard rose replaces the original lead, and the jackrail is modern. The top of the lid has no remaining paint layers, and the rest of the case is covered with a walnut-imitation paint and a degraded oil-varnish, obscuring the original painted green porphyry imitation (O'Brien 1990, 167; Vandervellen 2017, 337). A similar coating is present on the virginal's stand, covering earlier decorative details. While there is no way of knowing if this stand is original to the instrument, its workmanship and design are consistent with those of mid-17th century Antwerp furniture.

## Analytical and reconstruction methods

A large variety of advanced methods was used to document the instrument's construction and decoration and to identify the materials originally used by the Ruckers workshop and in later alteration. Following an extensive study of 17th- and 18th-century literature on woodworking and instrument making and of extant historical Netherlandish woodworking tools, a period-style harpsichord making workshop was emulated in KASK & Conservatorium including a 17th century-style workbench and treadle lathe based on historical models, accompanied by hand tools, as much as possible approximating historic models.

Below is an overview of analysis and collaborators. Unless otherwise noted, all analysis was done by the authors from HOGENT:

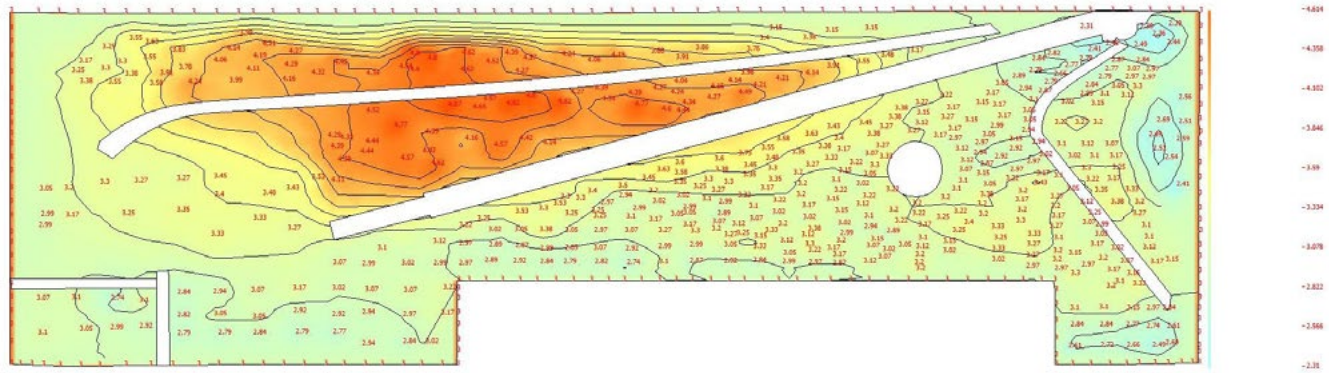

Figure 2: Topographical thickness map of the soundboard.

- Manual measurements of case, keyboard and jacks with Sebastiaan van den Noortgate, Kamiej De Prez, Darryl Martin (HOGENT, Ghent)
- Topographical thickness map of the soundboard (Figure 2)
- Digital endoscope imaging of case interior
- Digital X-ray images by Jan Dorscheid (Rijksmuseum Amsterdam)
- X-ray Computed Tomography (CT) scans of the 1640 Ioannes Ruckers virginal and the 1643 Andreas Ruckers virginal (NL.A.rm, BK-KOG-734) by Wolfgang Gard, Ellen Meijvogel-de Koning, Jan Willem van de Kuilen (Technische Universiteit Delft)
- Micro X-ray CT scans of keys and jacks by Francien Bossema, Tristan van Leeuwen (National Research Institute for Mathematics and Computer Science, Amsterdam)
- 3D structured light scans by Valentin Vanhecke (4Visualization, Zoetermeer)
- Digital 3D reconstruction and technical drawings
- Wood identification by gas chromatography-mass spectrometry (GC–MS) (Schilling 2018) of the 1622 Ioannes Ruckers virginal (US.NY.mma, 11.176.1) by Adrianna Rizzo (Department of Scientific Research, Metropolitan Museum of Art, New York)
- Dendrochronology and dendroprovenance of soundboard by Marta Domínguez Delmás (DendroResearch, Wageningen; University of Amsterdam)
- Pigment identification with Fiber Optics Reflectance Spectroscopy (FORS) of the soundboard decoration of 1640 Ioannes Ruckers virginal and 1640 Ioannes Ruckers harpsichord (NL.A.rm, BK-2017-42) by Francesca Gabrieli (Rijksmuseum, Amsterdam)
- High resolution digital imaging of soundboard by Staeske Rebers (Rijksmuseum, Amsterdam)
- Macroscopic X-ray fluorescence imaging spectroscopy (Ma-XRF) mapping of soundboard (Figure 3) by Nouchka De Keyser (Rijksmuseum, Amsterdam)

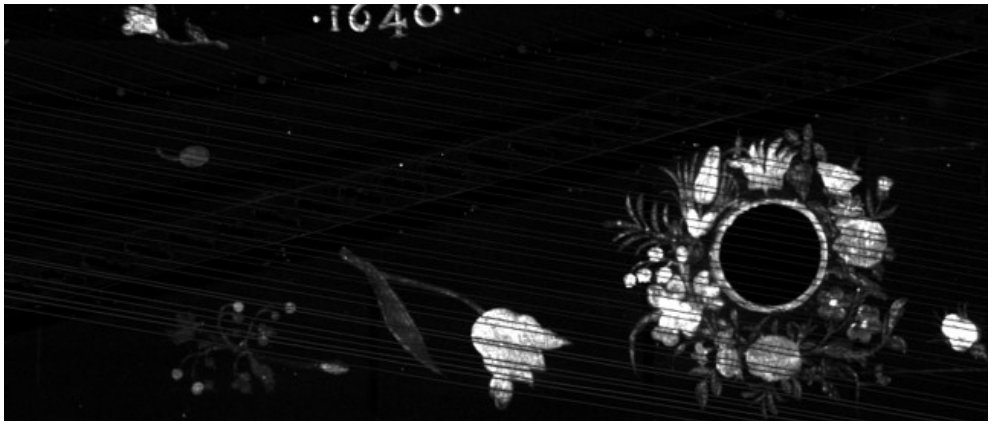


Figure 3: Macroscopic XRF map of soundboard showing the element lead.

Figure 4: Laser-engraved printing blocks. Photo: Timothy De Paepe

- Proteomics for binding medium identification of soundboard decoration of the 1640 harpsichord (NL.A.rm, BK-2017-42) by Inez van der Werf (Cultural Heritage Agency, Amsterdam)
- Proteomics for glue and bone key cover identification (Gilbert 2024, 2) of the 1622 Ioannes Ruckers virginal (US.NY.mma, 11.176.1) by Aleksandra Popowich, Julie Arslanoglu (Metropolitan Museum, New York)
- High resolution digital images of lid interior under visible light (VI), ultraviolet light (UV) and infrared reflectance (IRR) combined into a curtain viewer by Carola van Wijk, Robert Erdmann (Rijksmuseum, Amsterdam), Leila Sauvage (Rijksmuseum, Amsterdam; Technische Universiteit Delft)
- Macroscopic XRF mapping of lid interior with Judith van der Brugge, Jan Dorscheid, Paul van Duin, Anna Krekeler (Rijksmuseum, Amsterdam) Luis de Almeida Nieto, Leila Sauvage (Rijksmuseum, Amsterdam; TU Delft), Arie Pappot, (Rijksmuseum; University of Amsterdam)
- Laser engraving of printing blocks (Figure 4) by Rob Erickson (Visual Mechanics, New York),
- Printing of decorative papers historic printing press with Harry Doms, Joost Depuydt, Jan Van der Linden, Patrick Goossens (Museum Plantin-Moretus, Antwerp)
- Laser scan of decorative cast lead rose from 1622 Ruckers virginal (US.NY.mma, 11.176.1) by Deepa Paulus (Metropolitan Museum, New York)
- Computer numerical control (CNC) milling of soapstone mould to cast lead roses with Elias Heuninck (HOGENT, Ghent)


## Conclusion

Figure 5: Finished reconstruction. Photo: Rijksmuseum, Amsterdam

While most museums today serve a public function, they can inadvertently (or sometimes deliberately) create barriers between the public and the artefacts they house, barriers beyond a display case's glass or a storeroom's doors. Prioritising preservation and display often separates an object from its natural environments or prevents it from serving its original functions. The goal of this research is not only to reinstate those functions indirectly, by creating instruments that can be used for study, performance, and display without jeopardising the preservation of the original, but also to tell the multitude of stories, often hitherto untold, embedded in the object itself, inviting the possibility for new stories to be told and new functions to be discovered. Extracting these layered stories from a historical instrument is difficult, requiring not only access to the original, but to rare and expensive analytical equipment and expertise. Another challenge arises once this information has been "collected". Publishing results of novel analytical techniques in scientific journals is important but rarely reaches a wider audience and often isolates a narrow aspect of the research from its broader context. How can the complex biography of an instrument that has been altered and used in various settings for nearly four centuries

be shared in a manner that resonates with a diverse, often non-specialist, audience? How do the choices regarding which results to share and the format in which they are shared impact the shaping of these narratives? What are the values that these choices express, and how can they be made without cutting off the possibility of other equally valid choices, based on other values, being made in the future?

It might seem that this research is finished – materials have been meticulously analysed and reconstructions have been crafted (Figure 5) – but in many ways the work of interpreting and sharing the data has only just begun. In recognising the limitations of traditional scholarly dissemination, our focus shifts towards finding innovative ways to engage with a broader audience and continue unravelling the multifaceted narratives embedded within historical instruments.

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## Biographies

**Manu Frederickx** is a conservator at The Metropolitan Museum of Art, New York. He received an MFA in musical instrument making from HOGENT in 2002 and studied conservation of wooden artefacts at the Royal Academy of Fine Arts in Antwerp. From 2004 to 2015 he was a lecturer at HOGENT's musical instrument making department. He worked as a conservator at the Brussels MIM from 2009 until joining The Met's Objects Conservation Department in 2015.

**Tamar Hestrin-Grader** is a PhD candidate at the Academy of Creative and Performing Arts in Leiden University, researcher for HOGENT and a guest researcher at the Rijksmuseum, Amsterdam. Their role within the Ruckers project focussed on leading the research relating to the decoration.

**Frank Hollinga** completed his bachelor and master studies in Musical Instrument Construction HOGENT. During his studies, he specialised in historical keyboard instruments, with his main focus on the early piano of the 18th century. He is now active as a guest-teacher and researcher at the same department where he finished his studies.

**Giovanni Paolo Di Stefano** is the curator of musical instruments at the Rijksmuseum, Amsterdam. He studied musicology in Palermo and Rome where he earned his PhD. His research interests focus on the history and technology of musical instruments and music iconography. He has published widely and has taught organology at Italian universities and conservatories for more than fifteen years. Since 2016, he has served as a member of the CIMCIM Board. He is the coordinator of the CIMCIM International Directory of Musical Instrument Collections project.

**Paul van Duin** was head of furniture conservation at the Rijksmuseum from 1989 until his retirement in 2023. He studied psychology in Utrecht before developing an interest in furniture conservation. From 1984 to 1989, he was a furniture conservator at the Royal Collection in London. He is now a conservation consultant.

**Mané van Veldhuizen** has an MSc. in Technical Art History from the University of Amsterdam, where she specialised in the use and making of reconstructions with historically accurate materials and reproduction methods (digital methods and 3D prints). In the Ruckers project, she partakes in the technical analysis of the original object and is responsible for the painted decoration on the reconstructions.

**Nouchka De Keyser** is a paintings conservator and works as researcher at the Rijksmuseum. In her joint PhD project with the University of Antwerp and University of Amsterdam, she has specialised in the painting technique of 17th-century Dutch painters and the characterisation of pigment degradation with non-invasive imaging techniques (e.g., macro x-ray fluorescence scanning). She is currently part of the large-scale research and conservation project called Operation Night Watch to study Rembrandt's Night Watch (1642).

# The Conservation Treatment of the Clock Case of an Organ Clock produced by Charles Clay

*Tirza Mol*
**Rijksmuseum Amsterdam, The Netherlands**

## Introduction

In September 2016, a long-cherished wish came true for the Dutch Museum Speelklok in Utrecht. With the help of important donations, the museum was able to purchase the so-called "Braamcamp clock" at a Sotheby's auction in Paris. The purchase of this monumental clock with an elaborate musical mechanism also signified its return to Holland, where, at the end of the 18th century, it was part of the collection of the celebrated art-collector Gerrit Braamcamp (1699–1771), a Dutch merchant based in Amsterdam.

The prestigious clock was designed by Charles Clay, a London master horologist who by 1723 had been appointed Clockmaker to His Majesty's Board of Works and who held this position until a few years before his death in 1740 (Haspels 2006, 219).

Figure 1: The so-called "Braamcampklok", by Charles Clay ca. 1738 (before treatment). Oak, mahogany, pine, ebony, brass, gilt-bronze, silver, copper, oil-paint, varnish. 252 x 120 x 120 cm. [NL.U.ms], inv. no. 1335. Photo: Museum Speelklok

## Materials and techniques

The oak carcase of the over-lifesize case is veneered with mahogany (the pedestal) and with ebony (the dome) and is ornamented with gilt-bronze decorations and brass mouldings. The gilt bronze *ajour* screens on the dome are framed by brass arches and are masked behind with red fabric. The clock dial is located in the front arch and is relatively small, having a diameter of no more than 15 cm, incorporated into a large copper plate elaborately decorated with reliefs and an oil-painting of Apollo and the Muses on Mount Parnassus with Minerva. The painting can be attributed with some certainty to Jacopo Amigoni (c. 1685–1752). The clock face is framed by a gilt-bronze, low-relief architectural perspective with obelisks surmounted by silver urns and flanked by pedestals with silver urns and cast-silver high-relief figures of Apollo and Diana modelled by John Michael Rysbrack, who was also responsible for the lively group of the Arts below, also of silver and cast in high relief.

The musical mechanism consists of an organ that plays a variety of airs by Georg Friedrich Händel (1685–1759) (van Leeuwen 2017, 72–74). Händel (from Halle), Amigoni (from Naples) and Rysbrack (from Antwerp) were three of the leading figures in London's cultural life during the first half of the 18th century, and all were involved with the dominating art-form of the time: the fashionable Italian opera. As the most popular musician of the day, Händel was the obvious choice for such an extravagant and expensive item as Clay's clock and was possibly responsible for arranging his melodies for this, as well as other clocks by Clay. The Rysbrack reliefs reappear on a number of Clay's other musical clocks, while Amigoni was also responsible for painting all four faces of Clay's most elaborate clock, now in the British Royal Collection. Rysbrack and Amigoni were also involved with the scenography for London operas, so that Clay's choice of them to complement Händel's music is not surprising.

## Provenance

Although the clock's original owner is unknown, it had come into Gerrit Braamcamp's possession in Amsterdam by 1759. After his death, it was sold at auction and bought by members of a branch of his family who settled in Portugal, and it remained there until the 20th century, having passed through various collections including that of the Portuguese Infanta Maria Isabel. By 1972, it was owned by the Parisian collector Robert de Balkany, from whose sale it was acquired by the Museum Speelklok in 2016.

## Condition

While the clock and organ mechanisms were restored by the expert conservators of Museum Speelklok[1] , the case, pedestal and ornamental elements were treated in the conservation studios of the Rijksmuseum, which have the necessary expertise not only in the conservation of the woodwork, but also the metalwork, textiles and oil painting. Paul van Duin, head of furniture conservation, supervised the project. The author was invited to perform the conservation treatment.

Not only was the mahogany veneer loose and lifting off the wooden substrate in places, but there were numerous lacunae both in the veneer and the carved mahogany elements. The solid wood of the panels and the plinth were cracked and

1 A behind-the-scenes look at the restoration of the organ and clock mechanism can be found by this link: https://www.youtube.com/watch?v=9z5RamrocOo&t=10s

Figure 2: One of the panels (rotated) with the cracks, blistering veneer and discolorations. Photo: Tirza Mol

the veneer in these zones had split and was blistering with areas of discolouration along the cracks (figure 2). The gilt bronze, silver, and brass decorations were dirty and corroded. Diana's cast-silver quiver, a characteristic attribute of the goddess, was missing, and the red material behind the open work metal screens of the dome was loose, discoloured, and damaged. The surface of the painting was dirty and there were small lacunae caused by the paint flaking off the copper.

Although the transparent finish on the pedestal was in fairly good condition, its high gloss and reddish hue were considered disturbing. The reflection of light sources by the glossy finish impeded the experience of the subtle nuances in the structure of the mahogany. The thickness of the finish had made the edges of the carvings less distinct.

Inspection with ultraviolet (UV) light in combination with pyrolysis-gas chromatography/ mass spectrometry (py-GC/MS) analysis performed by Henk van Keulen (Dutch Cultural Heritage Agency) revealed that the glossy finish was a shellac that had been applied after the original finish (a mixture of terpene resins such as pine, sandarac, shellac and larch) had been removed. In the zones that are more difficult to reach, the original varnish had not been removed and the remains of this finish fluoresced greenish under UV radiation. Scrape marks on the veneer indicate the terpene resins had been removed mechanically.

## Treatment

The Museum Speelklok wished the case to be restored in such a manner that its original appearance could be appreciated, emphasising the high quality of materials and craftsmanship.

The high gloss finish on the pedestal was completely removed with solvents after which multiple layers of beeswax were applied. The satin patina of this beeswax, which was commonly used in the first half of the 18th century, enhances the three-dimensional effect of the interlocked grain of mahogany. Cracks and lacunas in the veneer and solid wood were filled and loose parts were consolidated.

In consultation with the metal conservation studio, it was decided to clean the brass and silver decorations and polish them to a soft gloss (figure 3). The gilt fired brass was cleaned, and a transparent varnish applied to the metals to protect them from future corrosion. A replacement for Diana's lost quiver was cast in silver using old photographs of the Braamcamp clock (figure 4).

The textile, identified by the Rijksmuseum's textile conservators as a modern synthetic fabric, was removed and replaced by a silk one, dyed in the appropriate shade of red.

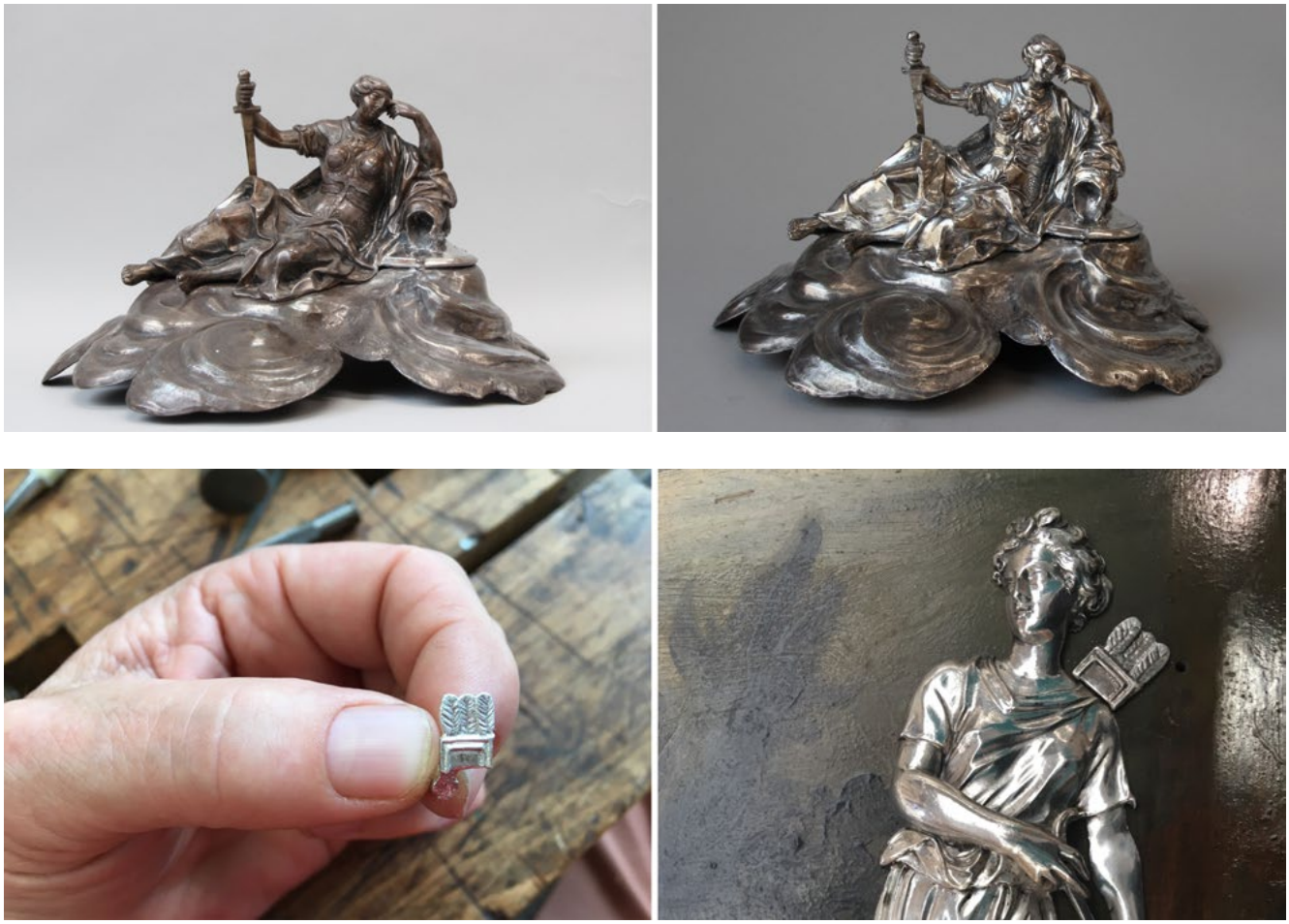

Figure 3: Minerva before and after cleaning. Photo: Tirza Mol

Figure 4: The new quiver for Diana. Photo: Tirza Mol

During the treatment, which took more than six months, director Marian van Dijk and curator Anne-Sophie van Leeuwen visited the Rijksmuseum's studio on a regular basis in order to discuss the options for treatment and to witness the progress.

## Conclusion and further research

The conservation of the Braamcamp clock is an outstanding example of interdisciplinary teamwork. Private textile conservator Anja Smets dyed and mounted the silk. The painting was treated by the painting conservator Giulia De Vivo, while the metal conservator Arie Pappot worked together with Tirza Mol on the reconstruction of Diana's silver quiver. The knowledge of historical art of Rijksmuseum curator Duncan Bull and that of Anne-Sophie van Leeuwen contributed to a better understanding of the context in which the clock was produced in 18th-century London. The Braamcamp clock is one of the highlights of the permanent display in Museum Speelklok.

Besides the Braamcamp clock, six other Clay clocks are known, which can be found in Beijing, Naples, Birmingham, and other locations. The clocks are well suited to an international collaborative project, combining musicology, (art) history, material research, and restoration. Museum Speelklok will lead this international project with the aim of unlocking all knowledge and bringing together all Clay clocks for an exhibition in 2028.

Figure 5: The Braamcamp clock after treatment. Photo: Rijksmuseum

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The author would like to thank Marian van Dijk, Anne-Sophie van Leeuwen, Erwin Roubal, Alberic Godderis (Museum Speelklok), Paul van Duin, Duncan Bull, Giovanni Paolo Di Stefano, Giulia de Vivo, Arie Pappot (RMA), Henk van Keulen (RCE), Anja Smets (independent conservator).

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## Biography

**Tirza Mol** has been employed at the Rijksmuseum in Amsterdam as a furniture conservator since 2018. She obtained a master's degree in psychology at the University of Amsterdam and a master's degree in conservation/restoration at the University of Antwerp. She is chair of Stichting Ebenist, secretary of the ICOM–CC Fund and board member of the Stichting Rietveld Schröder Huis. Her focus is on furniture as well as ship models.

# Digital Accessibility of Musical Instrument Collections

# Digital Accessibility in the 21st Century and the Role of Information Systems in Museums and Collections of Musical Instruments

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## Introduction

In the 21st century, the concept of accessibility transcends the physical boundaries that once defined our understanding of an inclusive museum visitor experience: achieving genuine accessibility in museums includes embracing people with disabilities as integral components of our historical, contemporary, and future narratives (Mairesse 2023, 8–12). Museums should go beyond mere legal compliance and incorporate sensory and cognitive considerations into the exhibition development process. This includes creating exhibitions that genuinely reflect the experiences of individuals with disabilities (Kosmas 2020, 471). Today's discussions revolve around a digital frontier, where technology stands as both the challenge and the solution.

Nowadays, when we delve into accessibility within the context of museums and collections of musical instruments, we inevitably navigate the complex landscape of information systems. These systems, while invaluable for preserving and disseminating knowledge, hold a dual responsibility: to provide information and to ensure it is accessible to all. In this article, I will explore the role that information systems play in shaping the inclusive future of museums, recognising that it is not enough to have information at our fingertips if it remains out of reach for a significant portion of museums' audience.

## Museums and digital transformation

Since the beginning of the 21st century, the world of museums and collections of musical instruments has been undergoing a profound transformation: museums are undergoing a transformative evolution driven by the influence of digital culture. In the museological context, the concept of digital relates to multiple aspects of museum work, such as the *use* of technology as a tool, the *management* of digital processes, the *creation* of digital content, and the *understanding* of "digital" as a subject within museum curation (Mairesse 2023, 127–30).

Museums are attuned to their audiences' changing needs and preferences, recognising the imperative to recalibrate their collection narratives. This shift extends beyond the mere act of preservation; museums are embracing more intricate and multifaceted ways of thinking that challenge the hallowed traditions of the past. They are becoming dynamic spaces where the essence of 21st-century life, characterised by its digital essence, finds a harmonious intersection with human interaction, information dissemination, and knowledge exploration (Lisney et al. 2013, 353–61).

Today, the digital realm, both within the physical museum space and across cyberspace, plays a central role in how museums communicate and engage with their visitors and communities. Whether people gather in the physical realm or virtually, museums have discovered a common ground in the vibrant landscape of digital culture. Museums find themselves compelled to adapt, incorporating cutting-edge technologies into their programs and strategies. Since the early 2000s, museums have actively improved their websites, placing a strong emphasis on new digital strategies that bridge the gap between the physical and online museum experiences, with a particular focus on exhibitions and collections.

Online and interactive access has opened new horizons for museums to engage with diverse audiences, transcending the physical spaces of their institutions. However, it is essential to recognise that accessibility is not just about the availability of records on websites or databases: it is about ensuring the accuracy and quality of the information provided. Achieving this requires meticulous content preparation (Napoleon and Amaechi 2021, 55–71) and the formulation of a robust digital dissemination strategy. Museums must uphold their fundamental mission of granting access to the knowledge their collections offer, ensuring that the digital realm reflects the same dedication to excellence and integrity that defines their physical spaces.

## Digital accessibility in the 21st century: principles and implementation

In the fast-paced and technologically driven 21st century, the concept of digital accessibility has emerged as a critical aspect of ensuring equal participation and engagement for all individuals, including those with disabilities (Mairesse 2023, 11). To maximise the reach of a piece of content, it is crucial to prioritise digital accessibility to ensure inclusivity. The internet has the remarkable ability to transport users to unexpected realms, such as immersing them in the rich world of arts and culture within any museum or gallery experience. It is imperative that individuals with disabilities are not excluded from this diverse audience. Moreover, they should be provided with the necessary support and tools to become active creators of this spectacle, fostering a more inclusive and enriching digital landscape for all. According to the *Standards in the Museum Curation of Musical Instruments*, "people with severe visual impairment can only enjoy and experience musical instruments by touching them. Museums should try, wherever possible, to make special arrangements to allow them to do so [...]" (Andrew 2005, 56). This applies to any type of disability.

Digital accessibility includes various parameters, both within and beyond the physical confines of museums. Inside the museum, digital interfaces are transforming the visitor experience to be more inclusive, featuring interactive touchscreens with text-to-speech capabilities, customisable font sizes, and multilingual options. Outside the museum, virtual exhibitions provide an alternative way for people to engage with the collections. This is particularly valuable for individuals who may face challenges related to geography or mobility. These platforms can also offer additional accessibility through alternative text for images, captions for videos and keyboard navigation.

Accessibility guidelines and universal design principles underscore the importance of considering diverse users, including those with disabilities, in the development of digital interfaces (Martins and Gabriele 2013, 257–65). The universal design "proposes an inclusive design for all". When we talk about accessibility, there are

some inclusion-related objectives that must ensure the autonomy of the individual, the ability to decide without depending on other people, empowerment, and equal opportunities.

In Portugal, for example, two normative documents related to accessibility in museological context were published: 1) *Museums and Accessibility* (IPM 2004) and 2) *Guide to Good Accessibility Practices. Inclusive Communication in Monuments, Palaces and Museums* (Garcia, Mineiro and Neves 2017). However, both documents focus on physical barriers and real museum spaces; there is only a small mention of virtual space in the 2017 guide.

Given the diversity of human experiences, the aspiration to serve "everyone" may not be fully achievable. To ensure that the museum website or platform is digitally accessible for people with disabilities, there are key criteria and guidelines to follow, such as those outlined in the Web Content Accessibility Guidelines (WCAG) developed by the World Wide Web Consortium (W3C). These criteria cover aspects related to: perceivability, operability, understandability, and robustness, emphasising the need for text alternatives for non-text content, keyboard accessibility, clear language, and compatibility with users. Additionally, considerations like screen reader compatibility, descriptive labels, captions, and consistent navigation are essential. Conducting accessibility audits, user testing, and employing automated testing tools can help evaluate and improve the museum website's accessibility progressively. In this context, it is inevitable to mention the self-assessment tool published by the Ibermuseus programme, available at http://www.ibermuseos.org/pt/recursos/noticias/museus-acessiveis/.

## The impact of digital technologies in museums and collections of musical instruments

The influence of digital technology in museums and collections of musical instruments has been nothing short of transformative. These institutions, tasked with safeguarding our rich musical heritage, have harnessed the power of information systems to open new frontiers in accessibility and engagement.

Information systems are digital tools designed to organise, manage, and provide access to data and information about museum collections. These systems help museums efficiently document, preserve, and share their cultural heritage. In the case of musical instruments collections, information systems play a pivotal role. They facilitate the interconnections of data regarding the instrument's performative use, preservation conditions, sound recordings, and even its association with construction techniques and geographical contexts (Furtado 2021, 8–10) – enriching visitor experiences, scholarly research, and overall accessibility.

Digital platforms and online databases grant virtual access to musical instrument collections, offering a global audience insight into musical heritage and cultural contexts. Interactive displays and immersive technologies breathe new life into museums, allowing visitors to engage with musical instruments, learn their histories, and even virtually play them. The virtual environment shatters barriers and overcomes geographical distances, seamlessly bridging the gap between distant and hard-to-reach places and objects. It achieves this by integrating acquired data with multimedia and interactive content.

Advancements in virtual reality (VR) and augmented reality (AR) further enhance information access. Data becomes readily usable through immersive experiences (Parrinello and Dell'Amico 2019, 1032–44).

## Challenges and prospects

Despite the significant strides that have been made, it is crucial to acknowledge that challenges persist on the path to achieving true inclusivity for all.

Nevertheless, as we continue to progress into the future, the role of information systems in these cultural institutions will inevitably evolve, presenting both new challenges and unprecedented opportunities. Information systems can help make cultural heritage accessible to a broader and more diverse audience through digital means, such as online exhibitions, interactive displays, and educational resources. Virtual exhibitions have become complementary spaces of the physical museum, where it is possible to observe in digital format the musical instruments enriched by audio and video contents.

Museums, by embracing the full spectrum of possibilities and adhering to universal design principles, have the power to foster an environment where every visitor, regardless of their physical or cognitive abilities, can engage with the musical heritage on a deeper and more meaningful level than ever before.

In this ever-evolving landscape, it is our collective responsibility to advocate for and implement inclusive practices, ensuring that the door to the world of music and musical culture remains wide open to every individual.

## Acknowledgements

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## Biography

**Cláudia Furtado** graduated in Art and Heritage Sciences in 2017, at Faculty of Fine Arts, Universidade de Lisboa (FBAUL). In 2021, she took a Master's degree in Museology at the School of Social Sciences and Humanities, Universidade NOVA de Lisboa (NOVA FCSH), with the presentation of a project work entitled "Documentation and inventory of the musical instruments collection of the Museu Nacional da Música: diagnosis and contributions to the development of a procedures manual from the perspective of an integrated information system". Currently, she is a PhD student and FCT fellow in Art History, in the specialization area of Museology and Artistic Heritage at NOVA FCSH. She is a research member at the IHA NOVA FCSH / IN2PAST. The PhD investigation is based on the collections of musical instruments, focusing on the challenges of documenting the performative use of historical musical instruments.

# “Breaking the Glass”:
## Making Historical Musical Instruments Accessible

*Ulla Hahn Ranmar, Marie Martens*
**The Danish Music Museum, Denmark**

## Introduction

The Danish Music Museum and the Multisensory Experience Lab of the Aalborg University in Copenhagen embarked on an action learning pilot project to make museum objects accessible to the public. Through digital-analogue interactive installations the project aims at providing the public with new ways of interacting directly with the silenced historical musical instruments on display in the museum.

The collections of musical instruments held by The Danish Music Museum were established in the late 19th century. The objective of both the Musikhistorisk Museum (inaugurated in 1898) and the privately owned Carl Claudius Collection (established ca. 1885) was to document the development of musical instruments, not only by exhibiting them but also by reviving their sound (Torp, Hahn Ranmar, and Martens 2018). Hence, the musical instruments that were – or could be – restored to playable condition were played by famous musicians at “historical concerts”, but as the early music revival was young in Denmark at the time, the musicians were not trained in playing historical instruments. Consequently, the musical repertoire was not necessarily given a historically informed performance; this is an entirely different story, nevertheless with some relevance to the present project’s ideas.

With time, the practice of playing the museum’s instruments changed due to a growing awareness of preservation, and so today the museum’s collections are non-playable. Obviously, the public was never allowed to play the museum’s instruments, but today, having a collection of objects originally functional but no longer so presents an increasing challenge to a museum. Since the mid-1960s, the museum has had a growing focus on educational programmes to make the exhibitions relevant to children above all. There is, however, a big step from trying to play a modern violin and immediately connecting the experience with understanding a historical instrument on display behind the showcase glass.

With this in mind, as well as a longstanding collaboration with the Multisensory Experience Lab of the Aalborg University in Copenhagen, the museum started on the project to – so to say – *break the glass* and with the help of modern technology make historical musical instruments accessible to the public.

## Breaking through the glass

Through specially designed interactive installations mounted in immediate connection to instruments in the exhibition, the project aims at arousing curiosity in

Figure 1: Glass harmonica by unknown maker, Europe, 19th century, The Danish Music Museum [DK.K.m], inv. no. MMCCS J 11. Photo: Ole Woldbye

people to investigate, connect, and engage with the historical objects on display. To attract the visitors' immediate attention, two of the most spectacular and thought-provoking instruments were chosen, instruments that also present interesting storytelling: the amoeba shaped violino arpa and the fragile glass harmonica.

Since neither of the instruments is in a playable condition, they were never sound documented, nor do the museum's archives hold complete technical drawings of the two instruments. At least, we were able to provide the instruments' dimensions as recorded in the museum's internal database.

In the case of the glass harmonica, the lack of original sound did not present a problem in creating the VR experience. Sound is not the only aspect of the project which aims at a multisensory experience. Therefore, the sound of a glass harmonica was obtained from the Internet, and sampled sound was applied to the cartoon-like scenery of Benjamin Franklin's home (https://www.youtube.com/watch?v=gzNOgJxAzXs). The audience will see that the VR glass harmonica is a perfect replica of the instrument on display, and they will find the physical presentation in the exhibition to be as can be observed in illustrations from the 18th century – and so, with the spread of the glass harmonica being largely due to two women musicians at the time, the installation also provides an opportunity to focus on women in music.

The general idea of the second installation, the violino arpa, is to – through morphing on a screen – provide the audience with an understanding of how the size and proportions of instrument bodies affect the sound. The original purpose of the instrument was to improve the sound by modifying the size and shape of the soundbox; but as is well-known, the violin remained an experiment because the sound turned out to be nasal and unclear. The lack of original sound became the cornerstone of the installation, and the Multisensory Experience Lab took on the challenge to digitally recreate the sound of the violino arpa through physical modelling (Mosen, Serafin, Adjorlu, Hahn Ranmar, and Martens 2023).

Figure 2: Violino arpa by Thomas Zach, Vienna, end of the 19th century, The Danish Music Museum [DK.K.m], inv. no. MMCCS CL 285. Photo: Ole Woldbye & Pernille Klemp

This unique installation has provided the museum with the missing link to better communicate the idea of the original instrument, and the revival of the sound has added another layer to the ontology of the object. In other words, with the use of technology the museum now possesses documentation of a vital part of a functional object which, with time, became defunct. In this sense, the project offers a historically informed experience based on interesting stories of music history and organology.

## The process of learning

The present learning project arose from many years of experience from the museum's educational and interpretation activities, mainly focusing on hands-on experiences in the designated workshop areas. Here, guests are given the opportunity to explore instruments hands-on and to challenge the possibilities of all kinds of instruments. However, we have found that the workshop activities were cut off from the museum's exhibition and so in many ways, we faced a museum experience split in two: the immediate, tactile, experimental, and playful activities in the workshop space which lacked the authenticity of the historical museum objects vs. the primarily visual display of historical musical instruments that often require prior knowledge to fully understand.

The project's goal, from an interpretation perspective, was to bring the two experiences closer together in the exhibition room and thus directly facing the original museum objects. The hypothesis being that we thereby would also make the objects

Figure 3: The VR glass harmonica installation facing the glass harmonica on display. Photo: The Danish Music Museum

more relevant to the guests who would not necessarily possess prior knowledge of the historical musical instruments and their cultural value. With inspiration from new museology (Charman 2013) and embodiment theories (Fredens 2018), the project attempts to create greater accessibility for those who do not have a background in classical music, mainly through bodily learning experiences. Furthermore, this approach embraces the overall strategy of the Danish National Museum to put "the audience first". Therefore, tactility and interactivity play an important role in the set of "dogmas" that we established for the project.

The first phase of the project resulted in the development of the two aforementioned interactive installations. Through a study based on 42 interviews, observations, and subsequent analysis, we gained information on how the two installations perform in relation to the project's "dogmas". The data obtained was processed qualitatively and reviewed on the basis of different coding marks reflecting the "dogmas". When reading through the data set, various surprising elements emerged, and the second phase of the project will build on these conclusions and recommendations.

For both installations, visitors to the museum generally experienced a high degree of immediate connection between the installation and the instrument on display, and several found "breaking the glass" descriptive of their experience. The social element of the installations is also evident. The guests immerse themselves in each other's encounters with the installations, laugh along and vividly guide each other through the experience. It was quite surprising how many people would use their phones to take photos of the others. This indicates a desire to share the experience with family and friends who were not present at the museum.

A very interesting result of the VR-based installation is that many of the guests expressed that they felt they were actually touching the glass harmonica, though that is all an illusion.

Figure 4: The analogue and digital violino arpa installation. Photo: The Danish Music Museum

## Future perspectives

The first phase of the project has focused on two very different installations, one using known technology (VR) and the other a prototype of as yet untested combinations of motion sensors, physical modelling, and other technologies. Regarding the prototype model, it goes without saying that we expected more challenges in the interaction, and the test results will to a great extent prove useful to the second phase of the project. So far, this learning project has shown that the guests like to have their curiosity piqued though at the same time to not lose their motivation, the challenge must not be too difficult. Or in other words, to keep the guests in a sense of flow (Csikszentmihalyi 2000). At the same time, the guests expect to find logic in the experience and that is to a large degree generated by the design. So-called mental models (Mosen, Serafin, Adjorlu, Hahn Ranmar, and Martens 2023) create expectations for the interaction between the guests and the installations. For example, elements like a bow and strings produce some very specific and detailed expectations, and on the other hand if they are not mirrored in the interaction, it causes confusion. Therefore, one should be aware of the expectations and interaction limitations that are created when installations mime the authentic.

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## Biographies


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**Marie Martens** is the curator of The Danish Music Museum – Musikhistorisk Museum & The Carl Claudius Collection in Copenhagen. She is a musicologist from the University of Copenhagen. Her daily work focuses on collection management, including the museum’s library and archives. Current research interests include the museum’s history and the provenance of the collections. Since 2019, she has served as Secretary of ICOM–CIMCIM.

# Improving Accessibility of Historical Musical Instruments through Interactive Virtual Representations:
## A Case Study on the Multimodal Virtualisation of a Mechanical Disk Player and its Media

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## Introduction

In collections of musical instruments, accessibility is usually constrained to visual displays, with textual descriptions or media recordings providing limited engagement. This paper presents an interdisciplinary case study of the multimodal digitisation and virtual representation of a mechanical cardboard disc player called Ariston (MusiXplora 2021) from the Museum of Musical Instruments at Leipzig University (MIMUL).

The result is an interactive mobile application utilising Augmented Reality (AR) to enhance the object experience in museums or home environments revealing its repertoire, sounds, animated mechanical components within a 3D model, and contextual information derived from organological research.

To achieve multimodal linking of intrinsic, emitted, and contextual data, this project employs the Virtual Acoustic Objects (VAO) standard and framework, currently under development within the MODAVIS project (Ukolov 2022). Simultaneously, the DISKOS project (Digital Organology 2021) focused on the organological investigation and digitisation of the instrument and its discs.

## Disc conversion

The majority of activity in the domain of the digitisation of historical music storage media has focused on piano rolls. Only a limited number of solutions exist for the digitisation of disc-shaped media.

One of the few solutions in this realm utilises software originally developed for the digitisation of piano rolls and combines it with a purpose-built utility designed to transform an image of a disc into a rectangular shape that resembles a piano roll. This resulting image can then be converted to a MIDI file using the existing software solution (Pedrazzini et al. 2013; Perretti et al. 2014). The process requires manual intervention during multiple steps and, as with all solutions we are aware of, the software is not publicly available.

To this end, we implemented a software purpose-built for the digitisation of disc-shaped media aiming to improve usability compared to existing processes. Our solution is capable of fully automatic and unsupervised operation and was designed to require only a minimal set of information about the media to process, such as some basic measurements and a mapping of tracks to tones. This approach eliminates the need for track position measurements, improving process portability

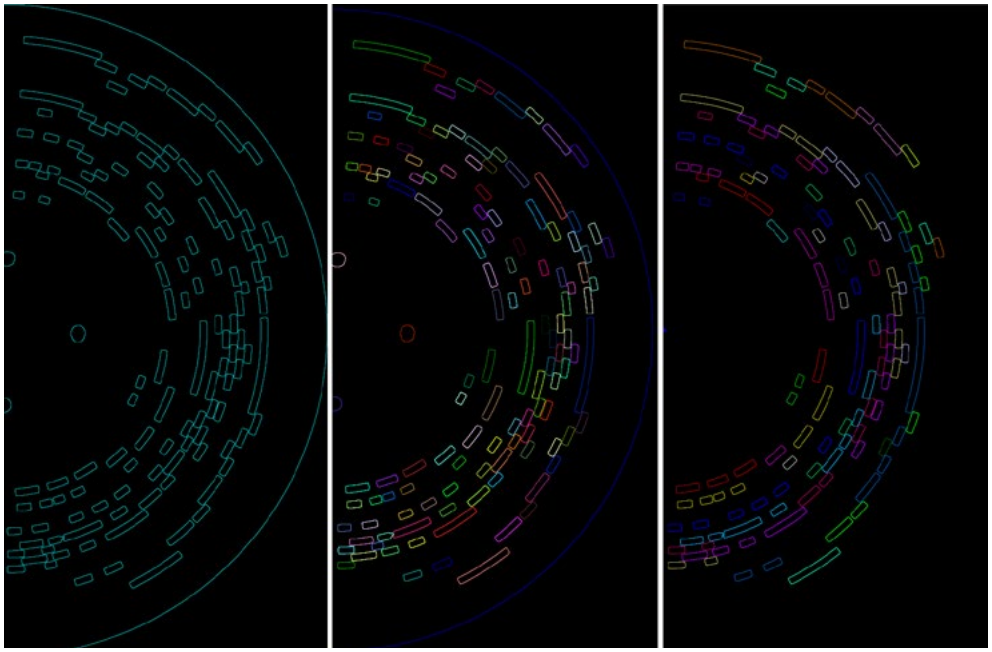

Figure 1: Three-stage process for extracting musical information from Ariston disc images: Initially, the image is segmented to isolate key components; secondly, the components are identified; thirdly, the tracks are systematically detected and assigned, resulting in a digital representation of the disc's musical information suitable for MIDI conversion.

and adaptability to new formats. An open-source Python package is publicly available (Fuhry and Ukolov 2023).

Photos for the digitisation process were taken with the discs placed on a custom-built, backlit rack with a long exposure time, creating overexposed images with a high contrast ratio between disc surface and background. Similar effects can be achieved by using software processing on regular photos of discs as well.

The digitisation process works by first segmenting the disc image using colour space segmentation and identifying different features of the disc in the resulting data, such as the tone-holes and the outer edge of the disc. Using direct least squares fitting (Halíř & Flusser 1998), the geometry of the disc is analysed and distance measures are generated for each tone-hole. Subsequently, the detected holes are grouped together in tracks utilising MeanShift Clustering (Fukunaga & Hostetler 1975) and then assigned to the correct MIDI note, accounting for tracks that are not populated on the given disc (see Figure 1).

Using basic geometry, the circular position and width of each hole is calculated, and the information is combined with the previously generated track mapping to create a MIDI file. In the process, no corrections are applied for physical defects that are common on some discs, such as tears between holes. This is a conscious design decision to preserve the playback behavior of the medium in its current condition.

This process has been used to digitise around 100 discs in the collection of the MIMUL of different formats from the Ariston brand. Due to the generalised design of the method, we are confident that it should be applicable to all formats of cardboard and some formats of metal discs with only minor modifications required.

Additionally, we have implemented the inverse process, allowing the generation of artificial discs as image files from MIDI files. These must be pre-processed by filtering non-tonal, e.g. percussive signals, consolidating channels, mapping notes to the Ariston's register, and applying temporal quantisation and vertical density reduction for realistic VAO performance during auralisation.

## Instrument digitisation

To obtain photorealistic three-dimensional models with correct geometries, a photogrammetric pipeline based on the AliceVision Framework (Griwodz et al.

Figure 2: Rendering of the merged 3D model: The segmentation allows the hidden interior to be revealed and other components to be transformed and rotated.

Figure 3: The 3D model allows views that are usually not accessible and hidden: in its default state, a cover hides the reeds on the top left but is made transparent in the virtual object.

2021) was adopted and further extended by customised pre-processing algorithms to compensate for difficult environmental conditions, phase shifts induced by object-internal reflections, and low-cost equipment.

Post-processing and data preparation for the VAO involved the computationally aligned merge of the interior and exterior 3D model (see Figure 2 and 3), the segmentation and annotation of the mechanical components, and the implementation of their animated behavior according to previously investigated mechanical interaction chains.

The sound inventory was acquired by discrete audio recordings of individual sounds and internal noises of the Ariston using an A-B stereophony and algorithmic post-processing. This audio processing includes environmental denoising, but more importantly the spectral identification and elimination of the rotating crank noise in order to prevent it from overlapping during polyphonic sample playbacks. To still incorporate this characteristic sound in the auralisation process, it was recorded separately in idle mode to enable its dynamic synthesis depending on the coded or variable rotation speed using a purpose-built DSP algorithm.

Once multimodally linked by utilising the VAO framework, these object-implicit and object-emitted datasets form the basis for the real-time auralisation of all converted discs, simultaneously accompanied by animated mechanics in a photorealistic 3D model of the Ariston.

## Application

Using the Unity engine (Unity Technologies 2024), an interface from the VAO framework and the Vuforia SDK (Vuforia Engine 2024), an AR app has been developed that is optimised for tablets (iOS or Android) and works either directly in front of the physical object as an overlay projection, with custom visual markers, or even markerless through arbitrary surface detection.

In this application, the digitised or artificial discs can be inserted into the virtual Ariston and auralised in real-time with their respective animations, while the case can be made transparent in order to view the moving mechanical components.

Clicking on the components reveals information about them, linked to internal or external contextual information; the same visual section provides general information about the history of the object as well as its production, its individual provenance and its repertoire, with background information on its arrangement strategies. It is planned to make this application and the embedded VAO publicly available at a later stage of development, incorporating multiple optimisations and extended features, including virtual acoustical environments for personalised auralisation (Ukolov 2023).

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## Biographies

**Dominik Ukolov** is a doctoral researcher in musicology at Leipzig University and research associate at the Friedrich-Schiller-University Jena. With academic experiences in digital humanities, electroacoustics, and as a researcher in the *TASTEN* and *DISKOS* projects, he specialises in the multimodal virtualisation of historical musical instruments. Having received multiple scholarships from the German National Academic Foundation, Ukolov’s doctoral project *MODAVIS* explores linked digitisation and virtualisation approaches of pipe organs, accompanied by the development of the *Virtual Acoustic Object* (VAO) standard and framework. He was awarded the Frederick R. Selch Award by AMIS in 2022 and is currently a member of the Europeana Network Association (ENA) as well as a board member of the Netzwerk DIGITAL ORGANOLOGY e.V. association.

**David Fuhry** began his studies at Leipzig University in 2014. He received bachelor’s degrees in cultural studies and digital humanities as well as a master’s degree in digital humanities. He joined the Research Center Digital Organology at Leipzig University in 2020 and wrote his master’s thesis on the digitisation of historical music storage media as part of the *DISKOS* project. Since 2022 he has been a research assistant at the Research Center focusing on creating digitisation solutions for the *DISKOS* project based on image processing and machine learning technologies.

**Franziska Bühl** studied Conservation-Restoration, Art Technology and Conservation Science at TU Munich where she received her master’s degree. During her studies, she did internships at the Germanisches Nationalmuseum Nuremberg, Kunsthistorisches Museum in Vienna, Deutsches Museum in Munich as well as the Händel-Haus in Halle/Saale. Following that, she did an apprenticeship as an organ and harmonium builder. Since 2020, she has been employed at Eckert Restaurierungen as a conservator-restorer for musical instruments, organ builder and research assistant. She joined the Research Center at the Museum of Musical Instruments in 2021 as a research assistant for the *DISKOS* project.

**Germán Camilo Salazar Lozada** studied music at the University of Caldas. Afterwards he worked as music teacher in middle and high school, as music writer for a local radio station and was the conductor of the most important choir in the region. In 2018, he started his studies in musicology at Leipzig University and was part of the *TASTEN* project at the Museum of Musical Instruments. Since 2021 he has worked as a research assistant for the Research Center at the Museum of Musical Instruments and is writing his dissertation on repertoire development in Leipzig’s music industry in the wider context of the *DISKOS* project.

# Be-MUSIC – A Plurivocal Access to Belgian Musical Heritage:
## Issues of Vocabulary and Intellectual Property Rights

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## Introduction

Be-MUSIC – A Plurivocal Access to Belgian Musical Heritage is a project (2023–2027) by the Royal Museum for Central Africa (RMCA) and the Musical Instruments Museum (MIM) in Belgium. Home to historically crucial collections, the museums will provide digital access to their musicological collections. While these are already partly available through MIMO, DEKKMMA, Carmentis, and Europeana, Be-MUSIC will create a new discovery platform with additional benefits.[1] It will give complete access to the museums' musical instruments and related audiovisual archives.[2] A common thesaurus will improve searchability and the search results' quality, thereby increasing the collections' research potential. Establishing best practices about Intellectual Property Rights (IPR) will broaden opportunities for artistic reuse.
This article offers preliminary reflections on methods and challenges to consider during projects like these.

## Technical development

Using open-source software, the Be-MUSIC platform will build a discoverability layer on top of the museums' existing collection management systems (CMS) by harvesting and ingesting their (meta)data and offering the possibility to integrate input from source communities.

RMCA and MIM are founding members of MIMO and active contributors to Europeana. As such, they have valuable experience in sharing data with aggregator platforms. The data exchange between the museums' CMS and the platform will happen in collaboration with MIMO, through revising and implementing MIMO's Common Data Model for the Description of Musical Instruments, the LIDO-based

1 Musical Instrument Museums Online (MIMO) provides access to musical instruments from 236 collections worldwide (https://mimo-international.com/MIMO). DEKKMA (Digitalisation of the Ethnomusicological Sound Archive of the Royal Museum for Central Africa) digitised the ethnomusicological sound archive of RMCA (https://music.africamuseum.be). Carmentis is the online museum catalogue of the Royal Museums of Art and History (including the MIM) in Belgium (https://www.carmentis.be). The European Union's web portal Europeana contains digitised heritage collections of more than 3,000 institutions across Europe (https://www.europeana.eu).

2 The collections jointly contain over 21,000 instruments and more than 45,000 sound and video fragments.

Metadata Mapping, and OAI-PMH Implementation Guidelines.[3] LIDO (Lightweight Information Describing Objects) was specifically extended to facilitate exchanging metadata from musicological collections between museums, online platforms, and aggregators. Furthermore, Be-MUSIC will integrate the specifications outlined by the IIIF (International Image Interoperability Framework) to enable visualising and sharing digitised collection material.

While the technical side relies on readily available software and guidelines, Be-MUSIC faces two major challenges in terms of content: (1) creating a culturally informed thesaurus to merge the instrument collections, and (2) IPR issues to make the audiovisual collections accessible and usable.

## Thesaurus of musical instrument names

Thesauri are essential to ensure collections' searchability and accessibility. As translatable, controlled vocabularies, they facilitate information retrieval within and among databases that use them. Uniformising preferred terms for instrument names while retaining record of synonyms and alternative names (including obsolete terms and alternative transliterations) ensures unambiguous entries into CMS and clear search results.

To this end, Be-MUSIC will homogenise both collections' thesauri of instrument names. The current thesauri differ in terms of hierarchical categorisation, and use of generic typologies versus specific terminology (see table 1). The advantages of using a hierarchical thesaurus, rather than an alphabetical glossary are two-fold. Users may intuitively browse the collections and the instrument's place in the thesaurus' structure informs users about its nature by grouping instruments according to common characteristics. For example, in an alphabetical list, the terms 'boha' and 'dudy' may seem unrelated. A hierarchical thesaurus shows that both are a type of bagpipe.

Table 1: Comparison of the MIM and RMCA thesauri. RMCA's thesaurus uses typological object names while MIM's thesaurus favours using specific instrument names.

**Thesaurus MIM (excerpt)**

| Level 1 | Level 2 | Level 3 |
|---|---|---|
| > Blaasinstrument | | |
| | > Accordeon | |
| | Bandriet | |
| | Bass horn | |
| | Bawu | |
| | Bilangdao | |
| | > Bugel | |
| | Clavicor | |
| | Cornophone | |
| | Diabolica | |
| | > Doedelzak | |
| | > Fagot | |
| | > Fluit | |
| | | Algoja |
| | | Ananta |
| | | Appeau |
| | | Bangsiq |
| | | Basi |
| | | Basuri |
| | | Bilbil |
| | | Bitu ubu |

**Thesaurus KMMA (excerpt)**

| Level 1 | Level 2 | Level 3 |
|---|---|---|
| > Aérophones | | |
| | Aérophone à implosion | |
| | Anches en pair | |
| | Clarinette idioglotte | |
| | Conque | |
| | > Flûtes | |
| | | Flûte |
| | | Flûte à conduit |
| | | Flûte à encoche, fermée, avec trouw latéraux |
| | | Flûte à encoche, fermée, sans trous latéraux |
| | | Flûte à encoche, ouverte, avec trous latéraux |
| | | Flûte de Pan |
| | | Flûte droite, fermée |
| | | Flûte droite, fermée, avec trous latéraux |
| | | Flûte droite, ouverte, avec trous latéraux |
| | | Flûté globulaire |
| | | Flûte nasale |
| | | Flûte traversière |
| | | Flûte-récipient à bec |
| | | Flûte-récipient sans bec |
| | Instrument à anche libre | |

3 See https://mimo-international.com/documents/MIMO_Deliverable_%202.1_v1%202%20(2010-06-30).pdf; https://cidoc.mini.icom.museum/working-groups/lido/; and Open Archives Initiative Protocol for Metadata Harvesting.

Figure 1: The muyemba's rows of keys function as the engraved figure's hairstyle. Photo: Simon Egan

Hierarchical thesauri present challenges, especially when dealing with heterogeneous collections such as those of MIM and RMCA, with instruments from cultures across the world, collected since the 1870s, and up to 20,000 years old.[4] Thesauri are unavoidably reductive. They represent the world through a categorisation biased by its author(s)' (historical) world view and the information available at the time of collecting and cataloguing, which may not correspond to the source community's categorisation. For example, MIM's thesaurus distinguishes between 'oboes' and 'clarinets' as generic terms for single and double-reed instruments. While this distinction based on acoustical characteristics seems objective, it is not universally made. The word 'mizmar', for example, is used in Arabic to refer to all types of reed instruments (Poché 2001), grouping both single and double-reed instruments into one category.

Furthermore, the thesauri contain obsolete and untransparent information. Historical terms that are no longer considered appropriate because they were

4 MIM was founded in 1877. Its oldest instrument is a whistle (B.B.mim 2395), estimated to date from between 12,000 and 18,000 B.C. RMCA's formal collection began after the Brussels International Exposition of 1897. Its earliest music recordings date back to 1910.

imposed during colonial times, like 'tam-tam', have already been removed. But also Hornbostel-Sachs terms need consideration. They are regarded as Eurocentric as they do not correspond with emic conceptualisations of instruments.[5] In addition, the thesauri use generic names without indicating that these are not the instruments' local names. For example, MIM owns 23 'slit drums', without acknowledging that this term indicates an instrument type rather than the instrument's specific name from its culture of origin.

Another challenge is that single terms are currently used for related, but nonetheless different instruments. For example, 'ṭanbūr' refers to various long-necked, fretted, plucked lutes from the Middle East and Central Asia (Hassan et al. 2001). The names in Dutch, French, and English – the project's working languages – are transliterations of the original term. Diversification in naming is essential to acknowledge the unique nature of each culture's instruments.

Explaining an instrument name's meaning in its local language enhances outsiders' understanding of an instrument. For example, 'kowodigo silga' means 'fiddle of the magpie', referring to the timbre of this fiddle of the Gulmantché in Burkina Faso (Willaert 2017, 34). The 'muyemba' is a sanza of the Chokwe people in the Democratic Republic of Congo and Angola (see figure 1). Its name and appearance refer to 'uyemba', the traditional hairstyle of Chokwe women (Gansemans 2008, 17). Such explanations contextualise instrument names and show that they are more than strange, exotic-sounding names (Willaert 2017, 32 and Agawu 2003, 44).

Local museum agents consider their heritage's correct (re)presentation in the Western world at least as important as restitution (Jean-Paul Koudougou, personal communication with Saskia Willaert, June 2013). Therefore, attention to correct and contextualised terminology is crucial. The Be-MUSIC platform will integrate citizen science, allowing local experts to provide input to refine the instruments' terminology.

Clearly, thesauri need to be handled with great scientific care. Be-MUSIC aims to include as many local and culturally informed object names as possible, while retaining alternative terms for (re)search purposes. In scope notes, we will explain a term's use and contextualise obsolete terms, communicate when the specific name is unknown or its correctness not yet verified, and shed light on the term's emic understanding.

## Intellectual property rights of audiovisual collections

Together, the museums hold over 45,000 audiovisual items, including field recordings, recorded performances, documentaries, commercial recordings, radio broadcasts, and interviews, ranging from late 19th century wax cylinders to recent digital recordings.

The major challenges when making these accessible and reusable are the need to comply with IPR legislation and establishing good practices concerning legal and moral rights. The museums' recordings include musical heritage from foreign countries (see figure 2). Western institutions' legitimacy in terms of ownership or representation is regularly contested by local and diaspora artists. Source communities do not always possess copies of their work and have limited access to them. While not specifically requesting to return the recordings, African artists or afro-descendant militants insist

5 Agawu (2003, 44), while acknowledging their apparent objectivity, suggests that terms like 'membranophone' should be but one among many descriptive terms to acknowledge that the same instrument, locally, may be referred to as a sacred object or an ancestor.

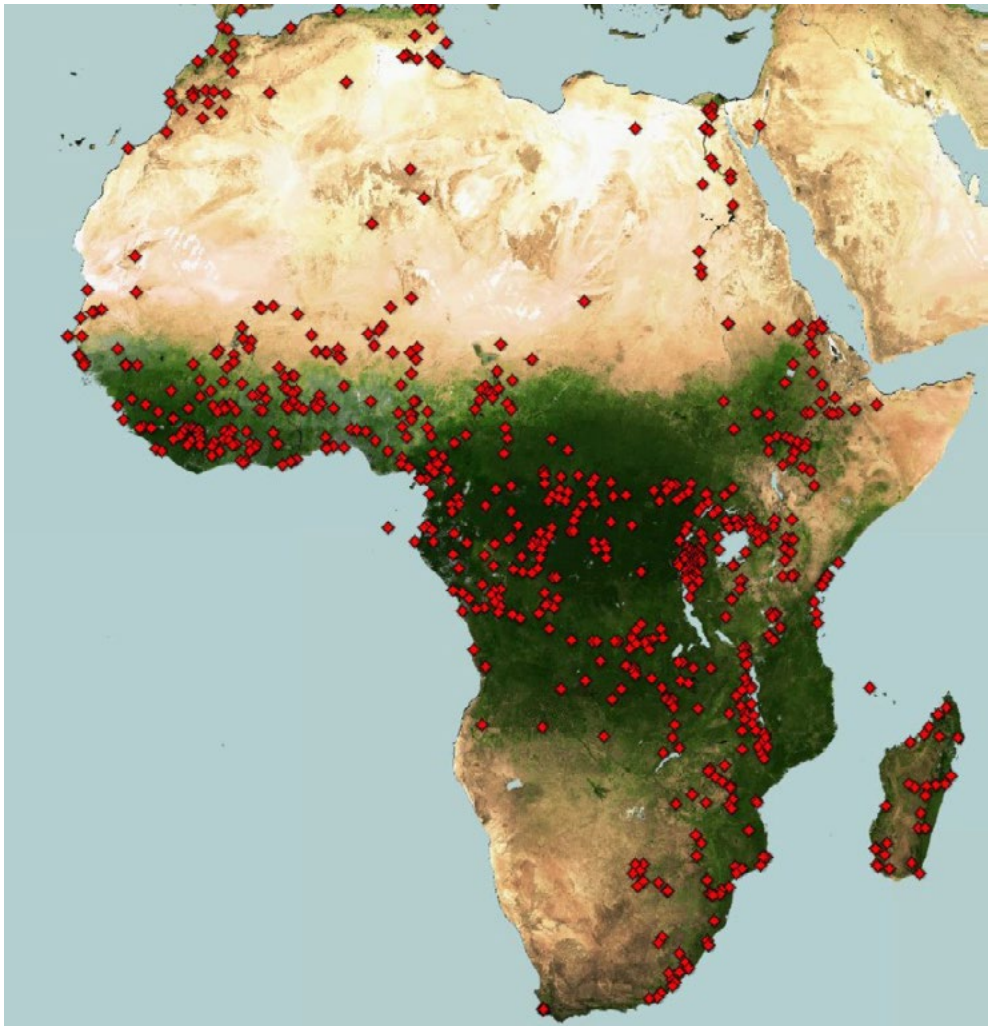

Figure 2: Map of RMCA's music archives featured on DEKKMMA, indicating the locations where the recordings were made. Image: courtesy of Olmo Cornelis

on freely using the archives. Putting recordings online does not replace the idea of repatriation but is a step towards sharing common heritage.

Recordings involve a musical work, its author(s) and composer(s) (or their heirs), performers, collectors, institutions that financed the collection campaign, and production and distribution labels. All these can claim authors' and/or neighbouring rights. The nature of traditional music, however, is often at odds with IPR presumptions which are, at large, Western constructions. Traditional music is considered public domain, and its authors are not (always) clearly identifiable. This makes traditional music's neighbouring rights especially important, while authors' rights are usually less applicable. The continuous variations of a musical model challenge the idea of a musical work. In Western art music, a written composition is considered as the 'original work' and performances as 'interpretations'. This distinction between 'original' and 'interpretation' hardly exists in orally transmitted music. All of this complicates granting the appropriate rights.

Few contracts exist between musicians and collectors, and between collectors and museums for pre-2010 recordings. Nor are the musicians' names always known. The absence of names, however, does not mean the absence of rights. The use of data policies and disclaimers by museums are legally insufficient. Be-MUSIC will examine the recordings to determine whether they can be considered as Orphan Works or as Commercially Unavailable Works, establishing whether a recording can be put on the Be-MUSIC platform without contacting the concerned contributors for each consultation request.

## Conclusion

Be-MUSIC will improve access to Belgian musical heritage. Using standard web design technologies, the platform will enable differentiated search options, adapted to academics, musicians, and interested amateurs alike. The integrated and improved thesaurus will optimise the platform's searchability and contextualise the terminology used. Research on the audiovisual collection will answer some long-standing questions in terms of ownership, ensuring a correct use of the materials.

Be-MUSIC will interact with MIMO by implementing MIMO's best practices on digitisation and compatibility. In turn, Be-MUSIC's thesaurus will enrich MIMO's international reference vocabulary on musical instruments, contribute to the expansion of the sound samples available on MIMO, and provide inspiring practices for clearing IPR. Be-MUSIC is a fundamental step for RMCA's and MIM's collections' future. It will pursue full valorisation of and in-depth research on these collections and strengthen the ties with the instruments' communities of origin.

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## Biographies


**Rémy Jadinon** (PhD in anthropology and musicology, Université Libre de Bruxelles) is the curator of the RMCA's ethnomusicological collections, where his research focuses on contemporary aspects of traditional music from Africa.

**Dieter Van Hassel** (MA in History and in Archival Science & Heritage Management) is the RMCA's Archivist/Information Manager, responsible for the institutional archives, collection registration, and digitisation activities.

**Anaïs Verhulst** (PhD in ethnomusicology, University College Dublin) is a researcher at the MIM, where she is responsible for Be-MUSIC's thesaurus of musical instrument names.

**Saskia Willaert** (PhD in musicology, King's College, University of London) is a curator at the MIM, in charge of the African, American, and Middle Eastern collections.

# Transfer of Collections from Private to Public Spaces

# The Legacy of the Jaap Kunst Archive in the National Museum of Indonesia: The Prospect of Development and Utilisation

*Nusi Lisabilla Estudiantin*
**Ministry of Education, Culture, Research and Technology, Indonesia**

## Introduction

The forerunner of the National Museum of Indonesia was a society formed by the Dutch East Indies officials and researchers in 1778. The society was originally aimed to advance research in the arts and sciences under the name *Bataviaasch Genootschap van Kunsten en Wetenschappen* or the Batavian Society for Arts and Sciences. A year after its founding, the society opened a museum to exhibit collections obtained during research or donated from collectors and researchers.

Indonesia was under Dutch Colonial rule for nearly 350 years. During the Dutch occupation there were many experts conducting research in the Dutch East Indies (Indonesia) covering political, economic, social, and cultural aspects; one such researcher was Jaap Kunst.

## Jaap Kunst in Indonesia

Jaap Kunst was born in Groningen, The Netherlands, on 12 August 1891. Following a failed engagement, family restrictions and dissatisfaction with his job in the Netherlands, Kunst departed for the Dutch East Indies (Indonesia) with two fellow musicians, Kitty Roelants-de Vogel and Jan Wagenaar in the spring of 1919.

Within eight months of their musical tour, the trio performed at various social clubs and art circles. In May 1920, both of Kunst's colleagues returned to the Netherlands, but Kunst decided to stay. He was captivated when he first heard the sound of a gamelan during Christmas 1919 at the Paku Alaman palace in Yogyakarta. His interest in the gamelan prompted him to study and conduct research on non-Western music.

Kunst befriended prominent figures in traditional music circles, such as gamelan master and Javanese traditional artist Raden Mas Djojodipuro and the King of Surakarta (Central Java) Mangkunegara VII. Both Kunst and Mangkunegara VII shared the concern that the gamelan would face extinction with the arrival of Europeans in Java. They were united in their mission to preserve the gamelan.

In 1922, Kunst began recording gamelan music using wax cylinders. In addition to his work, Kunst dedicated his time to ethnomusicological research and authoring dozens of books and articles.

In 1930, Kunst was appointed as an officer for systematic musicological research by the Dutch colonial government. From 1930 to 1932, Kunst travelled around Indonesia to conduct research and document music practices in various regions.

Around 1932, Kunst moved to Batavia and was appointed curator of the collection of musical instruments at the Royal Batavian Society for Arts and Sciences. Kunst primarily worked at his home, where he managed a collection of thousands of musical instruments gathered during his travels, as well as recordings, photographs, and films that were used as material for his research. In 1934, Kunst and his family returned to the Netherlands. He donated most of his collection to the Royal Batavian Society for Arts and Sciences, with many items later entering the collections at the Tropenmuseum and the University of Amsterdam.

## Jaap Kunst's legacy in the National Museum of Indonesia

After Kunst left Indonesia, the collection of musical instruments at the museum was managed by a new curator, Karl Halusa from Austria. During the Japanese occupation of Indonesia from 1942 to 1945, the music collection room at the museum was used as the headquarters of the Japanese army. All the collections were moved hastily, resulting in the Jaap Kunst archives being placed in separate storage areas. This caused the Jaap Kunst archives to appear fragmented in such a large museum space. After Indonesia's independence in 1945 until 2005, there was no replacement for the curator of musical instruments at the National Museum of Indonesia.

When I began researching the National Museum's musical instrument collection in 2006, I became interested in gathering musical instruments and archives donated by Kunst, which had been scattered for almost 60 years in several corners of the National Museum's storage. During the CIMCIM Annual Meeting in China in 2018, I expressed my concern because only a few of the Jaap Kunst archives were found: several musical instruments during 2006–2009 and 55 pieces of glass positive in


Figure 1: Glass positive No. H9, describes three musicians playing Suling Gede (big flute) and Rebab (fiddle) in Batu Bulan, South Bali, 1926. Photo: National Museum of Indonesia

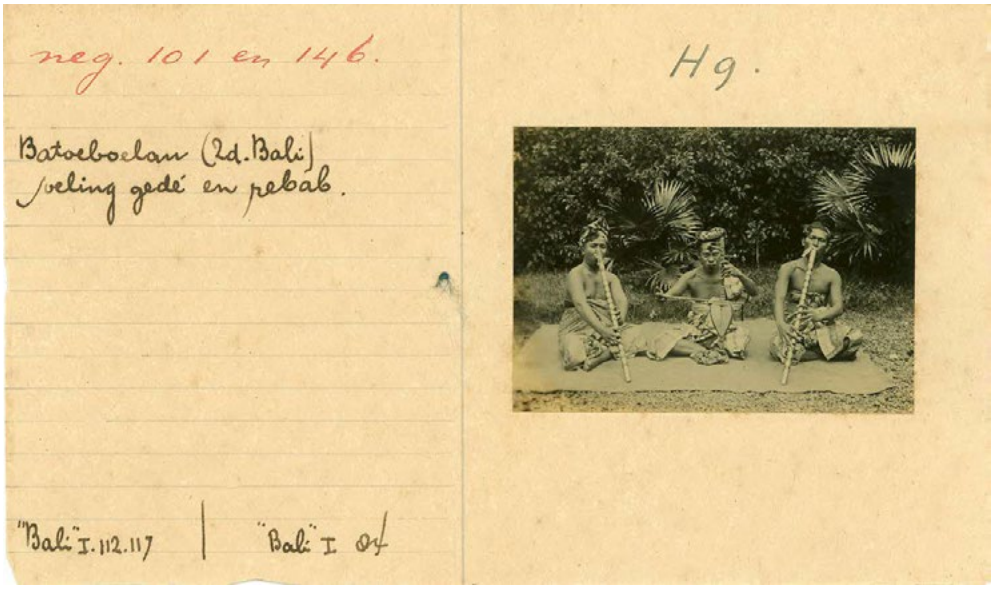


Figure 2: Catalogue card of glass positive No. H9, Batubulan, South Bali. Suling Gede (big flute) and Rebab (fiddle). Photo: National Museum of Indonesia

2013. The number is very small compared to the records left by Kunst in Indonesia, which amount to 1,000 musical instruments, hundreds of wax cylinders, glass positives, and vinyl records.

In October 2018, exactly one month after the CIMCIM conference, 627 wax cylinders in cans were accidentally found in one of the storage rooms of the National Museum. Furthermore, it was discovered that 507 sheets of glass positive cards were stored in different locations. Several glass positives were recovered, the current number is approximately 150 pieces. Then in 2019, 50 metal discs were found containing traditional music and songs from various regions in Indonesia, albeit in poor condition.

## Jaap Kunst's legacy in Berlin and the Netherlands

Kunst had a brilliant idea when he made copies of his works. He created duplicates of the recordings of wax cylinders for the museum, for his teacher Erich Moritz von Hornbostel in Berlin, and for himself. These copies later became part of the archive collection at the Universiteit van Amsterdam (UvA). Glass positive copies can be found in the same archive.


Figure 3: A wax cylinder from the collection of the National Museum of Indonesia Photo: Andre Herman for the National Museum of Indonesia

In addition to wax cylinders, glass positives, photographs, and vinyl records, the UvA library also houses the archive of Kunst's correspondence with colleagues who assisted his research, such as Mangkunegara VII, Raden Mas Djojodipuro, R. Goris, Curt Sachs, and von Hornbostel.

The wax cylinders that Kunst sent to Hornbostel are now in the collection of the Berliner Phonogramm-Archiv in Berlin and which have since been digitised there.. As a result of good cultural diplomacy between the Director General of Culture and the Director of the Museum of Ethnology, Berlin, who also manages the Berliner Phonogramm-Archiv, a hybrid repatriation took place in 2019. The National Museum of Indonesia received the digitised wax cylinder recordings totalling about 340 sound recordings.

## The exhibition "Tracking the Trace of Jaap Kunst: The Sound from the Past"

The exhibition served as the first step to inform the public about the existence of the Indonesian traditional music archive. On the initiative of the Director General of Culture, an exhibition of Jaap Kunst's archives entitled "Tracking the Trace of Jaap Kunst: The Sound from the Past" was held at the National Museum of Indonesia in 2019.

The exhibition presented the archives collected by Kunst during his time in Indonesia. Some objects, such as glass positives, wax cylinders, vinyl records, and traditional musical instruments from various regions, are now rare and rarely found. This attracted the attention of visitors, particularly the younger generation. The world's first recording technology provides new knowledge for those who are now more familiar with Spotify, many visitors still think of LPs as the oldest form of recording.


Figure 4: The poster from the Jaap Kunst exhibition. Photo: National Museum of Indonesia

In this exhibition, visitors were also given the opportunity to listen to the digitisation of the Berliner Phonogramm-Archiv wax cylinders through headphones.

Several collections of musical instruments on display are the result of provenance research. When I started working at the National Museum in 1999, I was interested in musical instruments of unusual shapes. Unfortunately, the information was limited. The label only mentioned that the musical instruments are from South Sulawesi. I then conducted research on provenance after I discovered an archive of photos from the Jaap Kunst collections.

Upon tracing their history, it turned out that the collections were a donation from Kunst and that the musical instruments were used by shamans or Bissu in South Sulawesi. Bissu played these instruments during the coronation of kings, the start of rice planting, and other important ceremonies. Bissu, the chosen ones, are male but resemble women. When in a trance, the Bissu are immune to sharp weapons. The mantra from Bissu and the sound of its musical instruments are believed to be able to entertain the rice goddess Sang Hyang Serri so that she will produce an abundant harvest.

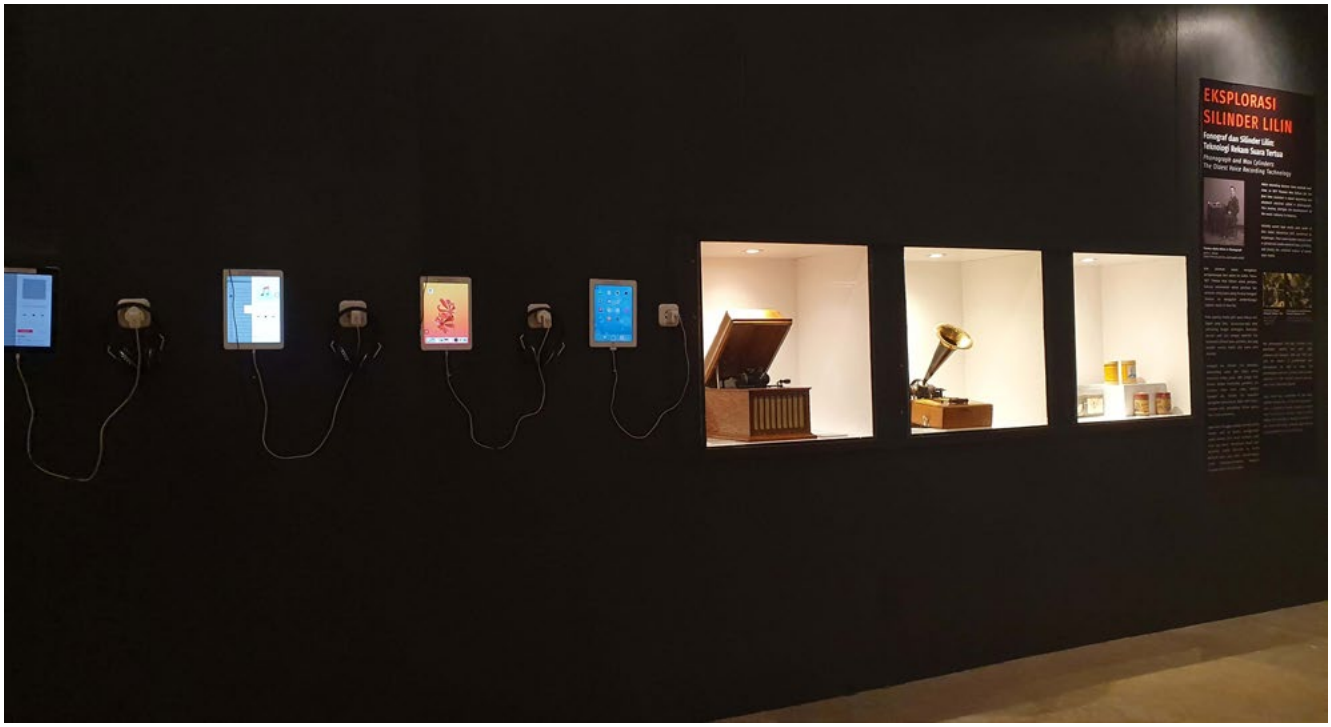


Figure 5: The exhibition of "Tracking the Trace of Jaap Kunst: The Sound from the Past". Photo: Nusi Lisabilla Estudiantin

Without intending to exaggerate the name of Jaap Kunst, who happens to be Dutch, we still appreciate his efforts in amassing such an important musical archive. The exhibition also aims to raise the awareness among the younger generation to recognise and preserve traditional arts, especially traditional music.

## The prospect of development and utilisation

It is essential to consider the future prospects of these archives. Hence, it is time to think about how to develop and utilise these archives in accordance with Law no. 5 of 2017 concerning Cultural Advancement issued by the Ministry of Education, Culture, Research and Technology. There are ten objects of cultural advancement, which include: oral traditions, manuscripts, customs, rites, traditional knowledge, traditional technology, arts, languages, folk games, and traditional sports. Traditional music and musical instruments are part of the arts, one of the objects of advancement of culture.

Numerous stakeholders can develop and utilise these archives. The archives can become primary data for ethnomusicological research by students majoring in art, anthropology, archaeology, and history. The development and utilisation of traditional music through these archives can also be carried out by artists and communities who own the musical traditions. In essence, it is time for the National Museum to grant the wider public open access to the archive.

The Directorate of Cultural Development and Utilisation, where I am currently working, has been building the Daya Desa (meaning the power of the village) web application since 2022. The web application is part of the Village Culture Advancement programme, a collaborative platform aimed at building self-supporting villages by enhancing cultural resilience and the contribution of village culture amidst global civilisation. On the website, each village can fulfil its potential in ten objects of cultural advancement. Currently, there are 33,893 development villages, and for this pilot project there are 355 villages that have entered data on their village potential and have included 167 musical instruments from various regions.

The Jaap Kunst archives can help identify which traditional music has become extinct and which still continues. Moreover, the archives can open up opportunities for artists in the village to re-recognise the traditional arts of their ancestors.

The website serves as a database of ten Indonesian cultural objects. It is conceivable that as more villages upload their potential culture, a wealth of information on traditional music and musical instruments will be included. The National Museum and other parties can also use the Daya Desa website to enrich their information. Collaboration with the Jaap Kunst archives will build a new and better narrative of Indonesian musical instruments. Artists and communities who own the music can use the website and Kunst's archives to develop concerts, to generate new musical ideas, cultivate fresh perspectives on traditional music, and preserve Indonesian musical art.

## Conclusion

Indonesia possesses an exceptionally rich heritage of art and culture, particularly in its traditional music. However, globalisation and modernisation have marginalised traditional music, pushing it toward extinction.

The archives of Indonesian traditional music meticulously curated by Jaap Kunst, hold immense significance. These archives serve as a crucial repository of data that can be utilised for the preservation, creation, and revitalisation of traditional music. Furthermore, these efforts help sustain local knowledge and traditions, ultimately contributing to the well-being of the community. Ensuring the sustainability of this cultural legacy is essential for future generations, highlighting the vital role of these archives in cultural preservation and community enrichment.

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## Biography


**Nusi Lisabilla Estudiantin** worked at the National Museum of Indonesia from 1999 to 2023 in the role of curator, educator, and exhibition designer. She is interested in the study of post-colonialism, particularly on the subject of repatriation, while still pursuing her research on Jaap Kunst collections at the National Museum of Indonesia, Netherlands, and Germany. Nusi has conducted over 30 exhibitions in Indonesia and abroad. The most memorable to her was when she was appointed curator of the "Tracking the Trace of Jaap Kunst: The Sound from the Past" exhibition in 2020 at the National Museum of Indonesia.

# The Transatlantic Adventure of a Rare Collection of Instruments:
## From New England Conservatory's Storage to a Musical Instruments Museum in Bursa, Turkey

*Mehmet Ali Sanlıkol*
**Nilüfer Municipality Dr. Hüseyin Parkan Sanlıkol Musical Instruments Museum, Turkey**

## Introduction

The main inventory of the Nilüfer Municipality Dr. Hüseyin Parkan Sanlıkol Musical Instruments Museum (MEM) consists of about 300 instruments collected from around the world by Parkan Sanlıkol (1944–2015), my father, who was a major supporter of musical activities and organisations in Bursa, Turkey. Indeed, while my father was a successful medical doctor, today he is remembered more for his contributions such as the nationwide piano festival, as well as the first amateur polyphonic choir of Turkey, which he co-founded and led until the end of his life. He started collecting musical instruments during the 1980s and what was first a hobby, quickly turned into a passionate pursuit of seeking and purchasing a wide range of instruments, both by himself and through colleagues, as well as friends who would obtain and bring such instruments to him. I was one such 'friend' living in Boston, MA since 1993.

I am an award-winning composer, a jazz pianist, an ethnomusicologist, a full-time faculty member at the New England Conservatory (NEC) and the project director and curator of the Nilüfer Municipality Dr. Hüseyin Parkan Sanlıkol Musical Instruments Museum. Frankly, my position at our museum is perhaps the most unexpected reward of my life, as my main musical passion has always been composition. That being said, performance has been a natural part of my life since age 5, but it was only seven years after my arrival in the US when I took a sudden interest in a variety of traditional Turkish musics which led to a second career path in ethnomusicology. And, as a result of my ethnomusicological studies, I got hired by the Musical Instruments Museum (MIM) in Arizona as the main consultant to design their Turkey exhibit in 2011. I worked with the MIM for about two years, after which I collaborated with the Museum of Fine Arts in Boston, as well as the Museum of Fine Arts in Houston on several projects too. However, I must admit that even after these experiences it never occurred to me that one day I would become the project director and the curator of a musical instruments museum named after my father. Little did I know that only a few days before we lost my father due to a sudden heart attack, he had a meeting with the mayor of Nilüfer Municipality about the creation of a musical instruments museum to which he would donate his collection.

Having been stored in one of the larger rooms of his house until his passing in 2015, my father's collection did not necessarily require major restoration efforts. Indeed, with little work and some strategic new purchases, we were able to present a diverse collection to our visitors when our museum opened its doors in August of 2021. Shortly after this opening, I was approached by the New England Conservatory's

administration about their wish to donate a number of historical instruments that were being held in the conservatory's storage area for several decades to our museum in Bursa.

Since I studied at the NEC for both my Master's and Doctorate degrees, I had seen about 15 or so instruments inside a cabinet in the Keller Room, one of the NEC's smaller recital halls. However, it never occurred to me that the NEC would have another 60 or so historical instruments in their storage area! In fact, when I was first invited to see these instruments under pandemic conditions, they were in small boxes with little protection. This was indeed why the NEC wanted to donate them in the first place: like many other institutions the pandemic had taken a toll on the NEC and the conservatory was no longer able to properly care for these instruments. And when they saw one of their own start leading a museum of musical instruments they decided to donate these very valuable instruments to our museum, an unlikely candidate newly established in Bursa, Turkey.

## The NEC collection

The only major source of information we have about the NEC's collection is a Master's thesis by Elizabeth Burnett written in 1967 at the NEC. In order to obtain further information, I also reached out to my colleague and friend Darcy Kuronen, MFA's curator of musical instruments until 2020, who knew about the collection because of several instruments given to the MFA during his tenure. A final source available to me was a small catalogue of a somewhat large exhibition at Boston's Horticultural Hall supported by the Chickering and Sons piano company in 1902. Although the instruments were not well identified, this catalogue was published with photographs displaying a number of the NEC's instruments as a result of which I was able to cross check the dates of several instruments. In any case, according to Burnett's thesis' preface, this collection started to be compiled shortly after the conservatory's opening in 1867 by its founder Eben Tourjee, whose desire was to create a similar collection to those found in conservatoires in Paris, Brussels, and Berlin at the time. In fact, while in 1883 a large number of Western and non-Western musical instruments were already on display at the NEC, significant additions were made to the collection, such as the instruments that were first exhibited by the Japanese government at the New Orleans World Exposition in 1885, as well as a small collection of non-Western instruments in 1919. In the end, from what I understand, the collection had about 125 instruments in the early 20th century out of which 14 were given to the MFA in Boston, 37 are unaccounted for, 1 sold at an auction, 21 remain at the NEC, and 52 were donated to our musical instruments museum last year.

## Transportation and opening

After we agreed on terms and conditions of the donation, the NEC had to search their records for possible limitations on any of the instruments that would prohibit them from being donated to our museum. This process lasted for several months as some of the records went back at least about 150 years. While the NEC was busy with such legalities, I started looking into what was clearly going to be the most challenging aspect of this donation: transportation.

This rare collection of 52 historical instruments was transported from Boston MA to Bursa, Turkey with the help of Turkish Airlines as it was clear to us that to try and pay for this highly valuable cargo was beyond the means of Nilüfer Municipality.

However, to get Turkish Airlines to sponsor this transfer was not necessarily easy. Since Turkish Airlines is in part tied to the Turkish government, first I tried to engage their interest through the Ambassador of Turkey to the United States. While the Ambassador seemed interested in helping, it quickly became clear to me that he was not going to directly intervene, as a result of which bureaucracy was going to slow things down. Seeing that this path was not going to yield immediate results, I decided to reach out to the Turkish-American business community from which a true patriot and an arts admirer who happened to be the CEO of a leading Turkish cargo company emerged and helped us secure Turkish Airlines' sponsorship. In fact, once Turkish Airlines realised the significance of what was taking place, they decided to create a short commercial film that we co-produced together, and this film has been accessible on their flights since last year.

I am happy to report that we have been engaged in an extremely careful restoration and conservation process over the past year with these 52 instruments in partnership with the head of Bursa Uludağ University's musical instruments repair and restoration workshop of Murat Caf. We opened our new NEC exhibit on February 17, 2024.

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## Biography


**Mehmet Ali Sanlıkol** is an award-winning composer and CMES Harvard University fellow (2013-15) who is currently a full-time faculty member at the New England Conservatory's Music History & Musicology Department, as well as the director of NEC's Intercultural Institute. Sanlıkol's first book, entitled *The Musician Mehters*, about the organisation and the music of the Ottoman Janissary bands was published in 2011 in English by the ISIS Press and in Turkish by Yapı Kredi Publications. Sanlıkol's second book, entitled *Reform, Notation and Ottoman Music in Early 19th Century Istanbul: EUTERPE*, was published by Routledge in 2023.

# The Ehrenfeld Collection of Flutes at the Rijksmuseum

*Giovanni Paolo Di Stefano*
**Rijksmuseum Amsterdam, The Netherlands**

## Introduction

Just a few days before the beginning of the conference, for which the proceedings are being compiled here, the Rijksmuseum [NL.A.rm] received a noteworthy donation, the Ehrenfeld Collection of Flutes. I will briefly provide some insights into this prestigious acquisition, which also touches upon topics discussed during the conference, such as the accessibility of musical instrument collections and their transition from private to public management.

## The Ehrenfeld Collection

The Ehrenfeld Collection was assembled in the mid-20th century by Herman Ehrenfeld (1896–1983), a flautist in the Utrechts Stedelijk Orchest since the early 1930s and the first and for many years the only Dutch baroque flautist. Ehrenfeld started collecting and playing historical flutes in the 1940s. In 1952, he acquired a few flutes during the auction of the musical instrument collection belonging to Willem Mengelberg, the famous chief conductor of the Concertgebouw Orchestra. By 1962, he possessed over twenty historical flutes, "some over 200 years old and of exceptional quality" (Ehrenfeld 1962, 317). Upon Ehrenfeld's passing in 1983, his widow, Guus Ehrenfeld-ten Bosch (1910–2003), established a foundation to preserve the collection. The founding board members were Willemke Terpstra, a former pupil of Ehrenfeld, Jouke Arjen Miedema, and Willem Kroesbergen, the renowned harpsichord maker who was a friend and neighbour of the Ehrenfelds. Guus Ehrenfeld led the foundation until 2000, after which Kroesbergen assumed responsibility. During this period, Kroesbergen added to the Ehrenfeld Collection another dozen flutes from his own collection, dating from the late 18th century to the mid-19th century. When Kroesbergen relocated to South Africa in 2007, the Ehrenfeld Foundation appointed the renowned organist and conductor Ton Koopman as curator. The flutes were therefore moved to Koopman's residence in Bussum (fig. 1). Since its inception, the primary aim of the Ehrenfeld Foundation was to ensure the long-term accessibility of its collection. The 1983 statute stated that in the event the Foundation became unable to manage the collection, the flutes would be placed under the care of a Dutch museum. Following Guus Ehrenfeld's passing in 2003, the Foundation's board explored various management options. In 2014, under the recommendation of the then-chair, René Poorter, a feasibility plan was launched for transferring the flutes to the Rijksmuseum. A significant milestone was achieved

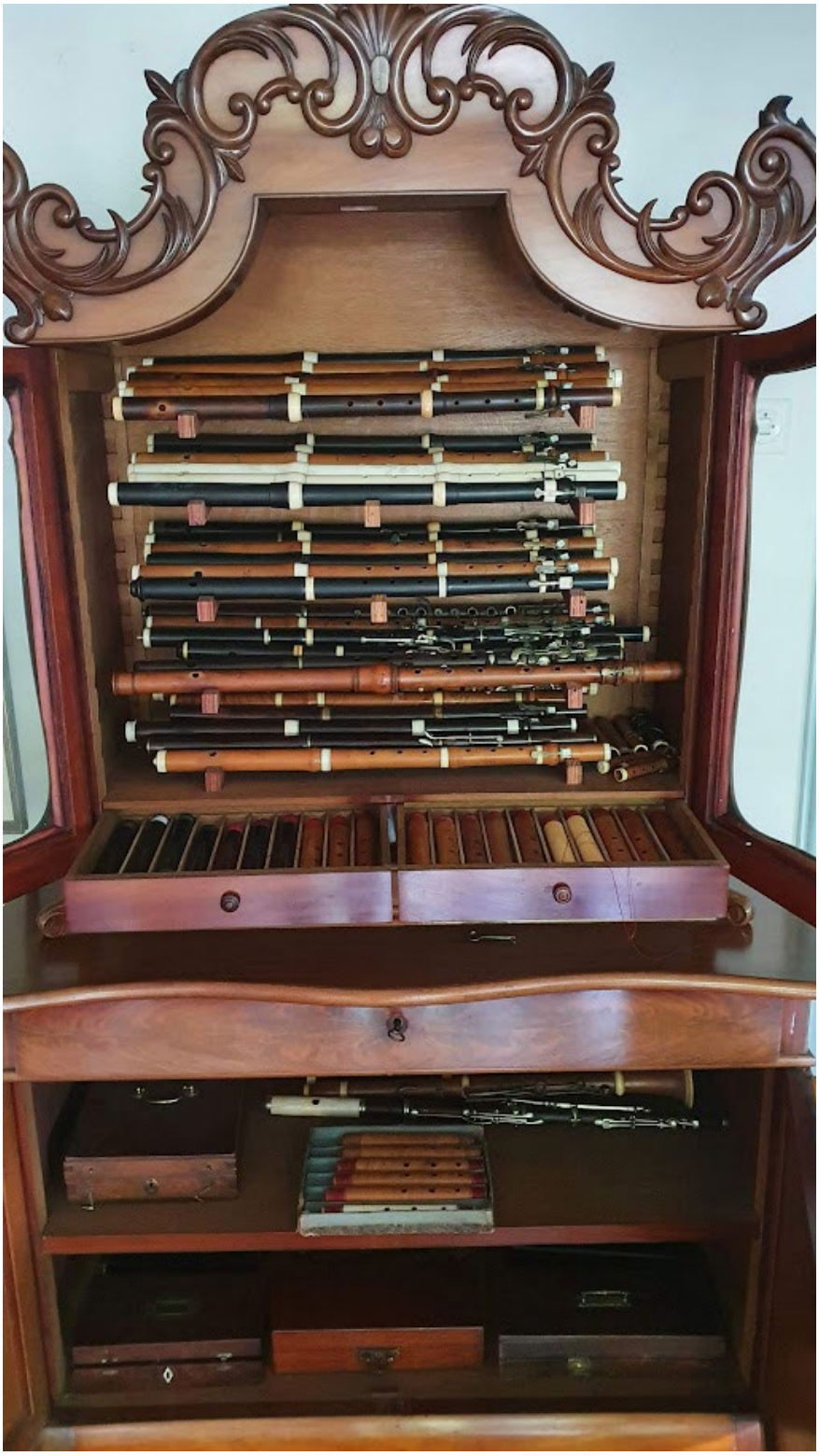

Figure 1: The Ehrenfeld Collection in Bussum, prior to its transfer to the Rijksmuseum. Photo: Giovanni Paolo Di Stefano

Figure 2: The Haka Flute. © Rijksmuseum

Figure 3: Mould on one of the flutes upon its arrival at the Rijksmuseum. Photo: Giovanni Paolo Di Stefano

in 2016 when the Foundation loaned Richard Haka's flute, the collection's *pièce de résistance* to the Rijksmuseum for approximately two years. Although temporary, this loan set the stage for discussions about relocating the flutes to Amsterdam, ultimately resulting in the dissolution of the Foundation and the donation of the entire collection to the Rijksmuseum in 2023.

## The flutes

The Ehrenfeld collection includes 35 flutes, predominantly from the 18th century. As mentioned earlier, the standout piece is undoubtedly the Haka flute (fig. 2), crafted in Amsterdam during the second half of the 17th century (Bouterse 2005). This exquisite and rare three-piece flute combines features from both Renaissance and Baroque flutes (Clark 2020). Alongside flutes by other Dutch makers such as W. Beukers, J. Beuker, H. van Elwe, R. Wijne, and J. Christiani, the collection also boasts a variety of German examples including flutes by J.G. Freyer, C.A. and A. Grenser, J.A. Crone, J. Scherer, G. Ulrich, and F.G. Kirst. Additionally, English and French flutes are included in the collection. An interesting feature of this collection is that many of the Baroque flutes are equipped with a substantial number of *corps de rechange*. In addition to the flute collection, the Foundation also transferred its archive to the Rijksmuseum, which consisted of two boxes containing administrative documents, some photographs of the instruments, and other documentary material.

## Accessibility

Before making the donation, the Ehrenfeld Foundation was aware that it would not be feasible to exhibit the entire flute collection in the Rijksmuseum's galleries. However, a crucial aspect outlined in the donation agreement is that the flutes will be accessible to scholars and photographs of the instruments will be made available on the museum's official website.

The challenge of accessibility is particularly significant when it comes to wind instruments, due to obvious conservation concerns. Access to the Ehrenfeld Collection has been restricted in the past, and opportunities for playing the instruments have been limited due to conservation reasons. However, upon their arrival at the Rijksmuseum, the flutes exhibited typical conservation issues resulting from occasional use and storage in a non-museum environment. For instance, several flutes exhibited signs of mould, particularly in the tenon-mortise joints, inside the bore, and around the finger and mouth holes, suggesting that these examples were not stored in optimal environmental conditions and sometimes were not properly dried after being played in the past (fig. 3).

The transition of the Ehrenfeld Collection from private ownership to public stewardship underscores the need for a comprehensive plan to enhance its accessibility while upholding the highest conservation standards. The following plan outlines the steps to be undertaken in the coming years to achieve these dual objectives:

1. Documentation and cataloguing. This process will ensure that comprehensive information about the instruments is readily available and accessible to the public through the Rijksmuseum's website. Detailed descriptions, photographs, and historical context will be provided, facilitating research and appreciation. Until now, most of the flutes have never been catalogued in detail, and there is no technical documentation or other accessible records available to scholars.

2. Accessibility to instrument makers. The collection will be made accessible to qualified makers under strict museum security protocols. This initiative aims to encourage the creation of modern replicas of the historical flutes. By fostering partnerships with skilled craftsmen, we can expand the reach of the collection by making playable replicas available to musicians.

3. Educational outreach. In collaboration with flute experts and musicians, particularly those from conservatories, educational activities will be organised to promote awareness and study of the flute collection. Workshops, masterclasses, and lecture demonstrations will be conducted, inviting students and professionals alike to gain insights into the historical significance and technical aspects of these flutes, fostering a deeper appreciation for their cultural and artistic value.

By implementing this strategic plan, we aim to make the Ehrenfeld Collection not only more accessible but also a dynamic resource for education, inspiration, and artistic creation. Through careful curation, collaboration, and outreach efforts, we endeavour to preserve this invaluable cultural heritage for future generations.

The following table provides the list of instruments belonging to the Ehrenfeld collection along with their corresponding new accession numbers from the Rijksmuseum.

| *Maker* | *Type* | *Inv. No.* |
|---|---|---|
| W. Beukers | Flute | BK-2023-24-1 |
| J. Beuker | Flute | BK-2023-24-2 |
| Anonymous | Flute | BK-2023-24-3 |
| R. Wijne | Flute | BK-2023-24-4 |
| H. van Elwe | Flute | BK-2023-24-5 |
| J.G. Freyer | Flute | BK-2023-24-6 |
| C.A. Grenser | Flute | BK-2023-24-7 |
| J.A. Crone | Flute | BK-2023-24-8 |
| J. Scherer | Flute | BK-2023-24-9 |
| G.M. Ulrich | Flute | BK-2023-24-10 |
| Anonymous | Flute | BK-2023-24-11 |
| Anonymous | Flute | BK-2023-24-12 |
| Tibouville | Flute | BK-2023-24-13 |
| F.G.A. Kirst | Flute | BK-2023-24-14 |
| F.G.A. Kirst | Flute | BK-2023-24-15 |
| F.G.A. Kirst | Flute | BK-2023-24-16 |
| F.G.A. Kirst | Flute | BK-2023-24-17 |
| Anonymous | Flute | BK-2023-24-18 |
| R. Haka | Flute | BK-2023-24-19 |
| Haynes & Co. (?) | Flute | BK-2023-24-20 |
| H.F. Meyer | Flute | BK-2023-24-21 |
| Anonymous | Flute | BK-2023-24-22 |
| Button & Whitaker | Flute | BK-2023-24-23 |
| Anonymous | Flute | BK-2023-24-24 |
| Anonymous | Piccolo | BK-2023-24-25 |
| J. Christiani | Flute | BK-2023-24-26 |
| Astor & Co. | Flute | BK-2023-24-27 |
| Metzler & Co. | Flute | BK-2023-24-28 |
| A. Kauffmann | Flute | BK-2023-24-29 |
| Martin Frères | Flute | BK-2023-24-30 |
| Keith-Prowse & Co. | Flute | BK-2023-24-31 |
| C. Gerok | Flute | BK-2023-24-32 |
| Anonymous | 3rd Flute | BK-2023-24-33 |
| C.A. Grenser | Flute | BK-2023-24-34 |
| Martin Frères | Flute | BK-2023-24-35 |

Table 1: List of the flutes.

## Acknowledgements

I wish to express my gratitude to Ton Koopman, Willem Kroesbergen, and René Poorter, without whose collaboration the transition of the Ehrenfeld Collection from private to public management would not have been possible.

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## Biography

**Giovanni Paolo Di Stefano** is curator of musical instruments at the Rijksmuseum, Amsterdam. He studied musicology in Palermo and Rome where he earned his PhD. His research interests focus on the history and technology of musical instruments and music iconography. He has published widely and has taught organology at Italian universities and conservatories for more than fifteen years. Since 2016, he has served as a member of the CIMCIM Board. He is the coordinator of the CIMCIM International Directory of Musical Instrument Collections project.

# Posters

# KOLLABS: A Participative (non) Education Project on Contemporary Music

*Miriam Noa*
**Münchner Stadtmuseum, Germany**

*KOLLABS Musikbaustelle* ("music construction site") is the name of the Münchner Stadtmuseum studio exhibition on contemporary and experimental music. Open to all, interdisciplinary, process-based, performative, and collaborative, the exhibition invites musicians and artists to deal with historical material and discuss it with the public. The interactions foster the creation of new sonic explorations and redefine the ways in which music can be exhibited. The audience gets an insight into the development processes of artistic work and is expressly encouraged to participate and collaborate. The exhibition and space change with each artistic contribution and the often perceived discomfort and mental barriers of contemporary music are reduced or even completely removed.

The Münchner Stadtmuseum started this project in 2022 as an open test in collaboration with painter and sound artist Andrea Lesjak from Munich, who came to us with the concept for the educational part of our exhibition "50 years of Munich 72". During the 1972 Olympic Games, there had been an enormously rich cultural programme with a focus on contemporary music and radically democratic formats – we wanted to convey this, reflect on it, talk to each other about the music, find the most diverse approaches, and let new things emerge from the reflection in the sense of artistic research – completely in the spirit of that time, open to literally everyone.

The title deliberately plays with the double meaning of collaboration and collapse ("Kollaps" in German is pronounced the same way as the project title). The runtime during the first season was from the beginning of October 2022 to mid-January 2023, a total of 15 weeks. The second season ran for two months from 8 November 2023 to 7 January 2024, concurrent with the museum's farewell programme before our general renovation.

The decision to organise Kollabs a second time came from our management after the first round had received a great and completely positive response. The number of visitors, which had steadily increased over the course of the first season, was exceeded.

## What does it take?

First of all, the space: a large, initially rather empty exhibition hall with plenty of room to let things grow. Then, of course, technical equipment, musical instruments (especially idiophones and keyboards), working tools, tables, and materials for

creative work (but as we wanted to address adults in the first place, we avoided a "preschool arts and crafts" atmosphere, and the result was also vividly accepted by kids). Clearly, you need an artistic director plus at least one assistant if possible. It was a pleasure to see our museum's own craftsmen committing themselves more and more to the project, after the initial scepticisms they had shown in the beginning.

As for the programme, we invited one dedicated artist or collective per week for a residency. On Mondays, when the museum is closed, the residents would meet and exchange ideas, i.e. how to work with the already existing material, how to develop the place and so on. On Tuesdays, the artists of the week would install themselves, start to work, and rehearse in a closed, safe space. On Wednesdays, they could choose to open to the public, to work with a small fellowship, or to cooperate with others. From Thursdays to Sundays, the hall was open to the public, with two mandatory events: Thursday afternoons from 4 to 6 p.m. were the so-called "collabs" with the artists in residence, which acted as a window to collaborative work, and Sundays at 4 p.m. was a performance, which was generally followed by a vivid discussion with the public. Most of the artists took the opportunity on the Thursday event to let something grow and present the results on Sundays.

We also installed a padlet (https://padlet.com/kollabs/musikbaustelle) as a continuation in digital space – this easy and inexpensive medium allowed us to interact with the audience, communicate additions or changes to the programme without long lead times, and publish images, sound, and film material from the events as an online exhibition.

Admission to the hall was free. Even though the entrance fees of the Münchner Stadtmuseum are moderate, we believe free admission to the hall removed barriers.

The nature of an interactive, collaborative exhibition requires an interested audience to participate and interact with it. This came naturally to us: the doors are open, something is sounding, something unexpected is happening. Curiosity drew in even our typical (i.e. older, more conservative) museum visitors. Some stayed longer, some shorter, some joined in, others just wanted to have a look.

In the first few weeks, we attracted only a small crowd, mainly at the direct invitation of the artists. But word quickly got around about the new format and visitor numbers grew. In the last few weeks of the exhibition, we had several hundred people as guests and in the final weeks in both seasons more than a hundred guests participated at the same time every single day. This demonstrates that we had clearly attracted a new audience that had not shown up before.

## What is so exciting about it from a museum perspective?

1. This is a totally different kind of curating! Not only was this a different kind of participatory mediation work: the audience gets an insight into curatorial work and can also participate in it and help shape it.

2. The artistic confrontation with historical material onsite in a museum context, from which something new then emerges, has enormous potential for our own curatorial approach as well.

3. If you lift a project like this out of the purely educational sphere, it takes on its own "higher" status: it is an enormous opportunity to get in touch with our visitors. They feel seen and heard, they learn that their visit has a meaning not only for themselves but also for the artistic project.

Our administration raised many concerns before and even during the first project period, but finally the general director was persuaded by the success and asked to repeat the event. The theme then was “Splinter / Deconstruction”. Directly before the closure and general renovation of the Münchner Stadtmuseum, we not only wanted to change the way we deal with contemporary music, but also devote ourselves to the question of how museums can (and should) open up – and how they must deconstruct themselves in a certain way. To this end, the former exhibition furniture of “Munich 72” such as plinths and pedestals were sawn up and reassembled into benches, a bar, and a DJ console. We physically removed sections of the interior walls of the room, which increasingly opened up the view to the exterior walls, allowing more and more sounds and light in, but also out. The museum, which is situated right in the middle of Munich’s city centre, opened up to its urban environment – the surrounding lights and sounds became part of the artistic installation.

At the same time, the boundaries between museum, audience, and artists became blurred as well: curating and mediating are rethought as essential, organic parts of artistic practice.

The museum is looking for its place in society – as a classic venue for new exhibitions, and as a newly conceived venue for artistic and social discourse.

## Some impressions

Figure 1: Pianist Masako Ohta playing from graphic notations designed by Kollabs visitors. © Münchner Stadtmuseum

Figure 2: Opening performance of Kollabs II, November 8, 2023. Improvisation for jigsaw, percussion, and various acoustic and electronic instruments. © Münchner Stadtmuseum

Figure 3: Performance “Traumsplitter” by Ute Kabisch, Duo Götz Mildenberger, and audience, December 14, 2023. © Münchner Stadtmuseum

Figure 4: Performance by Limpe Fuchs, piano, Caspar Lesjak, synthesiser, and Kordian Tetkov, drums and percussion. © Münchner Stadtmuseum

Figure 5: DJ Hias playing at the Kollabs “silver disco”, an adjoining room to the main exhibition area. © Münchner Stadtmuseum

## Acknowledgements

First and foremost, to Andrea Lesjak for the project idea and concept, for her unbelievable creativity, patience, and total dedication. Then to my wonderful colleagues at Münchner Stadtmuseum who helped to realise this dream. To all the stunning artists and everything they let happen, and to our interested and engaged audience who became part of this adventure.

## Biography

**Miriam Noa** has been curator and director of the music collection at Münchner Stadtmuseum since 2021. Previously from 2013 to 2017, she was curatorial assistant at Germanisches Nationalmuseum and Hochschule für Musik, Nürnberg, and from 2017 to 2020 research associate at the Deutsches Museum, Munich. She has a M.A. in musicology, history and German philology at Humboldt-Universität zu Berlin and the Technische Universität Berlin, M.Ed. in music and history at the University of Potsdam. In 2012, she received her doctorate in sociology and social history of music, from the Humboldt-Universität zu Berlin.

# Bringing a Collection of Musical Instruments to the Public: The Importance of Storage Infrastructure

*Iveta Ruskule*
**Latvian Museum of Literature and Music, Latvia**

## The beginning

This is a story of how one man's enthusiasm led to the creation of a collection of national significance and how its value is acknowledged as it moves towards public access amid the growth of the museum's storage infrastructure.

The Latvian Museum of Literature and Music will celebrate its centenary in 2025. It was formed through the development of collections in three art forms: literature, music, and theatre. The collection of musical instruments, whose dedicated selection only began in the mid-1990s, has become a cornerstone of the museum. It began when professional oboist Elmars Zemovics started working at the museum and convinced the museum's management to pay attention to the history of the construction of Latvian musical instruments and to start collecting them.

## The policy of collecting

The policy of collecting musical instruments is based on three main criteria:

1. the instrument is built in Latvia or built by a maker of Latvian origin;
2. the instrument is of special historical or artistic value built in other countries, which have no equivalent in the collections of other Latvian museums;
3. the instrument has belonged to or was used by recognised creative personalities from Latvia.

One of the treasures of the collection in this criterion is the country's first piano – a musical instrument that is especially significant to the emergence of Latvia's statehood – the grand piano of composer Baumaņu Kārlis on which the National Anthem of Latvia was composed.

## National treasures of the collection

The Museum has the largest collection of musical instruments in Latvia with 336 items, 60% of which are instruments made in Latvia and by Latvian makers. Other instruments are of German, Russian, and other origin (e.g. Austria, France, Switzerland, Poland, USA, Ukraine, Belarus).

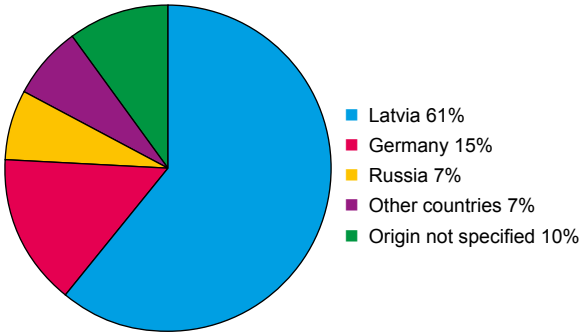


Figure 1: Country of origin of musical instruments in the collection.

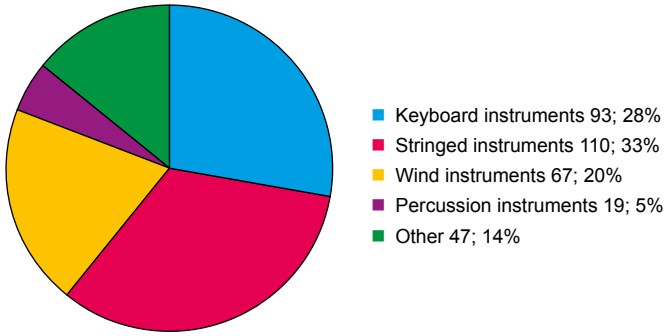


Figure 2: Types of musical instruments in the collection.

The majority of the collection consists of stringed instruments. These are mostly by Latvian and Latvian-born makers of different generations and include violins, kokles, and zithers.

The second largest group is keyboard instruments. The museum is proud of its wide representation of pianos made by Latvian makers. Research has identified Baltic, German, and Latvian instrument masters, even entire maker families, who used various innovative technologies in their work.

Highlights of the collection include:

- A prized exhibit is a Hammond electric organ built by the VEF factory under a USA patent licence.
- Latvian-made trombones, euphoniums, and trumpets.
- a pair of timpani made in 1774 by an unknown maker from Riga.

## On the way to collection awareness

The path to the creation of a collection of national significance and international value is closely related to the development of storage infrastructure. Until 2020, storage space for musical instruments was ill equipped and cramped. Only after the instruments were moved from narrow and unsuitable premises to the new storage complex was it possible to see the collection of musical instruments in its entirety and to identify shortcomings. This transition enabled the creation of a strategic vision for the collection in the context of the national tangible and intangible heritage and integration into the international cultural value chain.

The development of the collection can be divided into four important stages, taking into account the formation of the collection, the storage infrastructure, the possibilities and the museum's strategic and emotional relationship with the collection.

## Phase I from 1996 to 2010

This phase included the beginning and development of the collection with 244 objects acquired. The museum employs researchers and restoration specialists, but the storage is lacking space and instruments are housed in various locations.

A barometer of this phase reveals enthusiasm, ambition, growth, and a purpose – an idea for a Music Museum.

Figure 3: The process of collecting the square pianoforte "W. A. Aul" from the Sēja village. 17 September 2002. The second person from the left Elmārs Zemovičs, the initiator of the collection. Photo: Latvian Museum of Literature and Music

Figure 4: Arrangement of musical instruments in temporary storage rooms. 2017. Photo: Dace Gramatina

## Phase II from 2011 to 2014

Work on the musical instrument collection has slowed down and moved into the unknown: in 2014 the Museum moved to inadequate temporary premises, staff was cut, and a very valuable musical instrument specialist was sacked. The collection is not actively growing at this stage. The increase of 25 items (269 items in the collection) is insignificant and related to passive collecting practices. A barometer of this phase shows stagnation, loss of knowledge and commitment.

## Phase III from 2015 to 2019

The musical instrument collection is in hibernation. The total area of storage facilities diminished to 1080 m 2 (a decrease of 355 m2). Storage conditions are very poor – there is limited or no access to larger objects. Although there is still no active collecting the collection grew by 24, obtained mainly in the context of collecting other collections. Meanwhile, the former specialist is re-hired in the position of Collection Manager – and a new, modern, government funded museum repository building complex is in the process of being developed. The aim is to start a new page in the strategic development of the collection. The barometer indicates rethinking and re-evaluation; we are regaining expertise and knowledge – a former colleague's return brings engagement and enthusiasm.

## Phase IV from 2020 to 2023

Starting a new era – the collection is accessible for research, digitisation, and other professional purposes and it can be seen in a new light with a promising future. Along with the other museum collections, the collection of musical instruments has been moved to new and professionally equipped storage premises in the newly built repository complex. Total area of storage facilities has more than tripled to 3832 m2 (an increase of 2752 m2). Competent staff and resources are available for research, restoration, digitisation, and active collection development. Exhibitions

Figure 5: The new musical instrument repository. Museum Director Iveta Ruskule with one of the collection's highlights – a violin built by Augusts Dombrovskis, a philanthropist and maker, known as the "vijoļu fantasts" (violin fantasist). Photo: Kristaps Kalns

are organised and the collection has grown by 43 objects. A barometer indicates professional confidence, enthusiasm, and a vision for the future.

## What's next?

The collection of musical instruments is a powerful resource for building a national story, as well as for international integration and representation.
Our projects include:

- publishing a comprehensive catalogue of Latvian instrument makers;
- organising regional exhibitions;
- creating a strategic decision at government level for a brand new permanent exhibition of musical instruments in Riga;
- joining the MIMO network;
- establishing new partnerships, collaborating on joint projects.

Today the collection can contribute to the wider community. It has a role to play as a resource centre offering unusual examples of creativity and innovation to inspire and educate.

## Biography

**Iveta Ruskule** is director of the Latvian Museum of Literature and Music and is an expert in museum management and museology in Latvia. She is a member of the Museum Council of Latvia, ICOM and has a particular interest in museum collection policies, theory, and ethics of collection development. She initiates and organises national and international conferences and forums on various issues of museum and collection management. Under her leadership, a brand-new permanent exhibition dedicated to the tradition of the Latvian Song and Dance Celebrations was created and opened in Riga in 2023.

# Paper Abstracts

## Approaches to Inclusivity and Diversity

### More Comfort for Everybody

Silke Berdux, Deutsches Museum (Munich, Germany)

In its large-scale general renovation, the Deutsches Museum paid particular attention to inclusion measures. Under the motto "Inclusion is more comfort for everybody", the museum coordinated with an external agency and interest groups to realise educational programs, new features within its exhibitions, and a museum guide for people with disabilities. These include, for example, barrier-free access, tactile maps, books and objects, videos in sign language, texts in simple language, and guided tours for people with visual impairments and people with dementia. The paper gives an overview of the process and results and describes the experiences that have been made since the exhibitions opened in July 2022.

### Seeking for Accessibility, Inclusivity, Equity, and Diversity in the New Museography of the National Museum of Music, Portugal

Edward Ayres de Abreu, Museu Nacional da Música (Lisbon, Portugal)

The National Museum of Music is in full transformation. Temporarily installed (some thirty years ago) in the premises of a Lisbon metro station, it is now preparing to move to its own facilities in the north wing of the noble floor of the Royal Building of Mafra, an outstanding example of Portuguese Baroque architecture. This transformation led to the complete redesign of the museography. Despite the various initial contingencies – among others, the extraordinary but irregular nature of the collection itself and its history, the scarce scientific knowledge about the collections preserved in the museum, and the spatial conditions of the new facilities – the museum team, in collaboration with external advisory and scientific councils, developed a radically different exhibition programme from the one with which the instruments were displayed until now. In this context, the discussion focused on exploring alternatives to a mere organological organisation as well as on the multiple ways we could open the museum to greater accessibility, inclusivity, equity, and diversity. In particular, this exercise promoted reflections on (1) how the museum could become more musical for the most diverse audiences, including visitors with hearing impairments, and exploring senses other than just hearing and sight, namely smell and touch; (2) how the museum could be opened to the most diverse musical languages and practices or, even before that, how the very concept of music could be problematised, instigating the visitor to question himself about the boundaries of the concept and the multiple aspects that it can encompass; (3) how could it give voice to female musicians, opposing the male hegemony in consolidated historiographical discourses; (4) how could it integrate and contextualise non-Western instruments

in a non-segregated, non-colonialistic way. This paper summarises the main results of these reflections and describes the actions chosen to respond to the challenges posed.

### The Video Guide of the Musée de la musique in Paris: A New Tour Guide Designed for Universal Accessibility

Caroline Bugat, Musée de la musique – Philharmonie de Paris (Paris, France)

The Musée de la musique in Paris offers a tour in music. Since January 2022, a web app, available on the visitor's smartphone or on a device provided by the museum, makes the collection accessible to all visitors, including people with disabilities. An integral part of the visit, this new video guide is free of charge and is essential for exploring the works in the collection. From audio guide to video guide: previously, all visitors were given an audio guide with over 4 hours of content. The decision to upgrade the system to a video guide was motivated by three elements: improved accessibility, possibility of watching videos of instruments from the collection in concert, and greater adaptability. The new system retains the content of the audio guide, which includes a tour for children and music played on the instruments from the collection. A universally accessible video guide: the museum has been involved in accessibility issues for many years. In 2013, it received the "Patrimoine pour tous" (Heritage for All) award from the French Ministry of Culture. And so, when the decision was made to change the audio guide, the team naturally seized the opportunity to develop a more accessible guide, taking advantage of the new technical possibilities. With the video guide, visitors can choose between several tours, including a tour in French sign language, a tour in easy-to-read French for people with learning disabilities, and a tour in audio description for people with visual impairment. Each tour is composed of dedicated videos and specific gestures and adjustments (contrast control, text size, text display...). The museum's ambition is to offer every visitor equal access to its collection, regardless of age, language, or disability.

### Digital Replicas as Interactive Objects in an Education Project for Visually Impaired and Blind People

Benedikt Brilmayer, Das Musikinstrumenten-Museum des Staatlichen Instituts für Musikforschung (Berlin, Germany)

This project combines the expansion of the visitor experience for visually impaired people with interactive elements and playable digital replicas and a spotlight exhibition with additional tactile objects and listening stations. With the help of digital technology, visitors are motivated to interact creatively with collection objects, regardless of location, because this project is accessible via the museum's homepage. The main narrative is the keyboard with its multifaceted form, which is conveyed from organological and media science perspectives, based on research by e.g., F. Kittler and M. Haffke. We want to raise awareness of the important role of interfaces, their affordances, and their ubiquity in our world. Next to that, we try to raise interest in the processes of making music with today's different forms of keyboards. Five objects, a regal (ca. 1680), the hurdy-gurdy by G. Louvet (1733), the clavichord by J.G. Horn (ca. 1795), a glass harmonica (ca. 1810), and the Mellotron (1972) with their different "keyboards" were sampled. The samples are playable in the permanent exhibition using small keyboards. A podcast series was produced for these instruments, and our digital museum guide was redesigned to be barrier-free and equipped with a special tour for this project. All named aspects are digitally accessible via our homepage. The content of the different aspects of this project has been developed in close cooperation with blind and visually impaired people. This

experience is particularly valuable for the design of future exhibitions. The next step will be to expand the project and present additional hands-on-models in the museum that also produce sounds/music. At the same time, other instruments with unusual keyboards, as well as VR-elements will be integrated into the project.

### San Colombano "No-Limits": An Inclusivity Project 360°

Catalina Vicens, Museo di San Colombano – Tagliavini Collection (Bologna, Italy)

Defined by its founder as a playing collection of historical keyboard instruments, the Museo San Colombano – Genus Bononiae opened in 2010 housing the collection of Luigi Ferdinando Tagliavini with the goal of making the sound of the restored instruments accessible to the public through concerts and conferences. A renewed museum direction has as one of its main aims to revise the meaning of the museum's accessibility and inclusivity. Since 2022, the rich concert programming for the valorisation of the musical heritage includes a yearly series dedicated to women composers and women's histories in music; innovative concert-development makes selected shows accessible and inclusive for people with visual and hearing disabilities thanks to the use of technologies and sign language interpreters. It has also launched a series of educational programs to make knowledge accessible through specialised masterclasses on historical instruments as well as offering a space for young instrument builders to carry out internships and conduct research. A new platform for engaging conservatory students in educational concerts for general audiences and schools, aims to actively involve younger generations in raising awareness of the material and immaterial musical heritage to a diverse audience. In 2023, an EU-funded project will make the permanent exhibition accessible to people with visual disabilities through the implementation of inclusive tactile maps and 3D models with interactive audio content. To further remove barriers, the digital and physical museum communication foresees the revision of the content using inclusive language, and museum guides will be trained for leading selected visits using Italian sign language.

### Welcome to Touch the Historical Sounds: The Accessible Visiting of Visually Impaired in the National Museum of Taiwan History

Chia-Yi Lin, National Museum of Taiwan History (Tainan City, Taiwan)

The National Museum of Taiwan History first opened in 2011 with the mission to research Taiwanese history. A second opening in 2021 saw the renewal of the permanent exhibitions and the construction of seven touch object areas. The new permanent exhibition devoted greater attention to multiple perspectives on historical events in narratives, and displayed more historical sounds such as folk ballads, political songs, and field research by anthropologists. In order to develop the learning resources of touch-object areas for the visually impaired, we cooperated with special education experts, frontline staff and visually impaired people to develop Braille interpretation boards, large print guides and an audio description guide. When we designed the audio description guide, we specifically explained the historical meaning of each touch-object area and connected this to the surrounding historical sound materials to allow the visually impaired visitor to construct a diverse sensory object memory. At the same time, we planned a series of "visually impaired visitor reception services" courses to help frontline staff understand the skills of receiving visually impaired visitors and the application of the learning resources. Compared with the touch-objects, the historical sound materials in the permanent exhibition are not easy for visually impaired visitors to find. Therefore, we connected the historical sound materials and touch-object areas in order to create a multi-sensory experience for the visually impaired visitor. Our intention was to open up points of

connection between visually impaired visitors and our historical sound collection, so that the museum's historical sound collection can better facilitate speculation and the inheritance of knowledge for the visually impaired visitor.

### Delivery of Museum Experiences for Social Inclusion: Case of a Long-Running Outreach Programme of Hamamatsu Museum of Musical Instruments

Sawako Ishii, Hamamatsu Museum of Musical Instruments (Hamamatsu, Japan)

As defined by ICOM, museums are open to the public. In reality, users are usually limited to those who have means to visit, or originally have an interest in their collection. For example, without parents or teachers who would provide individuals with the opportunity to visit, school children are less likely to benefit from museums than adults. Hamamatsu Museum of Musical Instruments has sought ways to make its collection and activities accessible to more diverse groups of people. This paper introduces the outreach programme held in elementary schools as one of the attempts that the museum has facilitated for more than twenty years. This programme has been successful, leading to a lower threshold for visiting the museum. Since 2000, Hamamatsu Museum of Musical Instruments has worked on the outreach programme named "Moving Museum of Musical Instruments". Following the concept of introducing various cultures and lives through musical instruments around the world, museum staff visit elementary schools in the city and lecture about musical instruments from various areas and countries. Each instrument is demonstrated and introduced in connection with such topics as aesthetics, natural environment, ways of living, etc. This programme enables children to encounter and play with real musical instruments, which in turn facilitates a deeper understanding of cultural and natural diversity in the world. This experience generates further curiosity and often leads participants to visit the real museum. "Moving Museum of Musical Instruments" is developed not only for those who already feel a connection with music but also for those who do not. Therefore, it has the potential for more diverse use. Although some aspects of the targets, contents, and approach may benefit from modification, the museum believes this long-running programme is a hint to connecting a broader group of people with the institution and its collections.

### Project "Beethoven is Black": A Policy for Cultural Diversity and Equity

Jurn Buisman, Museum Geelvinck (Amsterdam / Heerde, The Netherlands)

Music is an essential part of our cultural identity and musical instruments, as a determining means of producing music, form an integral part of this. Museum Geelvinck is a historic house museum and stewards the largest collection of stringed keyboard instruments from the 18th and 19th centuries in The Netherlands. As a historic house museum, it is strongly connected with the Dutch colonial past and, therefore, cultural dialogue in general and especially transatlantic slavery in relation to the Dutch colonies in Suriname and the Caribbean have always been a common thread within our museum's exhibition policy. For instance, in 2013 we organised a ground-breaking exhibition about traces of transatlantic slavery in Amsterdam. Hence, our interest in ethnomusicology, as well as historically informed performance practice. Commonly, classical music is regarded as a universal value. Black Lives Matter and the subsequent fierce debate it has generated within the global community of ethnomusicologists, has led us to consider an underexposed aspect of our collection. The piano has found acceptance in almost every corner of the world; it has become part of popular music genres; classical music is taught and appreciated globally. However, this is inextricably linked to European expansion in the past centuries and the Western cultural hegemony of today. Western music has largely supplanted the great diversity of traditional art and folk music. Where

traditional music genres have been assimilated into popular music, these have been appropriated by the Western music industry. Today, traditional non-Western art and folk music are dismissed as world music, while classical music is commonly validated as a higher art form. Within the professional classical and early music sector, musicians of colour are strongly underrepresented. This has prompted us to research and to address this phenomenon. My paper will explain this research and its findings, as well as provide some recommendations.

### Instrumental Women: Using Digital History to Tell Untold Stories About Women Instrument Makers

Jayme Kurland, George Mason University (Fairfax County, USA)

Should a lack of representative objects in our collections keep historians and museum professionals from telling important stories? Women have held and continue to play important roles in the instrument making trades, but relatively few musical instruments made by women are included in museum collections globally. We argue that digital history projects are an essential tool for museums to share yet-untold stories about women's history. In 2020, I created the digital history project "Instrumental Women" to illuminate the roles of women in the musical instrument making trades, past and present. The project includes a website maintained voluntarily by myself and Juliet Glazer. The site hosts a global database of contemporary female makers and restorers. The website additionally includes a reference page to compile scholarly and industry secondary sources that engage these women's historical and contemporary practices. This presentation will serve as the launch of the project's second phase, a database of historical female musical instrument makers and representative instruments in museum collections. The database will engage museum professionals by employing a crowdsourced survey requiring collaboration and input from museums with representative collections. Future site content will include the online publication of oral history interviews with contemporary makers, an interactive timeline, and digital instrument exhibitions. Instrumental Women aims to serve as a resource for museums, musicians, scholars, and collectors looking to represent and amplify the presence of women in the musical instrument making trades. The project demonstrates that digital, web-based technologies are promising tools for using our collections, but also highlights the gaps within them to tell important stories about women's history in museums.

### Planning Inclusive Exhibitions, Participating in Ethical Returns, Creating Access to Collections, and Uplifting Lesser-Known Histories with Grant Funding at the Smithsonian

Timothy Anne Burnside, Hannah Grantham, Krystal Klingenberg, Steven Lewis, Dwandalyn Reece, John Troutman, The Smithsonian Institution (Washington D.C., USA)

The Smithsonian Institution is a museum, education, and research complex in the United States of America comprising 21 museums, research centres, and a National Zoo. Founded in 1846 with a mandate from Congress to increase and diffuse knowledge, the Smithsonian has grown to be one of the largest research institutions in the world. Global musical heritage is among the many traditions preserved by the Smithsonian and can be seen, heard, and appreciated in a myriad of ways. Various units care for innumerable instruments, objects, books, archives, recordings, artworks, and films representing centuries of musical history. Smithsonian Music is an initiative led by a community of curators, educators, and programmers that promotes interdisciplinary research, programming, and interpretation of music collections across a variety of platforms. Smithsonian Music employs the musical resources at the Smithsonian to stimulate public engagement and create opportunities to incorporate music into cultural

education. In this wide-reaching panel conversation, members of the Smithsonian Music initiative from the National Museum of American History and the National Museum of African American History & Culture will gather in-person and virtually to discuss how musical collections are shared, interpreted, collected, and cared for at a national cultural heritage institution. After a brief introduction to Smithsonian Music and its ongoing work, members of the panel will address topics including planning inclusive exhibitions, participating in ethical returns, creating access to collections, and uplifting lesser-known histories with grant funding. The conversation will also touch on the Smithsonian's digitization efforts and how these have benefited musical resources. Attendees of this talk will get insights into how curators at the Smithsonian build music collections and use them to engage and inspire people while making space for critical conversation on issues affecting our nation and the world.

## Position Papers on Provenance Issues

***Keynote***

### Provenance Due Diligence Policy and Practice: Challenges for Musical Instrument and Music Collections

Carla Shapreau, Ansley K. Salz Collection of Stringed Instruments, University of California (Berkeley, USA)

Provenance, the record of an object's ownership and possession history, plays a pivotal role in evaluating the legality, authenticity, and value of cultural artefacts. It offers valuable evidence of lawful ownership, helping to avert potential legal, customs, and criminal complications while safeguarding institutional reputation. Consequently, thorough provenance research is indispensable for both acquiring new pieces and managing existing collections. Ownership disputes concerning cultural objects are multifaceted, spanning Nazi-era seizures, antiquities looting, illicit import and export, indigenous claims, and colonial-era acquisitions. The variances in laws concerning stolen property across different nations only add complexity to this issue. Institutions entrusted with preserving cultural objects for the public benefit must also consider provenance in fulfilling their stewardship duties, whether for acquisitions, loans, deaccessions, or restitution. Beyond the legal realm, provenance provides curators with a powerful tool for contextualising artefacts, uncovering connections to individuals, and shedding light on historical, political, cultural, and economic dimensions. Provenance evidence can validate an object's authenticity, assess its alignment with purported origins, and significantly influence its monetary value. Provenance research is an interdisciplinary endeavour encompassing historical documents, records, contracts, and physical markings on objects. It necessitates collaboration across multiple fields, often involving scrutiny of Nazi-era victim claim files, sales records, auction records, and archives related to dealers, makers, and restorers, as well as genealogical research, among other resources. Nonetheless, challenges persist in provenance research. These encompass the absence of digitised, publicly accessible archives, gaps in evidence stemming from historical factors like record destruction during wartime, and the lack of a centralised database dedicated to documenting losses of musical instruments and related items. While respecting privacy and data protection regulations is paramount, it is equally vital to strike a balance that allows researchers access to provenance information, especially when investigating sensitive periods such as the Nazi era. Despite these challenges, the significance of provenance research remains unwavering in assessing an artefact's history, authenticity, and legal status. It serves as the cornerstone for ethical acquisition, preservation, and exhibition practices.

### Provenance Research Focus: Confiscation of Cultural Assets in the Soviet Occupation Zone and the GDR Between 1945 and 1989

Heike Fricke, Research Center DIGITAL ORGANOLOGY, Leipzig University (Leipzig, Germany)

The German Lost Art Foundation states that "research continues to be inadequate on the history of the GDR's cultural, economic and social policy" and funds provenance research at the Musikinstrumentenmuseum der Universität Leipzig. This research deals with two different aspects of the history of the GDR: the so-called "Schlossbergungen" are connected with the "land reform" carried out in 1945/46 in the territory of the Soviet occupation zone and later the German Democratic Republic, in which landowners who owned more than 100 hectares of land, as well as owners of smaller farms who were classified as war criminals and NSDAP members, were expropriated without compensation. This measure also affected members of the Saxon nobility. The families were also expelled from their former estates, and in some cases interned. The cultural assets left behind were confiscated by the Saxon state administration and distributed to cultural institutions. The so-called "Umsetzungen" are connected with collections from museums and cultural institutions of the GDR. With the aim of raising the profile of museums in the GDR in terms of their holdings, a cultural policy initiative was taken in 1959/1960 that redistributed historically grown collections and official responsibilities. In the process, the Musical Instrument Museum of the Karl Marx University also took on state tasks in the administration, safekeeping, and utilisation of historical musical instruments, in close cooperation with ministries and authorities of justice, finance, culture, foreign trade or state security. The areas of activity, especially on behalf of the Ministries of Foreign Trade and State Security, were outside the usual and now expected scientific metier of a university museum. For three decades, individual objects or entire collections were transferred to Leipzig with the intention of expanding the holdings quantitatively and raising the international profile of the Museum of Musical Instruments.

### Mosaic Pieces in Biographies: Provenance Research on Musical Instruments, Acquired by the Rijksmuseum Between 1933 and 1945

Lea Grüter, Hester Kuiper, Rijksmuseum (Amsterdam, The Netherlands)

Research on the objects in its collection is one of the Rijksmuseum's core tasks, and their provenance is part of this. As a public institution, the museum strongly believes that the results of this research should be accessible to everyone. Hence, since 2012 a professional team of about five full-time provenance specialists have been investigating the ownership history of objects that were involuntarily removed from Jewish possession under pressure of Nazi persecution. We recognise that this research started late and wish to contribute to the restoration of legal rights and to the historical memory of the Second World War. The aim of the research is to uncover instances of theft, confiscation and sale under duress from the Nazi regime and make them public as soon as possible. In addition, we want the human stories, the family histories that emerge from this research to be told in the museum and to be given a natural place in the chronicle of The Netherlands' own history. The Rijksmuseum displays physical objects and makes visible their various and varied stories. Accounts of the life of the objects' previous owners, of the people who were persecuted and murdered during the Second World War, are part and parcel of this.

### Producing for the Enemy: A Preliminary Look at the La Couture-Boussey Manufacturing Industry during the Occupation

Emanuele Marconi, Le Musée des instruments à vent (La Couture-Boussey, France)

The village of La Couture-Boussey (Normandy), the main centre for French woodwinds production, was occupied by the German Army between 9 June 1940 and 21 August 1944. Many companies had just reconquered a market heavily impacted by the Wall Street crisis that started in 1929 and that continued in the following years. Some, such as Robert Malerne, were founded during these years (1931). In La Couture-Boussey and the neighbouring villages (Ivry-la-Bataille, Ézy-sur-Eure, Garennes-sur-Eure), many companies (out of the almost 30 known) seemed to have been active during wartime: Leblanc, Martin Frères, Malerne, Thibouville-Cabart never ceased their activities. The loss of the large majority of the local companies' archives is a gap almost impossible to overcome. Nevertheless, a few documents in the Departmental archives and the recent acquisition (2022) of the archives of the Thibouville-Cabart company shed light on the manufacturing activities during the Occupation. The example of the Thibouville-Cabart company, subject to forced labour, can be representative of other manufacturing companies' situation during the 1940–1944 period, including perhaps other production centres in Europe. A few questions arise: how many instruments were produced in the La Couture basin during the Occupation? What were the German needs in terms of woodwinds? How could a single country absorb the whole production (even if reduced) of the French village? Were the instruments branded with the traditional company mark or with German army marks? To answer some of these questions, the paper will present the existing new documents and discuss the spoliation approach for La Couture-Boussey produced instruments: not one or a few easily traceable objects but hundreds or more mass-produced ones.

### Accessing the Inaccessible: Putting "Unlocated" Instruments Online

Pascale Vandervellen, Musical Instruments Museum (Brussels, Belgium)

During the year 2022, two instruments previously missing from the MIM's collections – a high treble viol by Pierre Saint-Paul dated 1742 (inv. no. 1395) and an organ pipe from the Abbey of Moissac listed in the inventory as from the 16th century (inv. no. 0463) – were spontaneously presented to the museum by their current "owner". These restitutions have led the museum staff to reconsider with more attention the problem of "unlocated" instruments - at least some 150 objects, many of which disappeared from the museal collections during the 1970s. The online database of the Royal Museum of Art and History's collections is indeed laconic, if not silent, about vanished instruments... If thefts of items from museums are a taboo subject, shouldn't it be made public enough to put an end to their concealment? Wouldn't a coordinated approach between all the museums of musical instruments be welcome? At the MIM, this reflection is being carried out simultaneously with the creation at a federal level of a centre of expertise on the provenance of works of art.

## Sound Accessibility

### Music Museums in the Age of 3D Reproduction: Access, Potential, Challenges

Gabriele Rossi Rognoni, Royal College of Music Museum (London, UK), Gabriele Ricchiardi, University of Turin (Turin, Italy), Federico Xiccato, Freelance Engineer (Treviso, Italy)

3D scanning and printing are now a common element of everyday life. Despite their origins in the 1960s (for scanning) and 1980s (for printing), it is over the past

decade that the technology has moved out of its medical and industrial applications to become affordable to small institutions and even households. Over the same period, the potential of this technology for music making has been extensively explored leading to the development of new shapes and models, to the production of affordable instruments, as well as – in an increasing number of cases – to the production of copies of historical ones. For museums this might be a veritable game changer in research and outreach: the contained cost and easy reproducibility of some instruments might address the long-lasting tension between conservation and usage, copies might be used to test interventions in conservation or in 3D virtual conservation and they can transform the possibility of tactile and experiential access to collections for a variety of audiences including professional musicians, children and people living with disabilities. Several music museums already developed independent projects in 3D printing and others have made their scans available to external endeavours. However, with over 75 different materials available for prints and a variety of measuring/scanning and printing techniques, results can vary hugely in terms of cost, reliability, and suitability for different purposes. This paper will present an overview of the current approaches to 3D printing, gathering for the first time comparative data which can be further used to develop a common approach to this technology among music museums. It will also present a new research project launched by the Royal College of Music Museum – with the support of the Wolfson Foundation and UK–DCMS – to develop 3D prints for professional musicians as well as testing their potential to reach new audiences.

### 3D Digitisation and Digital Access for Musical Collections: An Overview of the Process, Challenges, and Success of Charlie Parker's Alto Saxophone

Joseph Aaron Campbell, The Smithsonian Institution (Washington, USA)

Musical instruments are complex physical objects that have several challenges for digitisation, exhibition, and access. By utilising various 3D capture processes, we can not only create an astounding digital surrogate for research but also create new forms of engagement, digital access, and accessibility. So where do we start when approaching 3D digitisation for musical collections? What are the possibilities for 3D capture? How do we process the data for public engagement and access? The Smithsonian Institution's Digitization Program Office would like to present the process, challenges, and success that resulted in the published 3D representation of Charlie Parker's Alto Saxophone. Like many musical objects, this highlight of the collection posed many challenges for 3D capture and processing due to the intricate, metallic, and mirror-like surface properties. This workshop will walk through the workflow and processes for such a complicated and rich musical object. This includes the digital imaging capture process, post-production, and the necessary 3D processing steps to produce the final 3D model. We will also take a brief look into various 3D capture tools used for digitisation of musical collections here at the Smithsonian. As well as the Smithsonian's open-source automated 3D derivative pipeline, and successful online publication and accessibility using the Smithsonian's Voyager online viewer.

### Finding and Reconstruction of the Warder Flute

Roberto Bando (The Hague, The Netherlands), Jonty Coy, University of Leiden (Leiden, The Netherlands), Hans Huismann, RCE (Amsterdam, The Netherlands)

The reconstruction of the Warder flute is a case where collaboration between a research institution, a musician and an instrument maker made the sound of an important instrument that is no longer playable, accessible again. This renaissance woodwind was recovered from the Warder shipwreck at the bottom of the lake

Markermeer (NL) by the Cultural Heritage Agency of The Netherlands' (RCE) archaeology diving team in 2018. The ship's wood is dendrochronologically dated to about 1534 AD. The flute is made of boxwood, and it is equipped with a brass tube on the mouthpiece-end. Despite being submerged for nearly 500 years, it survived in good condition. This woodwind is among the oldest surviving transverse flutes in the Western culture, predating for instance the Nova Zembla flute (ca. 1590, now at Amsterdam's Rijksmuseum) by several decades. Probably the earliest flute with a metal tube at its top end, it likely matches the depictions found in Virdung (1511) and Agricola (1529). The printed text on a fragment of paper that miraculously survived, stuck between the metal tube and the wood of the flute, was studied by Willem Frijthof and indicates a German or Swiss origin. Unplayable due to deformation, damage and fragility, a revival project coordinated by Hans Huisman (Senior Researcher at RCE) took place in 2019–2020. After its conservation and restoration by Restaura in Heerlen, renaissance flute specialist and player Kate Clark assessed the instrument's historical context and prototype creation, while flute maker Roberto Bando studied, measured, and made successful reconstructions of the flute, helped by CT scans by Dominique Ngan-Tillard (TUDelft). One replica is now at the Archaeology Museum "Huis van Hilde" in Castricum, The Netherlands, a second one was donated to The Hague's Royal Conservatory. A project with a similar reach concerning the Nova Zembla flute is also being considered.

### Synthetic Materials in Traditional Folk Music Instruments: Functionality, Feelings, and Ideologies

Madeleine Modin, Svenskt visarkiv – Centre for Swedish Folk Music and Jazz Research (Stockholm, Sweden)

The building of folk music instruments is entangled with many choices concerning their design. Historical authenticity, playability and aesthetical matters are only a few of all the considerations at play. In the choice of materials, the maker not only considers the above-mentioned aspects, but also takes prices, accessibility, and durability into account, as well as notions of certain materials' value with regards to morals and ideologies. Who is building the instrument and who is going to play it are also of great importance in the choices of materials. In the revival movements surrounding traditional music, the approach to a material like plastics is complex with sometimes conflicting ideologies of traditionalism, antiquarianism, nationalism, environmental sustainability, social equality and an ideal of do-it-yourself. In this paper the choices and approaches related to synthetic materials in folk music instruments – materials that bring many of the considerations above to a head – are examined. The examples are primarily drawn from the revivals and contemporary making of Scandinavian traditional instruments, such as the Swedish bagpipe, with a revival process starting already in the 1940s, but with a strong development and dissemination from the early 1980s. The results are primarily based on interviews, makers' and players' writings on homepages and communities on social media as well as archive materials. The study is part of the research project Intangible instrument building as folk musical materialisation conducted at Svenskt visarkiv (Centre for Swedish Folk Music and Jazz Research), part of the Swedish Performing Arts Agency, which also includes the Swedish Museum of Performing Arts.

### Unique Findings of Traditional Musical Instruments in the 21st Century: Dižā Kokle in the Museum and a Replica for the Community

Rozīte Katrīna Ponne, The Ethnographic Open-Air Museum of Latvia (Riga, Latvia)

In 2019, members of the Riga Latvian Society (RLS) accidentally discovered a unique musical instrument and with it a whole musical collection of traditional Baltic

psaltery instruments. These instruments, created between 1925–1947, were made by master, soldier, and musician Eduards Krauksts (1896–1969) and have been lying in the attic of a mansion for almost 70 years. The report tells about the experiences during 2020–2022 when members of the RLS Folklore Commission started the project "Dižā kokle" – the aim of this project was to create a playable replica of the most interesting example of this collection. The instrument is called dižā kokle or bāgs in Latvian and is the biggest instrument (2.07m tall) of its kind in Latvia and possibly the whole region, created in 1947. The report reveals the process of how the master instrument maker Rihards Valters created a playable replica of dižā kokle. Working closely with the Baltic psaltery instruments community in Latvia and its best young musicians, a new art of playing this instrument is being created, because there are no sources describing the way this instrument was played. The report provides an example of cooperation between the community and the museum. Since February 2023, the original collection has been taken over by The Ethnographic Open-air Museum of Latvia, but the playable replica of dižā kokle is still actively used and currently is in the hands of the RLS community. During the presentation about the process of the creation a special exhibition of the new collection of musical instruments will be outlined. The special exhibition opened in June 2023 and will also include playable instruments made by local makers for the museum's visitors.

### Historical Keyboard Instruments in Italian Public Collections: A Kaleidoscopic Approach

Massimiliano Guido, Pavia University (Cremona, Italy)

This paper will discuss the situation in public museums around Italy with regards to historical keyboards. In recent years, some of them have started or are about to start documentation and restoration campaigns, with strong economic support from Next Generation EU. Elaborating on direct experiences with institutions that have a research agreement with the Conservation and Restoration Programme at Pavia University, I will examine several case studies spanning from pure conservation to performance-oriented choices. Notwithstanding a rather strict national law, the ways in which musical instruments are treated are quite diverse. In many cases the decision is left to the personal intuition of the instrument curator (if there is one), or the whimsical direction of the board of antiquities (that has no musical instrument expert in its governing body). From this survey two foci will emerge. First, the importance of generating a conservation plan that is a product of mediation between several contrasting ideas. Unpacking the complex entanglement between materials, building techniques, and sound production, is a necessary step to a better understanding of what an instrument is. There is a need to reframe the simplistic question of playability into a much more detailed (and universally comprehensible) picture. It is crucial to build up consensus within the museum staff and the several social groups that engage with the instrument. Preserving a sounding image of the artefact is often a way to overcome inconsiderate interventions on the original. Second, this survey will demonstrate the importance of developing new ways of documentation, and the role of building replicas as a way of preserving the historical object while experimenting with sound production. On this subject, the use of mixed- and virtual-reality environments is a frontier research field for understanding the dynamic behaviour of keyboards.

### Construction of a Facsimile After Jean II Denis's 1648 Instrument in Its First Musical State (Musée de l'Hospice Saint-Roch, Issoudun, France)

Florence Gétreau, Institut de Recherche en Musicologie – Bibliothèque nationale de France (Paris, France)

This unicum is the oldest surviving French harpsichord. It bears witness to the work of a famous dynasty of makers and musicians who worked in Paris. It has been kept in the Hospice Saint Roch in Issoudun's museum since the beginning of the 20th century and was identified in 1986 by the late Michel Robin. Protected as a "historical monument" in 1987, it has since been exhibited in the museum and studied by the maker and scholar Alain Anselm. In 2019, the association Clavecin en France, whose mission is the development of the harpsichord and in particular its teaching, has undertaken to entrust the strict copying of this instrument to the maker Émile Jobin. An advisory board was constituted to accompany this project in optimal conditions. My paper will present this project in the historiography of a long tradition of reconstructions, copies, and facsimiles in the field of musical instruments, notably developed by the Musée de la musique in Paris over the last three decades. The paper will highlight the exploration of forgotten French repertoires from the first half of the 17th century, especially by Marie Demeillez, harpsichordist and musicologist, notably supported by the Centre de musique baroque in Versailles and its publications. The presentation will therefore address the challenges of protection, restitution, and innovation from various perspectives, including research, musical and educational activities, and the museum's museography. These elements form the foundations of this initiative, which bring together public and private partners.

### Reconstructing a Reconstruction? The History of a Taskin Harpsichord and Its Restoration(s)

Olaf Kirsch, Carola Klinzmann, Museum für Kunst und Gewerbe Hamburg (Hamburg, Germany)

The Museum für Kunst und Gewerbe Hamburg (Museum of Applied Arts, MK&G) holds a French two-manual harpsichord in the Beurmann Collection of historical keyboard instruments. The object was passed off by an inscription by Pascal Taskin as a Ruckers from 1636 rebuilt by him in 1787. However, when the instrument was acquired by Andreas Beurmann in 1995, it became apparent that it was obviously not a "ravalement" of a Ruckers harpsichord, but an instrument built by Taskin in the 18th century. In addition, several inscriptions indicate extensive restoration work undertaken in the second half of the nineteenth century in the workshop of the piano builder Henri Herz in Paris, concerning technical features as well as the lacquer decoration. In a recent study and conservation project, the instrument could be examined in detail applying various scientific methods such as dendrochronology, X-ray, analysis of cross sections, FTIR-spectroscopy, et al. The aim of the research was to better understand the present state of the instrument, to attribute its features to different historic layers, to trace back the process of its construction and reconstruction, and to finally develop a strategy for an adequate conservation treatment on the basis of the examination. In the paper the intricate task of reconstructing the complex historical building- and rebuilding-process of the instrument will be discussed. An overview of the results of the technical investigation and the conservation treatments will be presented.

### Reconstructing the (In)tangible Heritage

Mirte Maes, Museum Vleeshuis (Antwerp, Belgium)

More than 50 years ago, in 1970, a fierce debate was launched during the CIMCIM conference at Museum Vleeshuis; should the Ruckers harpsichords be thoroughly

restored, or copied? Will it be possible to finally bring a successful outcome to this everlasting debate? Today, the Andreas Ruckers 1615 harpsichord has neither been restored, nor copied. A new approach, initiated by a harpsichord making project focusing on craftsmanship and intangible heritage, seems to offer a solution. Inspired by innovative projects in safeguarding intangible cultural heritage in Flanders, Museum Vleeshuis prepared a flowchart for the (re-)construction of a Ruckers harpsichord. It suggests neither a restoration, nor a replica or copy of the instrument. Instead, the proposed flowchart revolves around understanding the instrument, and safeguards the tradition of building according to Ruckers' techniques and mindset, as opposed to building a precise copy. Crucial to the instrument making process is the documentation and safeguarding of the craftsmanship and intangible heritage. Thus, the outcome of the project will be more than only a sounding instrument. More importantly, there will be extensive documentation of craftsmanship and intangible heritage. In addition, the heritage community will be more connected through and to the museum, and the craftsmanship will be spread across a diverse community of instrument makers, securing the future of the heritage. Museum Vleeshuis proposes this fresh attitude towards musical instruments in order to safeguard the intangible knowledge revealed by the instruments. The proposed flowchart and instrument making project can serve as a template for the safeguarding of diverse instrument making traditions and craftsmanship. It helps to engage young people and to encourage a regeneration of the craftsmanship, as well as to establish a prominent and interactive place for musical instrument making heritage in music museums.

### Reconstruction of the 1640 Ioannes Ruckers Virginal in the Rijksmuseum, Amsterdam. Interactive Ruckers Project Workshop

Tamar Hestrin-Grader, HoGent KASK & Conservatorium (Ghent, Belgium), University of Leiden (Leiden, The Netherlands), Manu Frederickx, Metropolitan Museum (New York, USA), HoGent KASK & Conservatorium (Ghent, Belgium), University Ghent (Ghent, Belgium), Frank Hollinga, HoGent KASK & Conservatorium (Ghent, Belgium), Mané van Veldhuizen, HoGent KASK & Conservatorium (Ghent, Belgium), Giovanni Paolo Di Stefano, Rijksmuseum (Amsterdam, The Netherlands), Paul van Duin, Rijksmuseum (Amsterdam, The Netherlands), Nouchka de Keyser, Rijksmuseum (Amsterdam, The Netherlands)

This project centres on one specific object, which has been in the Rijksmuseum collection since it opened in the 1880s. Belonging to the Koninklijk Oudheidkundig Genootschap, this 5-voet muselaar virginal, built in 1640, is attributed to the renowned Antwerp builder Ioannes Ruckers. This project is the result of a partnership between the Rijksmuseum, the Metropolitan Museum of Art, the School of Arts and Conservatorium in Ghent, and the University of Leiden. Object-centred research is sometimes used to isolate an object from its communities of creation, use, and care. We hope that through this project's transparency and open-ended nature, it will instead be a tool for reconnecting the instrument with its communities – past, present, and future. Fundamentally interdisciplinary by design, the project combines scientific analysis, historical research, and research-by-making on an equal footing throughout, so that specialists of many disciplines can co-create knowledge unreachable alone. But not only was it important that the research process be interdisciplinary, but also that the results be accessible and approachable to a wide variety of communities of care. To reflect the flexible and collaborative nature of the research, and to move away from the often-limiting paradigm of presenting only successful results in lecture form, we propose an interactive workshop. The aim would be to demonstrate a way of showing the layered and nonlinear complexities of the research process in a tangible, embodied, and dynamic way, as well as how it

can be made approachable for people of a wide variety of backgrounds, knowledge bases, and interests. A short introduction to set the scene, and then participants will be invited to explore "stations" devoted to different aspects of the research, each with a specialist to offer context and answer questions. These stations may include, for example:

- The completed reconstructed instrument (decorated, playable)
- The second partially completed instrument (internal construction, tools)
- Decorative mock-ups (reconstructing materials, decision-making process)
- Scientific data and processing (data interpretation as part of historical/ embodied research)

### The Conservation Treatment of the Clock Case of an Organ Clock produced by Charles Clay

Tirza Mol, Rijksmuseum (Amsterdam, The Netherlands)

In 2016, Museum Speelklok (Utrecht) acquired a prestigious organ clock which was produced in the late 1730s by Charles Clay in London. The oak carcass of the over-life-sized clock case is veneered with mahogany and ebony. It is ornamented with gilt bronze decorations and brass mouldings. The arches of the dome are framed by gilt bronze ajour screens. The clock dial is incorporated into a large copper plate elaborately decorated with sculpted silver elements in relief and an oil painting. The musical mechanism consists of an organ which plays a variety of airs by Georg Friedrich Händel (1685–1759). The Rijksmuseum owns an important mechanical organ made by Dietrich Nikolaus Winkel (1776–1826), who was active from 1800 in Amsterdam and delivered mechanical musical instruments to important Dutch families like the family Six. The organ is contained in a cabinet in the Empire style, which was strongly influenced in The Netherlands by the French King Louis Napoleon. When Louis Napoleon came to Amsterdam in April 1808, he chose the Amsterdam Town Hall for his Palace. An important furniture supplier for the Palace was the Amsterdam cabinet maker Carel Breytspraak (1769–1810). The conservation of both musical instruments and their cases was an excellent example of collaboration between institutes. While the clock, organ mechanism and organ pipes were treated by Museum Speelklok, the clock case and cabinet were conserved in the Rijksmuseum studios. This co-production is the focus of the paper.

### Ontology, Aura, and Access: "Presencing" Collections at Museum Speelklok

Claire McGinn, Museum Speelklok (Utrecht, The Netherlands)

The aura of a historical object – that special quality that might be argued to lend it museum-worthy status – is often linked to being one of a kind, to being "original", and to being very old. At Museum Speelklok, we want the mechanical instruments in our collections to be playable. A proportion of these were mass-produced; for other instruments, significant alterations were a routine part of their "authentic" working lives, such as mechanical street organs. But this does not change the fact that some of our collection items are very old and rare – or the fact that through the course of functional restoration procedures can be irreversible. We are in touch with the tensions this creates in terms of more conservation-focused perspectives on what the role of a museum actually is. The aura of an object (especially something rare, original and fragile) can lend it a certain unreachability. This unreachable quality is still sometimes seen as a defining characteristic of museum objects, which creates interesting problems when we start to think about increasing access: do all museums really want their collections to be as accessible as possible? Is there a vested interest in preserving a certain mysterious distance? Focusing on maintaining the original

physical form of an object is prioritising one particular "mode of existence" – possibly above other, also potentially meaningful, modes. Drawing on Antoine Hennion's ideas about multiple ontologies, this paper will explore how certain approaches to restoration and reconstruction can offer invaluable routes to "presencing" (or in other words, making accessible) some of the most important aspects of our collections. This ontological framework allows us to view such an approach to restoration not as a devaluation of an object's historical status, but rather as a re-valuation of one of its many possible modes of existence.

### The Componium: New Insights

Wim Verhulst, Musical Instruments Museum (Brussels, Belgium)

Once upon a time there was an orchestrion called the Componium, the first aleatory instrument ever built. The instrument, built by Diederich Winkel, premiered in 1821 in Amsterdam and soon became the talk of the town in Paris. Unfortunately, its success did not last long. After a brief resurgence in London in 1830, the Componium disappeared into the mists of time, until the Brussels Instrument Museum bought the instrument from the French luthier Auguste Tolbecque in 1879. In 2021, the Componium acted as the guest of honour at the exhibition "Choice or chance" in Museum Speelklok in Utrecht (NL). This was the opportunity to reconstruct and rewrite the fascinating history of this unique instrument. On the one hand, recent research allowed for nuancing and correcting the existing "biography" of the instrument. On the other hand, the Componium turned out to be an excellent example to advocate forgoing restoration to reconstruct its sound. That is why, in the context of the exhibition in Utrecht, it was decided to build a scale model of the Componium. As the emphasis of the copy was not on the sounding result, the making revealed a lot about the element that makes the Componium unique among peers: the random switch mechanism.

## Digital Accessibility of Musical Instrument Collections

### Digital Accessibility in the 21st Century and the Role of Information Systems in Museums and Collections of Musical Instruments

Cláudia Furtado, Universidade Nova de Lisboa (Lisbon, Portugal)

Museums are, by definition, responsible for collecting, preserving, and disseminating all information relating to their collections. If, at first, they were seen as static deposits for objects, today their role involves much more than that. The public itself has become more participatory and has sought different forms of access to cultural objects. Online and interactive access has created new opportunities for museums to reach other types of audiences, while at the same time being able to expose their collections, which would otherwise be confined to the physical spaces of the museum. The digital world, with all the transformation that comes with it, forces museums to adapt their programs and strategies to the expectations and behaviour of the public. For this reason, the future of museums undoubtedly involves the adoption of digital technologies to carry out the intrinsic tasks of a museum, including the field of documentation. The documentation and inventory of objects in a museum context are fundamental points in the management of collections, as they establish links between all the museological functions that are supposedly operationalised through the operation of museums. In the case of musical instruments, information systems are of particular relevance: they make it possible to interconnect, for example, information on the use of instruments with their preservation conditions and sound documentation, as well as establishing relationships between different construction

techniques and different geographical contexts. The main objective of this proposal is based on a reflection on the relevance of information systems in museums and collections of musical instruments. The methodology applied to achieve this objective is based on the study of the state of the art, from the reading of the references inherent to this theme, focusing on the different projects and platforms that have been developed since the beginning of the century. It is also interesting to address in this reflection some Portuguese case studies.

### "Breaking the Glass": Making Historical Musical Instruments Accessible

Ulla Hahn Ranmar, Marie Martens, The Danish Music Museum (Copenhagen, Denmark)

Recently, the Danish Music Museum embarked in an action learning pilot project to develop different ways of making museum objects accessible to the public. Through digital-analogue interactive installations the museum aims at providing the public with an experience of "breaking" the showcase glass and thus interacting directly with the silenced historical musical instruments on display. Inspired by new museology and through experience-based knowledge from the museum's ongoing interpretation and hands-on activities, the project intends to give visitors with little or no musical background a multisensory experience of the often estranged museum objects by motivating their curiosity to investigate, connect and engage with the historical objects. Furthermore, the project will provide valuable feedback to The National Museum of Denmark's overall "the audience first" strategy. For a number of years, the Danish Music Museum has collaborated with Aalborg University, Department of Architecture, Design and Media Technology. This fruitful interdisciplinary partnership has resulted in experiments and installation prototypes, and the current project has grown from these iterations. The present project is funded by The Augustinus Foundation whose main aims are to support classical music and museums. The paper will provide an insight into the project's hypothesis and methods and share the results, including test results of the first part of the pilot project: the development and making of two interactive installations focused on the museum's violino arpa and glass harmonica.

### Improving Accessibility through Interactive Virtual Representations: The Multimodal Virtualisation of a Mechanical Disk Player and Its Media

Dominik Ukolov, David Fuhry, Germán Camilo Salazar Lozada, Franziska Bühl, Research Center DIGITAL ORGANOLOGY, Leipzig University (Leipzig, Germany)

The virtual representation of musical instruments is currently mostly limited to photos and recordings, providing a predominantly static experience rather than interactivity. This form of representation makes accessing the objects less intuitive and potentially limits the available visual perspectives of interest. These problems can be addressed by creating multimodal datasets and integrating them into Virtual Acoustic Objects (VAO), a standard being developed for interactive virtual representations of musical instruments. This standard aims to enable the simultaneous visual exploration of an object in three dimensions, integrating its individual acoustic and organological data along with any additional related information. Furthermore, through an extensive framework with multiple interfaces, VAOs are equally suitable for scientific, museal and creative applications, greatly improving virtual access to musical instruments. To demonstrate the processes of generating such a virtual representation and its utilisation in museal contexts and organological research we virtualised a mechanical disk player and its respective cardboard disks. Our interdisciplinary approach further extended the virtualised instrument with findings from multiple perspectives of organological research. This includes insights resulting from the analysis of the cultural historical context of the object and its repertoire as well as research based

on original patents into the mechanical functionality of the instrument, allowing it to be reconstructed and integrated into the photogrammetric model. We will further demonstrate the process by which the musical action signals were extracted from simple photographs of the cardboard disks and converted into MIDI files, which can be played on any virtual object.

### Be-MUSIC – A Plurivocal Access to Belgian Musical Heritage: Issues of Vocabulary and Intellectual Property Rights

Rémy Jadinon, Dieter Van Hassel, The Royal Museum for Central Africa (Tervuren, Belgium), Saskia Willaert, Musical Instruments Museum (Brussels, Belgium)

Databases are fundamental cornerstones for research and understanding in the field of musical traditions. The Be-MUSIC project will bring together the digitised music collections (instrument photos, field photos, records, and sound recordings) housed at the Royal Museum for Central Africa (RMCA) in Tervuren and the Brussels Museum of Musical Instruments (RMAH–MIM) into a new, multilingual information platform for musical heritage. Both collections are known for their history, diversity, quality, and quantity. The RMCA holds 9110 instruments from Central Africa, the Americas and Oceania and the RMAH–MIM holds 11,400 instruments from all continents dating from the 16th century to the present day. The Be-MUSIC project aims to strengthen Belgium's role as a centre of excellence for the study of musical instruments. In this presentation, we will look at the issues of authorship and intellectual property rights of sound archives, the standardisation of the vocabularies backing the existing diversified datasets and their alignment into dynamic thesauri in view of decolonisation processes, and the creation of a national platform with crowdsourcing tools linked to international platforms (MIMO). Through the Be-MUSIC tool, we will address the accessibility of musical instrument collections to a wider and more diversified public.

### "I Need an F Alto Recorder Now!": University Collections Between Accessibility and Documentation

Kathrin Menzel, Schola Cantorum Basiliensis (Basel, Switzerland)

Approaching a renovation and rebuilding phase called "Campus 2040", the playable collection at the Musik Akademie Basel Campus is facing certain challenges. While the different institutions on the campus managed their sub-collections in their own evolved systems and tools, it became clear that a more holistic concept is needed. In preparation to pack up more than 1500 instruments into boxes for transport to intermediate locations, while teaching and performing shall continue, a concise plan is indispensable. Not only for the move itself, but also for the new buildings to come and the requirements of musical instruments. Main questions such as "how and where are instruments played?", "what conditions can and must be provided for while instruments are used or stored?", "how is the access organised?", "what data do we need for our daily business?", and "where and how do which groups of people get the data they need?" lead the planning. Leaving behind excel sheets and handmade databases, the 21st century is coming into play. There is the added responsibility of curating over 40 da braccio instruments from the 18th century side by side with over 200 recorders, all copies from the last 50 years, all in different intensities of documentation. The demand for information is versatile in such different "user groups", including students, movers, sponsors, teachers, architects, researchers, accountants, and instrument tuners.

# Transfer of Collections from Private to Public Spaces

## Transfer of Collections from Private to Public Spaces

Zami Ravid (Metula, Israel)

It is true that some private collections consist of used guitars, darbukas, and old school recorders. However, there are other collections that include significant instruments. The challenge with these collections is that their longevity is tied to the lifespan of the collector. One such example is the valuable pre-Columbian collection, which appeared in the CIMCIM register about 30 years ago and is now part of my private museum. Unfortunately, no music academy or museum has agreed to accept it, even when offered for free, putting it at risk of being lost. Undoubtedly, this presents a complex problem. Some collectors attach great importance to commemoration and require specific accommodations, such as a dedicated exhibition room. Others have an "everything or nothing" approach, further complicating the situation. Additionally, financial constraints come into play. Not everyone can allocate their income to support other musicians. On the other hand, we are aware of the space and financial limitations faced by museums. Considering this, I will discuss various aspects from the perspective of a standard collector who possesses around 300 instruments, some of which hold significant value. The primary concern is how to avoid the worst-case scenario, which, for myself, would involve gradually selling off the truly important objects to sustain my livelihood. However, such an approach would inevitably diminish the collection's overall value over time. It is imperative that we find a solution to preserve important instruments from private collections while also safeguarding the associated documents, knowledge, sound recordings, and more. We must establish mechanisms that not only protect the instruments themselves but also uphold the rich cultural heritage they represent.

## A Private Collection Made Accessible to All: The Utley Collection at the National Music Museum

Sabine Klaus, The National Music Museum (South Dakota, USA)

The Utley Collection of about 650 high brass instruments led a dual existence for over 20 years. Donated to the National Music Museum in 1999, ca. 90% of this private collection of Drs. Joe R. and Joella F. Utley remained in the Utley residence in South Carolina until spring 2020. In return, the National Music Museum gained a satellite facility in the Southern United States with limited access to visitors over two decades. The move of the Utley Collection from the collector's home in South Carolina to the new Center for Preservation and Research (CPR) at the National Music Museum in Vermillion, South Dakota, opened in 2019, commenced the final stages in this exceptionally long transition from a private to a fully accessible public collection. Transferring the entire Utley Collection to Vermillion allowed the inclusion of over 100 instruments into a new display concept, aimed at the general public. The permanent galleries at the National Music Museum's renovated and expanded Carnegie Building, scheduled for a phased opening starting in August 2023, will present selected holdings from the National Music Museum's collections in three themes: 1. The Roles Instruments Play in Our Lives; 2. Musical Instruments as Innovation; 3. The Art and Craft of Musical Instruments. The Utley Collection is now available for researchers, can be utilised for special displays in a gallery designated for temporary exhibitions, and will be used for teaching in the Master of Music programme with Specialization in the History of Musical Instruments at the University of South Dakota. The completion of this transition from private collection to public museum illustrates how the interests of one man can be made relevant for a great variety of audiences.

### Preserving Historical Instruments: The Jeremy Montagu Collection at Northumbria University

Rachael Durkin, Northumbria University (Newcastle, UK)

In 2022, the musical instrument collection, library, and archive of Dr Jeremy Montagu (1927–2020) was donated to Northumbria University in England. Comprising over 2,500 musical instruments, with around 75% from non-Western cultures, this vast private collection documents music-making across global borders, from ca. 1200 BCE to the late 20th century. As the collection has been preserved in its near entirety, and accompanied by its library and archive, this "single entity" profiles both the life's work of Jeremy Montagu, and the act of scholarly collecting in the 20th century. The collection arrived at an institution with no existing holdings of historic musical instruments and no purpose-built museum, but fortuitously coincided with a juncture in Northumbria's wider collection planning. Jeremy Montagu was curator of the Bate Collection, fellow of Wadham College (Oxford University), and former president of the Galpin Society. Jeremy Montagu's collecting was spurred by his work at the Horniman Museum (London) in 1961, and from there he amassed his collection for teaching, research, performance, and to illustrate his many publications. In 2020, Jeremy Montagu contacted me to see if Northumbria University would accept his collection in its entirety so that it may continue to be used for the purposes he intended. The Montagu Collection of Global Musical Instruments in its new home now presents a significant opportunity for Northumbria University, the community of the North East of England, and the field of organology at large to reimagine the role, function and display of a musical instrument collection. In my paper, I will first provide an overview of this exceptionally diverse collection. I will then outline the route to acceptance of the offer against the context of a modern British university's priorities, and the challenges of bringing a private collection into public hands. Finally, I will outline our vision for the collection, with a view to gather valuable input from CIMCIM colleagues.

### The Legacy of the Jaap Kunst Archive in the National Museum of Indonesia: The Prospect of Development and Utilisation

Nusi Lisabilla Estudiantin, Ministry of Education, Culture, Research, and Technology (Central Jakarta, Indonesia)

Indonesia is a diverse multi-ethnic country known for its various forms of traditional music and art. For nearly 350 years, Indonesia was colonised by the Dutch. During the Dutch occupation, there were many experts who conducted research in the Dutch East Indies (Indonesia) from political, economic, social, and cultural aspects. One of the researchers was Jaap Kunst. Jaap Kunst (a Dutch ethnomusicologist) collected the information, documented photos and films, recorded traditional music, and collected a variety of musical instruments from various regions in the Dutch East Indies (Indonesia), from Sumatra to Papua, which were stored in the musical archive space in his house. Currently, the Jaap Kunst collection is spread across several countries, such as Indonesia, The Netherlands, and Germany. In Indonesia, the Jaap Kunst collection is stored in the National Museum of Indonesia. Since Indonesia's independence in 1945, the Jaap Kunst collection has been stored in the museum storage, without any notes. In 2017, the Indonesian government issued Law No. 5 of 2017 regarding the Advancement of Culture in order to protect, utilise, and develop Indonesian culture. The National Museum of Indonesia, as an institution that stores the legacy of the Jaap Kunst archive has been given a challenging task. Not just in terms of storing, protecting, and conserving, but also how to utilise and develop this archive for the advancement of culture as well as the development of science.

### The Transatlantic Adventure of a Rare Collection of Instruments: From New England Conservatory's Storage to a Musical Instruments Museum in Bursa, Turkey

Mehmet Ali Sanlıkol, New England Conservatory of Music (Boston, USA)

The main inventory of the Nilüfer Municipality Dr. Hüseyin Parkan Sanlıkol Musical Instruments Museum (MEM) consists of about 300 instruments collected from around the world by Parkan Sanlıkol, who was a major supporter of musical activities and organisations in Bursa, Turkey. Having stayed in one of the larger rooms of his house until his passing in 2015, Sanlıkol's collection did not require major restoration efforts. Indeed, with little work, the museum was able to present a rich collection to visitors when it opened in August of 2020. Shortly after this opening, the project director and curator of MEM, Mehmet Ali Sanlıkol, who is also a professor at the New England Conservatory (NEC), was approached by NEC's administration about their wish to donate to MEM a number of historical instruments that were being held in the storage area of the school for several decades. NEC's collection started to be compiled shortly after its opening in 1867 by its founder Eben Tourjee, whose desire was to create a similar collection to those found in musical conservatoires in Paris, Brussels, and Berlin at the time. In fact, while in 1883 a large number of western and non-western musical instruments were already on display at NEC, significant additions were later made to the collection. These include the instruments that were first exhibited by the Japanese government at the New Orleans World Exposition in 1885, as well as a small collection of non-western instruments in 1919. This paper will present the details and the difficulties of how a rare collection of 52 historical instruments was transported from Boston, MA to Bursa, Turkey, as well as the restoration process currently underway with this rare collection.

### The Ehrenfeld Collection of Flutes at the Rijksmuseum

Ton Koopman, University of Leiden (Leiden, The Netherlands), Giovanni Paolo Di Stefano, Rijksmuseum (Amsterdam, The Netherlands)

The Ehrenfeld Collection, a distinguished collection of 17th-, 18th-, and 19th-century flutes, has recently undergone a significant transition from private to public ownership. Herman Ehrenfeld (1896–1983), a prominent flute player with the Utrecht Orchestra and a pioneer in early music, meticulously assembled this remarkable collection during the 1950s and 1960s. To ensure its enduring legacy, his widow established a foundation upon his passing, safeguarding the collection from dispersal. The collection was further enriched by additional 19th-century flutes collected by harpsichord maker Willem Kroesbergen, a dedicated board member since its creation. Following its relocation from Utrecht to Bussum, Ton Koopman served as the curator for several years. On August 28, 2023, the Ehrenfeld Foundation transferred the flute collection to the Rijksmuseum, ensuring its conservation and wide accessibility for future generations. Among the many remarkable pieces in the collection is a three-joint flute made by Richard Haka, a unique surviving exemplar of its kind.

## Poster Abstracts

### KOLLABS: A Participative (non) Education Project on Contemporary Music

Miriam Noa, Münchner Stadtmuseum (Munich, Germany)

As part of the special exhibition "Munich 72. Fashion, People and Music" (29.7.2022–12.3.2023) on the occasion of the 50th anniversary of the Munich Olympic Games, the Münchner Stadtmuseum also gave a prominent place to the cultural programme. Mauricio Kagel's commissioned work "Exotica", for the premiere of which around sixty

instruments were borrowed from the museum's holdings, the Olympic "Spielstraße" with numerous unconventional and radically democratic crossover projects, as well as a week-long rendezvous of the compositional avant-garde (Stockhausen, Cage, Feldman, Riedl, and many more) called for an equally unconventional "education" offer on the subject of contemporary music. From 5 October 2022 to 8 January 2023, the museum, which is about to undergo general renovation, made an already vacated floor available for KOLLABS. Here, under the curatorship of the Munich artist Andrea Lesjak and the exhibition and collection curator Miriam Noa, weekly alternating artists from different genres worked collaboratively with the public in the context of "residencies" on a constantly changing sound-space artwork. The only requirement was to offer a participatory workshop on Wednesdays and Thursdays and a performance on Sundays. Everyone was invited – with free entry – to join and find their own totally personal approaches as well as to share and discuss them with other participants. The (very mixed) public met this innovative approach with growing interest and responded very positively to the museum's opening to such forms of work and dialogue. A new edition is planned for the last weeks before closure in autumn/winter. In a short report, I would like to show some experiences and impressions of this inclusive "education" project – one that does not want to be called or understood as "educational".

### Reflections on Inclusive Design in Museums through the Lens of Sound

Yi Zhang, Politecnico di Milano (Milan, Italy)

Museums are becoming multimodal and sensitive organisms able to engage visitors in several respects. Herein, sound design in the cultural heritage and museum fields is one of the most critical aspects of shaping new cultural experiences, improving the narrative and engaging audiences. Furthermore, it is an acknowledged fact that museums should devote increasing emphasis to "access for all", including people with disabilities and other visitors. Not only is this a widespread consensus and vision of society and people in a wave of intellectual democratisation, but museums are also motivated by their desire to expand their audiences to increase accessibility. Sound can intervene in the museum experience in various ways to capture attention, create an atmosphere and convey information, and enhance the inclusive museum experience. Meanwhile, William Renel addressed the fact that sonic accessibility remains under researched in design. He concluded that there are two sonic barriers: structural sound barrier acoustics present in representatives of auditory navigation, localisation, and wayfinding; and psycho-emotional sonic barriers produced by the personal experience of internalised oppression. Then, this study introduces an analysis and design tool called "Exhibit sound score / Partitura sonoro-allestitiva", created by ourselves. With an empirical study through this tool, we selected some museums in the Lombardy region of Italy – to offer observations and comparisons, analyses of the crucial sonic barriers and positions of the proper sound strategies, considering that Lombardy has a commitment to increase museum accessibility and affordances. This study aims to observe existing accessibility for various audiences in museums and explore the role of sound in making more accessible and engaging museum paths.

### Bringing a Collection of Musical Instruments to the Public: The Importance of Storage Infrastructure

Iveta Ruskule, Latvian Museum of Literature and Music (Riga, Latvia)

The opening of a new museum repository in Riga, Latvia, has provided an opportunity to evaluate the potential and value of the musical instrument collection at the Latvian Museum of Literature and Music. This unique repository, which meets the

highest safety and preservation standards, houses collections from various national museums. Despite the challenges posed by the COVID-19 pandemic, the museum utilised this time to carefully assess its collections and recognise the significant value of the musical instrument collection. With daily access to well-equipped premises, the museum can now focus on preserving and researching the instruments, as well as providing accessibility to a wide range of visitors, including students, professionals, researchers, and media representatives. The repository sets a new standard for museum collections, meeting the requirements of the 21st century. After enduring several relocations under challenging circumstances, the museum finally has a secure environment with proper climate control, security systems, storage rooms, and spaces for visitors. Restoration studios with specialised equipment have also been established to preserve and restore the musical instrument collection, along with other collections held by the museum. The move to the new repository acknowledges the dedication of past museum employees who diligently compiled, stored, and protected the collection, which represents Latvia's national cultural and historical heritage. Despite the difficulties faced during the Second World War and the Soviet occupation, the collection has been safeguarded. The collection at the Latvian Museum of Literature and Music has now reached one million units, with the musical instrument collection being the largest in Latvia. The collecting policy focuses on instruments built in Latvia or by Latvian masters, as well as those associated with recognised creative personalities from Latvia. Notably, the collection includes the grand piano of composer Baumaņu Kārlis, on which the National Anthem of Latvia was composed, symbolising its special significance to Latvian national identity. The establishment of the new repository marks a significant milestone in the museum's ability to preserve and showcase its valuable musical instrument collection, allowing future generations to appreciate and engage with Latvia's rich cultural heritage.

### Getting It Right from the Very Start: The Challenges and Opportunities of Accessibility and Inclusion in a New Museum Collection

Matthew W. Hill, Georgia Southern University Museum (Statesboro, USA)

With the acquisition of the Fred and Dinah Gretsch Collection of Musical Instruments in 2021, the Georgia Southern University Museum has realised the biggest material expansion of its 90-year history. Spanning 140 years and featuring a diverse array of drums and stringed instruments, the Fred and Dinah Gretsch Collection represents what is probably the largest gathering of instruments by a single American manufacturer. While creating permanent exhibition spaces for the new collection, one of the most important goals is ensuring the accessibility of the collection to a wide variety of stakeholders, both traditional and non-traditional, from a wide variety of academic and cultural backgrounds. Our goal is to ensure the representation of diversity within the collection, highlighting the people and stories, especially those people of colour, that are often unknown or underappreciated in the history of American musical instruments. As well as giving a brief introduction to the collection, this paper will highlight some of the opportunities and challenges in presenting this new collection in a diverse, culturally relevant, and accessible way.

# Programme

## ICOM CIMCIM Annual Meeting 2023

## Prospects and Challenges of Museum Accessibility, Diversity, and Equity

*Wednesday 30 August – Friday 1 September 2023*

**Venues: Rijksmuseum Amsterdam – Collectiecentrum Amersfoort – Museum Speelklok Utrecht – Orgelpark – Pianola Museum – Geelvinck Museum**

### Programme

### Tuesday, 29 August

15:30–17:00 **CIMCIM Board Meeting (Board members only)**

18:00–20:00 **Welcome reception at the Pianola Museum**

### Wednesday, 30 August

Rijksmuseum
Ateliergebouw, Hobbemastraat 22, 1071 ZC Amsterdam

09:00–10:00 **Registration**

10:00–10:15 **Welcome remarks**

**Session 1: Approaches to Inclusivity and Diversity 1**

Chair: Giovanni Paolo Di Stefano (Rijksmuseum, Amsterdam, The Netherlands)

10:15–10:25 **More Comfort for Everybody**

Silke Berdux (Deutsches Museum, Munich, Germany)

10:30–10:40 **Seeking for Accessibility, Inclusivity, Equity, and Diversity in the New Museography of the National Museum of Music, Portugal**

Edward Ayres de Abreu (Museu Nacional da Música, Lisbon, Portugal)

10:45–10:55 **The Video Guide of the Musée de la musique in Paris: A New Tour Guide Designed for Universal Accessibility**

Caroline Bugat (Musée de la musique – Philharmonie de Paris, Paris, France)

10:55–11:10 **Q&A**

11:10–11:25 **Coffee break**

11:25–11:35 **Claviature – Keyboard – Interface. A Project for Visually Impaired Visitors, Exploring the Potential of Digital Replicas and Interactive Objects, Also Accessible via Internet**

Benedikt Brilmayer (Das Musikinstrumenten-Museum des Staatlichen Instituts für Musikforschung, Berlin, Germany)

11:40–11:50 **San Colombano "No-Limits" – An Inclusivity Project 360°**

Catalina Vicens (Museo San Colombano – Tagliavini Collection, Bologna, Italy)

11:55–12:05 **Welcome to Touch the Historical Sounds: The Accessible Visiting of Visually Impaired in the National Museum of Taiwan History**

Chia-Yi Lin (National Museum of Taiwan History, Tainan City, Taiwan)

12:05–12:40 **Open discussion with Hannes Wallrafen (Geluid in Zicht Foundation, Amsterdam, Netherlands)**

12:40–13:25 **Lunch**

**Session 2: Approaches to Inclusivity and Diversity 2**

Chair: Sarah Deters (St Cecilia's Music Museum & Concert Hall, The University of Edinburgh, Edinburgh, UK)

13:25–13:35 **Delivery of Museum Experiences for Social Inclusion: Case of a Long-Running Outreach Programme of Hamamatsu Museum of Musical Instruments**

Sawako Ishii (Hamamatsu Museum of Musical Instruments, Hamamatsu, Japan)

13:40–13:50 **Educating Present and Future Generations Through the Music Museum in the 21st Century**

Isaac Machafa (Midlands State University, Gweru, Zimbabwe)

13:55–14:05 **Archiving Traditional African Music and Dance by Integrating Culture Bearers to Teach at Teachers' Colleges**

Wonder Maguraushe (Midlands State University, Gweru, Zimbabwe)

14:05–14:20 **Q&A**

14:25–14:35 **Project "Beethoven is Black"**

Jurn Buisman (Museum Geelvinck, Heerde – Amsterdam, Netherlands)

14:40–14:50 **Instrumental Women: Using Digital History to Tell Untold Stories About Women Instrument Makers**

Jayme Kurland (George Mason University, Fairfax County, USA)

14:55–15:05 **The Musical Life of Women from the End of the Qajar Era to the end of the First Pahlavi Period; Based on the Works Recorded on Gramophone Records, Available in the Archives of the Iran Music Museum**

Sara Kariman (University of Science and Culture, Tehran, Iran), Mohammad-Reza Sharayeli (Iran)

15:05–15:15 **Q&A**

15:15–15:30 **Coffee break**

15:30–16:45 **Concurrent activities**

15:30–16:00 **Panel discussion (hybrid)**

Chair: Christina Linsenmeyer (Morris Steinert Collection of Musical Instruments at Yale, USA)

**Planning Inclusive Exhibitions, Participating in Ethical Returns, Creating Access to Collections, and Uplifting Lesser-Known Histories with Grant Funding at the Smithsonian**

Timothy Anne Burnside, Hannah Grantham, Krystal Klingenberg, Steven Lewis, Dwandalyn Reece, and John Troutman (The Smithsonian Institution, Washington D.C., USA)

15:30–16:45 **Tours at Rijksmuseum Conservation & Restoration Department**

(on-site only)

16:00–16:45 **Poster session (hybrid)**

**KOLLABS. A Participative (Non-)education Project on Contemporary Music**

Miriam Noa (Münchner Stadtmuseum, Munich, Germany)

**Reflections on Inclusive Design in Museums through the Lens of Sound**

Yi Zhang (Politecnico di Milano, Milan, Italy)

16:00–17:00 **Tour in the exhibition galleries**

(on-site only)

17:00–18:00 **Exclusive visit to the Rijksmuseum 17th-century gallery**

with contributions by Jan Bouterse, Maria Luisa Guevara Tirado, Hubert de Launay, Lucas van Helsdingen, Lisanne Wepler

18:30–20:00 **Dinner (not included)**

20:15–22:00 **Guided tour, concert, and reception at the Orgelpark**

Gerard Brandtstraat 28, 1054 JK Amsterdam

Guided tour, presentation, and concert by Hans Fidom (Orgelpark/Vrije Universiteit, Amsterdam)

## Thursday, 31 August

Museum Speelklok
Steenweg 6, 3511 JP Utrecht

10:00–10:05 **Welcome remarks**

**Session 3: Discussion Forum on Provenance**

Chair: Emanuele Marconi (Le Musée des instruments à vent, La Couture-Boussey, France)

10:05–10:15 **Keynote: Provenance Due Diligence Policy and Practice: Challenges for Musical Instrument and Music Collections**

Carla Shapreau (Ansley K. Salz Collection of Stringed Instruments, University of California, Berkeley, USA)

10:20–10:55 **National and Institutional Guidelines (3-minute flash papers)**

10:20–10:23 Emanuele Marconi (Le Musée des instruments à vent, La Couture-Boussey, France)

10:24–10:27 Marie Martens (The Danish Music Museum, Copenhagen, Denmark)

10:28–10:31 Pascale Vandervellen (Musical Instruments Museum, Brussels, Belgium)

10:32–10:35 Heike Fricke (Research Center DIGITAL ORGANOLOGY, Musikinstrumentenmuseum der Universität Leipzig, Leipzig, Germany)

10:36–10:39 Sawako Ishii (Hamamatsu Museum of Musical Instruments, Hamamatsu, Japan)

10:40–10:43 Hannah Grantham (The Smithsonian Institution, Washington DC, USA)

10:40–10:42 Nusi Lisabilla Estudiantin (National Museum of Indonesia, Central Jakarta, Indonesia)

10:44–10:47 Kathrin Menzel (Schola Cantorum Basiliensis, Basel, Switzerland)

10:48–10:51 Jimena Palacios (Instituto de Investigaciones Dr. José María Luis Mora, Ciudad de México, México)

10:52–10:55 Sabari Christian Dao (Musée National du Burkina Faso, Ouagadougou, Burkina Faso)

10:55–11:10 **Coffee break**

11:10–12:25 **Session 4: Position Papers on Provenance Issues**

Chair: Marie Martens (The Danish Music Museum, Copenhagen, Denmark)

11:10–11:15 **Provenance Research**

Heike Fricke (Research Center DIGITAL ORGANOLOGY, Musikinstrumentenmuseum der Universität Leipzig, Leipzig, Germany)

11:20–11:25 **Provenance Research at the Rijksmuseum**

Lea Grüter (Rijksmuseum, Amsterdam)

11:30–11:35 **Producing for the Enemy. A Preliminary Look at the La Couture-Boussey Manufacturing Industry During the Occupation**

Emanuele Marconi (Le Musée des instruments à vent, La Couture-Boussey, France)

11:40–11:45 **Accessing the Inaccessible: Putting "Unlocated" Instruments Online**

Pascale Vandervellen (Musical Instruments Museum, Brussels, Belgium)

11:50–11:55 **An Update from Ukraine**

Denys Vasyliev (Museum of Musical Instruments History "BarabanZA" Zaporizhya, Ukraine)

11:55–12:25 **Open Discussion. Feedback on Policies and Discussion Forum on Provenance**

12:25–13:10 **Lunch**

**Session 5: Sound Accessibility 1**

Chair: Marian van Dijk (Museum Speelklok, Utrecht, The Netherlands)

13:10–13:20 **Music Museums in the Age of 3D Reproduction: Access, Potential, Challenges**

Gabriele Rossi Rognoni (Royal College of Music Museum, London, UK)

13:25–13:35 **3D Digitization and Digital Access for Musical Collections: An Overview of the Process, Challenges, and Success of Charlie Parker's Alto Saxophone**

Joseph Aaron Campbell (The Smithsonian Institution, Washington, USA)

13:40–13:50 **Finding and Reconstruction of the Warder Flute**

Roberto Bando (The Hague, Netherlands), Jonty Coy (Leiden University, Netherlands), Hans Huismann (Rijksdienst voor het Cultureel Erfgoed, Amsterdam, Netherlands)

13:50–14:05 **Q&A**

14:05–14:15 **Synthetic Materials in Traditional Folk Music Instruments: Functionality, Feelings, and Ideologies**

Madeleine Modin (Svenskt visarkiv – Centre for Swedish Folk Music and Jazz Research, Stockholm, Sweden)

14:20–14:30 **Unique Findings of Traditional Musical Instruments in the 21st Century: Dižā Kokle in the Museum and a Replica for the Community**

Rozīte Katrīna Ponne (The Ethnographic Open-air Museum of Latvia, Riga, Latvia)

14:35–14:45 **Historical Keyboard Instruments in Italian Public Collections: A Kaleidoscopic Approach**

Massimiliano Guido (Pavia University, Cremona, Italy)

14:45–15:00 **Q&A**

15:00–15:15 **Coffee break**

**Session 6: Sound Accessibility 2**

Chair: Manu Frederickx (The Metropolitan Museum of Art, New York, USA)

15:15–15:25 **Construction of a Facsimile After Jean II Denis's 1648 Instrument in its First Musical State (Musée de l'Hospice Saint-Roch, Issoudun, France)**

Florence Gétreau (Institut de Recherche en Musicologie – Bibliothèque nationale de France, Paris, France)

15:30–15:40 **Reconstructing a Reconstruction? The History of a Taskin-Harpsichord and its Restoration(s).**

Olaf Kirsch, Carola Klinzmann (Museum für Kunst und Gewerbe Hamburg, Hamburg, Germany)

15:45–15:55 **Reconstructing the (In)tangible Heritage**

Mirte Maes (Museum Vleeshuis, Antwerp, Belgium)

15:55–16:10 **Q&A**

16:10–18:30 **Concurrent activities: interactive workshop, speed-dates, tours (on-site only)**

**Interactive Ruckers Project Workshop**

Tamar Hestrin-Grader (HoGent KASK & Conservatorium, Ghent, Belgium; University of Leiden, The Netherlands), Manu Frederickx (Metropolitan Museum, New York, USA; HoGent KASK & Conservatorium, Ghent, Belgium; University Ghent, Ghent, Belgium), Frank Hollinga (HoGent KASK & Conservatorium, Ghent, Belgium), Mané van Veldhuizen (HoGent KASK & Conservatorium, Ghent, Belgium), Giovanni Paolo Di Stefano (Rijksmuseum, The Netherlands), Paul van Duin (Rijksmuseum, The Netherlands), Nouchka de Keyser (Rijksmuseum, The Netherlands)

**Speed-dates in the exhibition galleries**

Tirza Mol (Rijksmuseum), Claire McGinn (Museum Speelklok), Wim Verhulst (Musical Instruments Museum, Brussels, Belgium)

**Tour at the Speelklok Museum restoration workshop**

**Tour at the Carillon Domtoren Utrecht**

18:30–19:30 **Dinner (not included)**

20:00–21:30 **Festival Oude Muziek (L'Arpeggiata's concert or other concerts, optional)**

## Friday, 1 September

Collectiecentrum Nederland
Verbindingsweg 1, 3826 PC Amersfoort

10:00–11:00 **Concurrent activities: Tour of the storage space (on-site only) and Poster session**

**Poster session (hybrid)**

**Getting it Right from the Very Start: The Challenges and Opportunities of Accessibility and Inclusion in a New Museum Collection**

Matthew W. Hill (Georgia Southern University Museum, Statesboro, USA)

**The Country's First Grand Piano: Transfer of Collections from Storages to Public Space**

Iveta Ruskule (Latvian Museum of Literature and Music, Riga, Latvia)

**Session 7: Digital Accessibility of Musical Instrument Collections**

Chair: Claire McGinn (Museum Speelklok, Utrecht, The Netherlands)

11:00–11:10 **Digital Accessibility in the 21st Century and the Role of Information Systems in Museums and Collections of Musical Instruments**

Cláudia Furtado (NOVA FSCH, Lisbon, Portugal)

11:15–11:25 **"Breaking the Glass": Making Historical Musical Instruments Accessible**

Ulla Hahn Ranmar, Marie Martens (The Danish Music Museum, Copenhagen, Denmark)

11:30–11:40 **Improving the Accessibility of Historical Musical Instruments Through Interactive Virtual Representations: A Case Study on the Multimodal Virtualisation of a Mechanical Disk Player and its Media**

Dominik Ukolov, David Fuhry, Germán Camilo Salazar Lozada, Franziska Bühl (Musikinstrumentenmuseum der Universität Leipzig, Leipzig, Germany)

11:40–11:55 **Q&A**

12:00–12:10 **Be-MUSIC – A Plurivocal Access to Belgian Musical Heritage**

Rémy Jadinon, Dieter van Hassel (The Royal Museum for Central Africa, Tervuren, Belgium), Saskia Willaert (Musical Instruments Museum, Brussels, Belgium)

12:15–12:25 **"I Need an F Alto Recorder Now!": University Collections Between Accessibility and Documentation**

Kathrin Menzel (Schola Cantorum Basiliensis, Basel, Switzerland)

12:25–12:40 **Q&A**

12:40–13:30 **Lunch**

**Session 8: Transfer of Collections from Private to Public Spaces**

Chair: Jurn Buisman (Geelvinck Museum, Amsterdam / Heerde, The Netherlands)

13:30–13:40 **Transfer of Collections from Private to Public Spaces**

Zami Ravid (Metula, Israel)

13:45–13:55 **A Private Collection Made Accessible to All: The Utley Collection at the National Music Museum**

Sabine Klaus (The National Music Museum, South Dakota, USA)

14:00–14:10 **Preserving Historical Instruments: The Jeremy Montagu Collection at Northumbria University**

Rachael Durkin (Northumbria University, Newcastle, United Kingdom)

14:10–14:30 **Q&A**

14:30–14:40 **The Legacy of the Jaap Kunst Archive in The National Museum of Indonesia: The Prospect of Development and Utilisation**

Nusi Lisabilla Estudiantin (National Museum of Indonesia, Central Jakarta, Indonesia)

14:45–14:55 **The Transatlantic Adventure of a Rare Collection of Instruments: From New England Conservatory's Storage to a Musical Instruments Museum in Bursa, Turkey**

Mehmet Ali Sanlıkol (New England Conservatory of Music, Boston, USA)

15:00–15:10 **The Ehrenfeld Collection of Flutes at the Rijksmuseum**

Ton Koopman (University of Leiden, The Netherlands), Giovanni Paolo Di Stefano (Rijksmuseum, Amsterdam, The Netherlands)

15:10–15:25 **Q&A**

15:25–16:25 **Transfer to Museum Geelvinck at Kolthoorn House & Gardens (Heerde)**

16:30–17:30 **Closing session: Keti Koti – Songs and Tales from Slavery Times**

17:30–17:45 **Closing remarks**

17:45–20:00 **Musical guided tours around the house and closing reception**

20:00–21:30 **Transfer back to Amsterdam**

## Saturday, 2 September (optional, subject to an additional participation fee)

### Post-conference excursion to Antwerp

8:30–10:30 **Transfer to Antwerp**

10:30–12:30 **Tour at the Museum Vleeshuis and storage**

Vleeshouwersstraat 38/40, 2000 Antwerp, Belgium

12:30–13:30 **Lunch**

13:30–15:00 **Tour at The Snijders&Rockox House**

Keizerstraat 10, 2000 Antwerp, Belgium

15:30–17:30 **Travel back to Amsterdam**

# Photo Gallery

Figure 1: Preparation of conference materials for participants at the Rijksmuseum. Photo: María Luisa Guevara Tirado

Figure 2: Welcome reception at the Pianola Museum, 29 August 2023. In the foreground: Arnold Myers (University of Edinburgh and Royal Conservatoire of Scotland) and Marijke Brekelmans (Pianola Museum, Amsterdam). Photo: Giovanni Paolo Di Stefano

Figure 3: Conference participants in front of Rembrandt's The Night Watch at the conclusion of the exclusive visit to the Rijksmuseum's 17th-century gallery, 30 August 2023. Photo: Giovanni Paolo Di Stefano

Figure 4: Concert by Catalina Vicens (Museo di San Colombano – Collezione Tagliavini, Bologna) during the concert and reception held at the Orgelpark in Amsterdam, 30 August 2023. Photo: Giovanni Paolo Di Stefano


Figure 5: One of the exhibition rooms at Museum Speelklok, Utrecht. Photo: © Museum Speelklok, Utrecht

Figure 6: Concert by Ronald Snijders and Gerda Havertong (Keti Koti – Songs and Tales from Slavery Times) during the closing reception on 1 September 2023 at Museum Geelvinck, Kolthoorn House & Gardens (Heerde). Photo: Giovanni Paolo Di Stefano