

THE AMERICAN MUSICAL INSTRUMENT SOCIETY

49TH ANNUAL MEETING

VIRTUAL MEETING
FRIDAY 4 JUNE 2021 – SUNDAY 6 JUNE 2021



The American Musical Instrument Society

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2021 Meeting

PROGRAM COMMITTEE

Jayson Dobney (chair), Jonathan Santa Maria Bouquet, Jayme Kurland, Darcy Kuronen, Janet K. Page

PROGRAM

Janet K. Page (coordinator), Darcy Kuronen, Jayson Dobney, Aileen Marcantonio

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WILLIAM E. GRIBBON MEMORIAL AWARD COMMITTEE/FREDERICK R. SELCH AWARD COMMITTEE (STUDENT PAPER PRIZE)

2020–21: Núria Bonet (chair), Jonathan Santa Maria Bouquet, Manu Frederickx

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2020: Cleveland Johnson (chair), Sabine Klaus, William Hettrick

2021: Sabine Klaus (chair), William Hettrick, Carolyn Bryant

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2021: Stewart Carter (chair), Robert Green, Bradley Strauchen-Scherer

FRANCES DENSMORE PRIZE COMMITTEE

2020: Thomas MacCracken (chair), Jayme Kurland, Allison Alcorn

2021: Jayme Kurland (chair), Allison Alcorn, Stephen Cottrell

SPECIAL THANKS TO: Carolyn Bryant, Cleveland Johnson

The American Musical Instrument Society takes pleasure in announcing the following awards, to be conferred at this annual meeting:

The **Curt Sachs Award**, the Society's highest award, is named for one of the founders of the modern systematic study of musical instruments. It recognizes individuals who have made significant lifetime contributions to the goals of the Society, which aims to promote the understanding of all aspects of the history, design, and use of musical instruments in all cultures and from all periods.

2020

John Watson is the recipient of the Curt Sachs Award for 2020. Mr. Watson is an internationally respected builder and conservator of historical keyboard instruments. As a maker of early keyboard reproductions from 1974 to 1995, and a conservator in private practice from 1977 to 1995, he joined Colonial Williamsburg in 1988 as Conservator of Instruments and Associate Curator of Musical Instruments, retiring in 2016. Since retirement, he has continued his work as a private conservator and scholar and, as always, has remained a supportive colleague to many in this Society. The full announcement can be found at: <https://www.amis.org/post/john-watson-receives-the-curt-sachs-award-for-2020>

2021

Prof. Dr. Em. Eszter Fontana is the recipient of the Curt Sachs Award for 2021. Professor Fontana's lifetime contributions are manifold and outstanding, and span more than half a century. She served as director of the Musical Instruments Museum of the Grassi Museum at the University of Leipzig and taught organology, acoustics, and paleography at the latter institution. Over the course of her career she was responsible for more than twenty-five exhibitions, including the complete reconceptualization of the permanent galleries at the Musical Instruments Museum in Leipzig. Her extensive activities as university professor, editor, and publisher have earned her significant recognition and allowed her to disseminate knowledge about musical instruments in many ways. The full announcement can be found at: <https://www.amis.org/post/eszter-fontana-receives-the-curt-sachs-award-for-2021>

The **Nicholas Bessaraboff Prize** is awarded annually for the best book-length publication in English in furtherance of the goals of the Society.

2020

The 2020 Bessaraboff Prize is awarded to Robert B. Winans and colleagues for the book *Banjo Roots and Branches* (Champaign-Urbana: University of Illinois Press, 2018). The full announcement can be found at: <https://www.amis.org/post/bessaraboff-prize-awarded-to-banjo-roots-and-branches>

2021

The 2021 Bessaraboff Prize is awarded to David Lasocki for *Jean-Baptiste Lully and the Flute: Recorder, Voice Flute, and Traverso*, published in 2019 by Instant Harmony. The full announcement can be found at: <https://www.amis.org/post/bessaraboff-prize-awarded-to-david-lasocki>

The Frances Densmore Prize is awarded annually for the most distinguished article-length work in English that best furthers the Society’s mission.

2020

The 2020 Densmore Prize is awarded to Jaime E. Oliver La Rosa for his article “Theremin in the Press: Instrument Remediation and Code-Instrument Transduction,” published in the journal *Organised Sound* 23, no. 3 (December 2018): 256–69. The full announcement may be found at: <https://www.amis.org/post/jaime-e-oliver-la-rosa-receives-the-frances-densmore-prize>

2021

The 2021 Densmore Prize is awarded to Dr. Rachel Beckles Willson for the article “Orientation through Instruments: The *oud*, the Palestinian Home, and Kamīlyā Jubrān,” in *World of Music* (new series) 8, no. 1 (2019). The full award announcement can be found at: <https://www.amis.org/post/rachel-beckles-willson-receives-the-frances-densmore-prize>

VIRTUAL COLLECTION TOURS & LECTURE RECITAL
AVAILABLE THROUGHOUT THE MEETING
<https://www.amis.org/2021-meeting>

Lecture-recital: "The Salonnières of Spanish Origin," from the Bartolomeo Cristofori Academy in Florence (Italy). Presenter: Patricia Garcia Gil
garciagilpatricia@gmail.com; www.patriciagarciagil.com

Sensational Sigal from Afar: A Virtual Tour Exploring the Evolution of the Sigal Music Museum. Presenters: Thomas Strange and Alexandra Cade
acade@sigalmusicmuseum.org; tom@sigalmusicmuseum.org; <https://sigalmuseum.org/>

A Virtual Tour of the Motown Museum. Presenters: Hannah Grantham, David Ellis, Hannah Thoms
hgrantham@motownmuseum.org; dellis@motownmuseum.org; hthoms@motownmuseum.org

A Virtual Introduction to the New Royal College of Music Museum. Presenter: Gabriele Rossi Rognoni
g.rossirognoni@rcm.ac.uk

A Forest of Harps: Virtual Tour & Demonstration of the Harps in the Museum and Archive for Harp History. Presenter: Nancy Thym
harfe@gotisches-haus.com

SCHEDULE OF EVENTS

Student presenters are marked *

All times are EDT

Friday, 4 June

- 9:30am Welcome and digital meeting orientation
- 10:00–11:00am **Paper session 1: Museums & Exhibits as Research** (see p. 10)
Moderator: Bradley Strauchen-Scherer
- Heike Fricke, *The Research Center Digital Organology at the Musical Instruments Museum at the University of Leipzig*
- Massimiliano Guido, *In the Process of Becoming: The Musical Instrument Collection at Pavia University as a Museum Gallery, a Project Incubator, and a Conservation Workshop*
- 11:15am–12:15pm **Paper session 2: Instrument Builders & Inventors** (p. 11)
Moderator: Bradley Strauchen-Scherer
- Emanuele Marconi, *Léon Leblanc 1900–2000: A Man, a Century*
- Rachael Durkin, *The Ingenious Mr. Charles Clagget: Inventor and “Harmonizer” of Musical Instruments*
- 12:30–1:30pm **Working group meetings**
- Ethnomusicology: moderator & tech host, Jayme Kurland
- Banjo, Mandolin, Guitar: moderator, Daniel Wheeldon; tech host, Cullen Strawn
- Open discussion rooms**
- Woodwinds: moderator, Janet Page; tech host, Geoffrey Burgess
- Brass: moderator, Stewart Carter; tech host, Byron Pillow
- Keyboards: moderator, Tom Strange; tech host, Aurelia Hartenberger
- Bowed strings: moderator, Allison Alcorn; tech host, Aileen Marcantonio

2:00–3:00pm **Paper session 3: Technology & Musical instruments I** (p. 13)
Moderator: Jayson Dobney

*Julin Lee, *Sounds of Futuristic Nostalgia: The Cultural Legacy of Blade Runner (1982) and the Yamaha CS-80 Synthesizer*

James Mooney, *Tape Recorder, Digital Computer, Studio: Reinventing Musical Instrumentality in the Mid-Twentieth Century*

3:15–4:15pm **Presentation of AMIS Awards for 2020**

4:30–5:30pm **Paper session 4: Technology & Musical Instruments II** (p. 15)
Moderator: Jayson Dobney

Roderic Knight, *Elisha Gray's Musical Telegraph*

Rick Meyers, *Century-Old Electromechanical Secrets Revealed! "Isis" the Zither-Playing Automaton*

Saturday, 5 June

10:00–11:30am **Paper session 5: Keyboard Instruments** (p. 17)
Moderator: Tom Strange

Laurence Libin, *Three Spinets From David Tannenberg's Workshop*

*Frank Hollinga, *Reconstructing the 1720 Cristofori's Piano*

*Devanney Haruta, *Destruction and Deconstruction in Piano Activities (1962)*

11:45am–12:45pm AMIS Awards 2021

1:30–2:30pm **Paper session 6: Harps** (p. 19)
Moderator: Jayme Kurland

*Fanny Guillaume-Castel, *The Pedal Harp Trade in Paris at the End of the Eighteenth Century: Luxury and Aristocratic Purchases*

Kathryn Hockenbury and Stephen Rees, *The Triple Harps of Bassett Jones (1809–1869): An Iconic Welsh Instrument and Its Revivals*

2:45–3:45pm **Paper session 7: Instrument Making & Performance** (p. 21)
Moderator: Jayme Kurland

Colin Harte, *The Lambeg Drum in Northern Ireland: Drum Making and Performance*

Erasmio Estrada, *The rabecas of Airon Galindo, Pernambuco, Brazil*

4:00–5:00

Paper session 8: Keys & Grilles (p. 22)

Moderator: Jayme Kurland

*Robert Apple, *The Keyed Trumpet and the Fathers of the Viennese Waltz (1826–1832)*

*Arianna Rigamonti, *Musical Grills: Metal Gridirons to Grill Fish and Play Music in Sixteenth- and Seventeenth-Century Europe*

Sunday, 6 June

10:00–11:30am

Round Table: Instruments in Quarantine: Museums & Their Musical Instrument Collections during the Pandemic (p. 23)

Moderator: Carolyn Bryant

Presenters:

Mimi Waitzman (Horniman Museum, London)

Bobby Giglio (Museum of Fine Arts, Boston)

Cleveland Johnson (Morris Museum, Morristown, NJ)

Jason Hanley (Rock and Roll Hall of Fame)

Katherine Palmer (Musical Instrument Museum, Phoenix)

12:00–1:00pm

AMIS General Meeting

1:15–2:15pm

Paper session 9: Woodwind Instruments & 3D Technology (p. 25)

Moderator: Allison Alcorn

Donna Agrell, Áurea Domínguez, Giovanni Battista Graziadio, Zoë Matthews, and Letizia Viola, *Out of the Bass Register: Expanding the Realms of Small-Sized Bassoons from the Eighteenth and Nineteenth Centuries*

*Jay Loomis, *Echoes of a Newly Audible Past: Replicating, Repatriating, and Resocializing Native Flutes in North America*

2:30–3:30pm

Paper session 10: Bowed Strings (p. 26)

Moderator: Allison Alcorn

Alicja Knast, ~~*Bowed Instruments Made in Polish-Speaking Lands Between 1550 and 1750: Attribution and Historiography in European Perspective*~~ **CANCELED; Session begins at 3:00 pm**

Geerten Verberkmoes, *The Workbench as Nexus for Multifaceted Organological Research*

3:45–4:45pm

Paper session 11: Plucked Strings (p. 28)

Moderator: Janet K. Page

*L. Roman Duffner, *Strap the Guitar to the Player: A Socio-Technical Analysis of the Guitar Strap*

*Esteban Mariño Garza, *Understanding the Transformation of the Cittern in Sixteenth-Century Europe*

5:00–6:00pm

Paper session 12: Woodwinds (p. 29)

Moderator: Janet K. Page

Rachel Becker, *The Long-Lasting Implications of Nineteenth-Century Woodwind Characteristics*

Samantha Owens, *“In Amsterdam, a Chalumeau”: The Musical Instrument Collection of John Sigismond Cousser (1660–1727)*

PAPER SESSION 1: MUSEUMS & EXHIBITS AS RESEARCH

The Research Center Digital Organology at the Musical Instruments Museum at the University of Leipzig

Heike Fricke, *Musikinstrumentenmuseum der Universität Leipzig*

This paper introduces the new research center DIGITAL ORGANOLOGY at the Musical Instruments Museum of the University of Leipzig (MIMUL) and its current research projects:

The first, called TASTEN, deals on the one hand with the digitization of selected keyboard instruments from the MIMUL collection, including clavichords, harpsichords, fortepianos, and organs. In addition, 3,400 historical piano rolls were digitized: they store concerts of famous pianists such as Ferruccio Busoni, Arthur Nikisch, and Max Reger as well as those of composers playing their own works, such as Claude Debussy, Richard Strauss, and Edvard Grieg.

The second is a provenance research project on the Kaiser-Reka Collection. The musical instruments collected by Paul Kaiser-Reka during his lifetime feed three large collections in Germany: those of the Cologne City Museum, the Viadrina Museum in Frankfurt/Oder, and MIMUL. Since the collection was assembled during the interwar years, it is burdened with considerable suspicions regarding cultural assets seized through Nazi persecution.

The third project, DISKOS, deals with the comparison of different sources of music, including sheet music, audio recordings, piano rolls, and card or metal discs. The digitization, conversion, and research of card and metal discs preserved at MIMUL will open up a new field of research. Until now, their illegibility—for humans—and their lack of standardization prevented comprehensive research. Exploring them will become possible with digitization. Making large sets of data accessible is a key task for our digitization projects.

In this paper, we also present the current state of the ongoing musiXplora project, including a multi-faceted digitized database and front end for persons, places, objects, terms, media, events, and institutions of musicological interest. A special focus of the project is the use of visualization to overcome traditional problems of handling both vast amounts of data and difficulties with the data itself.

Heike Fricke 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 *MGG*, *The New Grove*, *Lexikon der Holzblasinstrumente* and books such as the Catalogue of the Shackleton Collection, *Faszination Klarinette*, and *Die Klarinette im 18. Jahrhundert*. She is the editor of the magazine *Rohrblatt* and the CIMCIM Bulletin. Currently she conducts the research project DISKOS at the Musikinstrumentenmuseum der Universität Leipzig. heike_marianne.fricke@uni-leipzig.de; <http://organology.uni-leipzig.de/>; <https://musixplora.de/musici/>

In the Process of Becoming: The Musical Instrument Collection at Pavia University as a Museum Gallery, a Project Incubator, and a Conservation Workshop

Massimiliano Guido, *Pavia University*

Founded in 1361, Pavia University is one of the most ancient universities in the world. The University Museum System has a small but rather significant collection of musical instruments. Since 2016, the department has offered a unique master's program in Conservation and Restoration of Musical Instruments. This course is having a meaningful impact on the collection itself. Not only has the increasing media attention brought new donations, significantly enlarging the number of historical keyboards (harmoniums and fortepianos), but the students and restoration faculty are using the collection more and more as an experimental field for training. In this paper, I will describe how the collection is developing thanks to the special blending of its museum vocation and its academic potential.

I will focus on the backstage of the temporary exhibition *Expression(s): The Countless Lives of the Harmonium*, elaborating on how the idea of putting together some instruments for a play-and-go experience during an international conference developed into a real exhibition. An instrument makes music, but also tells different stories: about its makers, the composers, the musicians, the people who listened, and many more. The whole idea of what was on display came from a combined didactic and research experience: a seminar with musicology students about the layout and narrative of the exhibition; a workshop with restoration students about the photographing, preparation, and presentation of the instruments; a dialogue with colleagues on the multidisciplinary potential of such an event.

The present case will also contribute to the ongoing discussion concerning a new definition of museum recently advocated by ICOM.

Massimiliano Guido is curator of the Musical Instrument Collection at Pavia University and Associate Professor in the Musicology and Cultural Heritage Department, where he teaches courses on the History of Musical Instruments, Musical Iconography, and History of Restoration. massimiliano.guido@unipv.it

PAPER SESSION 2: INSTRUMENT BUILDERS & INVENTORS

Léon Leblanc 1900–2000: A Man, a Century

Emanuele Marconi, *Musée des instruments à vent, La Couture-Boussey*

Léon Leblanc lived through what the historian Eric Hobsbawm, in his 1994 work *The Age of Extremes*, dubbed the “short twentieth century.” This definition is perfectly suited to instrument making, which moved from a pre-industrial production system to a mass-production system, and then to globalized industrial production.

The paper will examine the professional and personal life of Léon Leblanc (recently highlighted by a temporary exhibit and catalogue) through the Leblanc archives preserved at the Musée des instruments à vent, La Couture-Boussey. I will present unpublished documents and link his activity to a three-centuries-old tradition of woodwinds instruments.

Léon Leblanc was driven by a tireless search for improved sound, efficient production, and lower costs. Surrounded by music from a very young age, he spent his childhood in workshops alongside workers, machines, woodwind instruments, and the musicians of the wind section conducted by his father Georges, a bassoonist.

An enterprising and visionary son and a determinedly forward-looking father: these were the ingredients of the brand's success. In the mid-1920s, workshops were set up in Paris and Yzeure: the new technologies developed there formed the first step in the transition from manual to industrial manufacturing, improving quality and making parts interchangeable. In 1944, Léon Leblanc met Vito Pascucci, his future business partner, a repair technician for the Glenn Miller Army Air Force Band. This meeting would have a profound effect on his career: created in 1946, the Leblanc Corporation became the largest clarinet manufacturer in the United States, and Léon traveled the world tirelessly promoting his instruments. Léon's journey through the century ended a few months before he reached his 100th birthday. The last representative of an artisanal tradition dating back to the previous century passed away quietly, but not without having forever transformed clarinet production and having permanently established La Couture-Boussey as a place of pilgrimage for thousands of musicians and enthusiasts.

Organologist, conservator, and curator **Emanuele Marconi** is Director of the Musée des instruments à vent of La Couture-Boussey and webmaster and advisory board member for CIMCIM. Research interests include the history and philosophy of restoration, investigating relationships among society, culture, technical evolution, and aesthetic perception, and analyzing myths and symbolism related to musical instruments.
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The Ingenious Mr. Charles Clagget: Inventor and “Harmonizer” of Musical Instruments

Rachael Durkin, *Northumbria University*

Charles Claggett (1733–1796) has proved, until now, to be an elusive yet colourful character of British and Irish music history. Moving in key musical circles of the eighteenth century, Clagget bounced from one job to the next in search of fame and fortune, latterly opening a museum of musical instruments of his own invention in Soho, London in the 1790s. Little has been done to understand his inventions or their impact on musical instrument design, nor what his quest tells us about attitudes towards the limitations of eighteenth-century musical instruments.

Born in Norfolk, England (and not Waterford, Ireland, as previously believed), Charles Clagget and his brother, Walter, were indoctrinated in music by their father, a professional dancer and dancing-master, who worked for a time at Sadler's Wells Theatre in London. While Walter pursued a career as a cellist and composer, Charles started as a dancing master and musician but soon turned to musical instrument inventing and improving, spurred by his friendship with the engineer, and former musical instrument maker, James Watt of Scotland. Clagget's experiments with musical instrument design centred around tuning and led to inventions such as an adjustable fingerboard for violins, a metallic organ known as the “aiuton,” the “Royal Teleochordon Stop” for harpsichord, and the first chromatic trumpet and French horn.

This paper will provide the first scholarly consideration of Clagget's contributions to musical instrument history. I will start with a brief overview of Clagget's life and training,

dispelling many of the myths which have surrounded him in scholarship. I will then consider his working relationship with James Watt, and how this developed into his fascination with musical instrument improvement. Finally, I will look at some of his inventions, his interactions with Joseph Haydn and Samuel Taylor Coleridge, and how his ambition led to his own demise.

Rachael Durkin is a senior lecturer in music at Northumbria University, England. She specialises in musical instrument history, particularly bowed and plucked strings of the long eighteenth century. Her monograph *The Viola d'Amore: Its History and Development* is the first scholarly study of the instrument, and she has also published studies of the baryton, pochette, and bowed psaltery.

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PAPER SESSION 3: TECHNOLOGY & MUSICAL INSTRUMENTS I

Sounds of Futuristic Nostalgia: The Cultural Legacy of Blade Runner (1982) and the Yamaha CS-80 Synthesizer

Julin Lee, *Deutsches Museum, Munich*

“She’s a replicant,” declares Arturia’s landing page for its software emulation of the legendary analog polyphonic Yamaha CS-80 synthesizer. It quotes the line delivered by Harrison Ford’s character, Rick Deckard, in Ridley Scott’s *Blade Runner* (1982)—a fitting reference, as Vangelis’ utilization of the CS-80 in the film’s celebrated soundtrack marks a significant milestone in the instrument’s history. From pre-set emulation sounds labeled “Blade Runner blues” to physical replicas of the CS-80 synthesizer named “Deckard’s Dream,” *Blade Runner* has left a significant impact on the cultural legacy of the Yamaha CS-80. Conversely, the CS-80 is inextricably linked to *Blade Runner*’s signature sound, prompting Hans Zimmer and Benjamin Wallfisch to bring back this vintage synthesizer for the soundtrack of Denis Villeneuve’s sequel *Blade Runner 2049* (2017). The *Blade Runner*–CS-80 association is particularly remarkable, considering the lack of substantial material or oral evidence regarding the extent to which Vangelis used the CS-80 amongst the many other synthesizers at his disposal in his London studio.

In this paper, I explore the intricately linked reception histories of the *Blade Runner* soundtrack and the Yamaha CS-80 by integrating approaches from film music analysis and organology. Besides determining how the physical design and technical affordances of the CS-80 synthesizer could have contributed to *Blade Runner*’s iconic soundtrack, I examine how the film’s musical and narrative themes encouraged the enduring *Blade Runner*–CS-80 connection by drawing parallels between the film’s retrofitted aesthetic and the nostalgia associated with the transition from analog to digital synthesis in the 1980s. By arguing that *Blade Runner* and the CS-80 mutually reinforced their cultural value in the intersecting fields of science-fiction film, electronic music and analog keyboard synthesizers, I aim to demonstrate that the cross-fertilization between film music and organology can yield new insights into how artifacts of popular culture acquire meaning.

Julin Lee is a PhD candidate in Musicology at LMU Munich. Since completing her first degree in Chemical Engineering at the University of Cambridge, she has pursued her

research interests at the intersection of science, technology, and music. She has presented and published her research on the Trautonium and on Oskar Sala and his soundtrack for *The Birds* (1963). Currently Scholar-in-Residence at the Deutsches Museum, she researches the impact of synthesizers on film scores.

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Tape Recorder, Digital Computer, Studio: Reinventing Musical Instrumentality in the Mid-Twentieth Century

James Mooney, *School of Music, University of Leeds*

“Today there are signs that the computer will be the musical instrument of the future.”
(Werner Kaegi, 1970)

In the 1950s, tape recorders, digital computers, and electronic music studios became musical instruments. But these were different in kind from acoustic instruments, and indeed from the electronic musical instruments of the Interbellum. They were not, therefore, straightforwardly accepted as “musical instruments,” even by their strongest advocates. In this paper, I examine the processes by which these new forms of musical instrumentation took shape. Drawing upon theories of science and technology studies (STS), I emphasise the sociomaterial and ontological “boundary work” that my historic protagonists undertook as they challenged orthodox views of musical instrumentality and sought to situate music within modernist technoscience. My case studies are: (1) “Special Purpose Tape-Recorders” designed at the Canadian National Research Council by a team led by physicist Hugh Le Caine (1914–1977); (2) computer music technology developed at Bell Labs by a group directed, famously, by Max Mathews (1926–2011); and (3) the electronic music studio at the Institute for Psychoacoustics and Electronic Music, Ghent, an exemplary institutional studio of the 1960s, designed and equipped under the technical direction of engineer Walter Landrieu (1927–2005). My central claim is that these constituencies developed a form of musical instrumentality, practiced in the studio rather than on-stage, in which the instrument executes a semi-automated process that is commanded and shaped by the performer’s instrumental techniques. The interplay of machine process and instrumental technique, and the status of studio-based practices as “performance,” are controversial topics that can be decisive criteria in demarcating cultural boundaries between valid and invalid forms of musical instrumentality. Nonetheless, I argue that tape recorders, digital computers, and studios should be understood and accepted as mid-century musical instruments by musicologists, organologists, historians, and curators.

Dr. James Mooney is Associate Professor of Musicology and Music Technology at University of Leeds, UK. His current research focuses on electronic music history, especially its instrumentation, and involves working collaboratively with musical instrument and science and technology museums in Europe and North America. He co-leads the Music, Science and Technology Research Group and (together with historian of technology Prof Graeme Gooday) the History of Technology Group at University of Leeds. j.r.mooney@leeds.ac.uk; <https://ahc.leeds.ac.uk/music/staff/373/dr-james-mooney>

Elisha Gray's Musical Telegraph

Roderic Knight, *Emeritus Professor, Oberlin Conservatory*

In 1991 Tom Standage wrote *The Telegraph: The Internet of the Victorian Age*. In the book, he chronicles the developments that led to Morse's electric telegraph and details the profound ways the technology changed lives in the nineteenth century. He does not mention how it affected the music world, but in this presentation I will fill in that information. When Morse demonstrated his telegraph in 1844, Elisha Gray was a nine-year-old Quaker farm boy living in Barnesville, Ohio. He built his own working model of Morse's device; later attended Oberlin College, where he studied physics with Charles H. Churchill and met his lifelong sweetheart (a fellow student studying music); and eventually rose to prominence as an inventor in the field of telegraphy. (Some know that Gray also invented the telephone—but his rival, A. G. Bell won all the court battles.) Early in his career Gray devoted his attention to the potential for the telegraph to democratize the concert hall, subscribing to a movement that was afoot. In concerts between 1874 and 1878, first in the Chicago suburb of Highland Park, then at Steinway Hall in New York, the Brooklyn Music Academy, in Washington, D.C., and at First Church in Oberlin, Gray presented his musical telegraph, the first-ever electric musical instrument, played by renowned pianists of the day. On a one-and-a-half octave but fully polyphonic keyboard, they played a selection of popular songs and opera solos. In this presentation I will demonstrate Oberlin's working one-octave model of Gray's keyboard, explain how it worked, and chronicle the short-lived but significant history of its impact on the musical world of nineteenth-century America.

Roderic Knight is professor emeritus of ethnomusicology at Oberlin. Primarily known for studies on the Gambian Mandinka kora and drumming, he has also published on adivasi groups in Central India, with articles, audio, and video documents on all these subjects. He was a student of Klaus Wachsmann. His third area of study is organology: In 2015 he devised the Knight Revision of Hornbostel-Sachs, and his current research is on the first electric instrument, Elisha Gray's 1874 musical telegraph.
rknight@oberlin.edu; <https://www2.oberlin.edu/faculty/rknight/>

Century-Old Electromechanical Secrets Revealed! – "Isis" the Zither-Playing Android

Rick Meyers, *Portland, Oregon*

Dr. Cecil E. Nixon's zither-playing Android "Isis" made her public debut at a meeting of the Society of American Magicians headed by Harry Houdini on Dec. 12, 1919. A week earlier, a post in the *San Francisco Chronicle* had boasted, "she will defy the masters to divulge her mystery ... whose secret has been called unsolvable by Goldin, Carter, Keane and other famous magicians." While "unsolvable" might seem an exaggeration, for Isis it rings true, since for one hundred years the mystery of her workings remained unsolved. As much a remarkable piece of artwork as an "illusion," Isis evoked almost shameless fascination for the next four decades, until the mid-1950s, when Nixon's health failed and she ceased being demonstrated.

Following his death in 1962, Isis was donated to the Pony Express Museum in Reno, Nevada, where she remained a “sleeping beauty” surrounded by Wild West memorabilia. In 1986 the museum’s contents were sold at auction and she was purchased by master illusion-builder John Gaughan and restored to working order. Beginning in 1989, Isis was demonstrated at special events and conferences and was taken abroad, where she appeared on European television. She was last demonstrated in 1996. During all performances she was presented as an “automaton,” having the uncanny ability to play any music selection requested of her, needing no assistance from her presenter. But Isis is not an automaton: she’s a magic illusion relying on the use of hidden electromechanical devices and clever “magic stagecraft” apparatus, which have never been fully viewed or understood except by a handful of operators.

Recently however, it was determined that, for the sake of enhancing magic’s historical legacy, photos and an explanation of Isis’s secret “hardware” should be revealed, in part as an overdue tribute to the creative genius of her inventor, Dr. Cecil E. Nixon. Therefore, the paper presentation will include photo-documentation of the hidden “control center” that facilitates Isis’s zither playing, along with the stagecraft devices manipulated during a performance to create desired effects. Finally, a five-minute video of Isis performing on British TV in 1989 will be shown, and paused as needed, to explain both the visible and hidden actions taking place.

Rick Meyers is an independent musical instrument historian, performer, multi-instrumentalist, and teaching artist specializing in traditional American music from Colonial times to the present. He is also director of the American Fretless Zither Project, dedicated to collecting, restoring, recording, and exhibiting American-made fretless zithers (1882–1972), and producing publications that combine illustrations and narrative to interpret their story for the benefit of museum professionals and the general public alike. info@rickmeyersmusic.com

PAPER SESSION 5: KEYBOARD INSTRUMENTS

Three Spinets from David Tannenberg’s Workshop

Laurence Libin, *Ramsey, NJ*

David Tannenberg (1728–1804), eighteenth-century America’s finest, most influential organ builder, was the central figure of a Pennsylvania German school of keyboard instrument making that has had far-reaching musical consequences. Tannenberg’s remarkable organ for Home Moravian Church in Salem, North Carolina, completed in 1800 and restored in 2003, continues to inspire new instruments from Pittsford, New York (Taylor & Boody, 2008) to Herrnhut, Germany (Eule Orgelbau, under construction).

Tannenberg’s stringed keyboard instruments are less well known, although his technical drawing and written instructions for making a clavichord have occasionally been used as models for new construction. My identification in 2004 of a clavichord Tannenberg made in Bethlehem, Pennsylvania in 1761—his earliest extant instrument and the only one he signed—proved revelatory since the clavichord departs in surprising ways from his graphic design.

Now, based on stylistic considerations and distinctive craftsmanship shared with known Tannenberg work, I have identified three unsigned, hitherto undocumented

spinets as late products of Tannenberg's workshop. One was long displayed unrecognized at the Lebanon County Historical Society, from which it was withdrawn in 2017; another, which passed from the Historical Society of Pennsylvania to the now defunct Philadelphia History Museum, is said, wrongly I believe, to have belonged to the prominent German-born ironmaster and glass manufacturer Henry William Stiegel (1729–85). Though conservative in appearance, these instruments display innovative elements including features borrowed from contemporary square pianos. A third related spinet, formerly in the Henry Ford Museum, was destroyed by fire in 1970 and is now known only through two photographs. These three instruments illuminate a previously unsuspected aspect of Tannenberg's creativity and show him to have been no less imaginative in designing spinets than he was in producing organs and clavichords.

Laurence Libin, FRSA, is editor-in-chief of the *Grove Dictionary of Musical Instruments*, past-president of the Organ Historical Society, and honorary curator of Steinway & Sons. For thirty-three years he was curator of musical instruments at The Metropolitan Museum of Art, and he continues to advocate for historic preservation. His honors include AMIS's Curt Sachs Award, the Anthony Baines Memorial Prize of the Galpin Society, and fellowships from the Likhachev Foundation and the Riemenschneider Bach Institute. lelibin@optonline.net

Reconstructing the 1720 Cristofori Piano

Frank Hollinga, *School of Arts, Ghent*

The reconstruction of the original state of Bartolomeo Cristofori's 1720 pianoforte has been my master's project at the School of Arts in Ghent, Belgium, for the past three and a half years. During the first two years, Kerstin Schwarz was the supervisor and coordinator of my project. This last year I was guided by the expertise of Darryl Martin. During the first year, I conducted a thorough preparational and a theoretical study of Cristofori's work. Kerstin and I visited the 1722 piano in Rome, the 1726 piano in Leipzig, and finally the 1720 piano in the Metropolitan Museum in New York, where we fully measured the instrument. With all the information I had gathered, I drew a 1:1 CAD drawing of the instrument's current state.

After a careful examination and study of all the modifications that the 1720 piano underwent, three reconstruction hypotheses can be suggested. The first suggests that Cristofori was still experimenting with sound and structural design in his late pianos. Hypotheses 2 and 3 suggest that Cristofori already had a rather solid design for his pianos by 1720, but was still experimenting with small details in the hammer action, making a clear distinction between his harpsichords and pianos.

In 2019 I presented a paper on the preliminary research for the pianos under construction. This year, you will hear the results of the first finished copy, along with details of how it relates to the nearly finished second copy.

Frank Hollinga is a master's student at the School of Arts in Ghent, Belgium. He was born in the Netherlands but emigrated to Portugal when he was five years old. Seven years ago, he moved to Belgium to pursue his studies in instrument building. Currently he is finishing his internship and thesis. frankhollinga@gmail.com; graduation.schoolofarts.be/student/frank-hollinga/

Destruction and Deconstruction in Piano Activities (1962)

Devanney Haruta, *Brown University*

During the September 1962 Fluxus festival at the Museum Wiesbaden in Germany, several performers destroyed a grand piano onstage, much to the mixed delight and horror of the live audience. This performance, which took place over the course of several evenings, was Fluxus founder George Maciunas' realization of Philip Corner's score, *Piano Activities* (1962). It shocked even the composer with its radical interpretation. In this paper, I examine three aspects of *Piano Activities*—score, performance, and public reception—to show how the destruction of the piano enabled access to various freedoms embodied in the Fluxus culture, its ideals, and the political climate of the 1960s. In particular, I show how *Piano Activities* reflects the calls for action outlined in Maciunas' manifesto and serves as a metaphor for Fluxus' goals to deconstruct the boundaries between art and the everyday. Through a deeper analysis of the piano's history, culture, and symbolism, I investigate its relationship with destruction, in both *Piano Activities* and other Fluxus works.

This paper expands on prior research of *Piano Activities* by Gunnar Schmidt (2012), draws from work by Fluxus scholars, and engages with primary source documents from Fluxus artists themselves, as well as with video and audio documentation of the performances. In addition, I apply Jared Pappas-Kelley's concept of "solvent form" (2019) to show how the piano demonstrates a permeability and instability that is revealed through destruction. This focus on destruction within *Piano Activities* raises important questions for organology: what does it mean to destroy a musical instrument? How can destruction reveal new insight into musical instruments as cultural objects? Examining destruction and deconstruction in a field that frequently emphasizes the creation, repair, and preservation of musical instruments can open new opportunities to reflect on instruments and their cultural value and meaning.

Devanney Haruta is a recent graduate of the Ethnomusicology MA program at Wesleyan University, where she wrote her thesis on case studies of piano destruction in works of art and music and worked for three semesters as the Teaching Assistant for Wesleyan's World Instrument Collection. This fall, she will be starting a PhD in Musicology & Ethnomusicology at Brown University, where she plans to continue her research in musical instrument studies. dharuta@wesleyan.edu

PAPER SESSION 6: HARPS

The Pedal Harp Trade in Paris at the End of the Eighteenth Century: Luxury and Aristocratic Purchases

Fanny Guillaume-Castel, *Royal College of Music, London*

In the collective imagination, the pedal harp is synonymous with luxury and aristocracy, and while today harpists come from many different backgrounds, this stereotype remains closely attached to the instrument. It appears that the flamboyance of eighteenth-century harps and the status of their owners is at the root of this idea, which has lasted through the ages. In fact, in Paris in the mid-eighteenth century, the pedal harp's popularity coincided with the affirmation of a new luxury market of consumption,

at the heart of which were members of the aristocracy. However, the dispersion of aristocratic possessions during the French Revolution and the absence of surviving sale books from harp makers have made it difficult to assess this market. What did luxury mean in the eighteenth century, and what was its function in society? How does this idea of the pedal harp as the favourite instrument of aristocrats translate in contemporary sources?

Through the analysis of financial documents, in combination with iconography and surviving pedal harps, this paper discusses the characterization of this instrument as a luxurious and aristocratic object. It analyses the definition of luxury at the time and its significance in aristocratic society, through the place of the pedal harp in the luxury market. It also sheds light on the identity of aristocratic consumers of the pedal harp, and on the instruments that they favoured.

Fanny Guillaume-Castel is a PhD candidate in Music and Material Culture at the Royal College of Music in London. She has collaborated with a number of museums on their musical instrument collections, including the Château de Versailles and the Musée de la Musique in Paris. Having previously researched Erard harps for her master's degree in Economic History, her research currently focuses on the transformations of the pedal harp in Paris and London between 1750 and 1830. Fanny.Guillaume-Castel@rcm.ac.uk

The Triple Harps of Bassett Jones (1809–1869): An Iconic Welsh Instrument and its Revivals

Kathryn Hockenbury, *Bangor University, UK*
Stephen Rees, *Bangor University, UK*

This paper has two main themes: (1) An investigation of some of the extant triple harps by Bassett Jones, explaining the context in which he made the instruments and analyzing some of his innovations in manufacture and design; and (2) An examination of the revival of the triple harp in Wales from the 1970s to the present day.

From the eighteenth century onwards, the triple-strung chromatic harp became an important symbol of Welsh musical identity. Although it was by no means the only type of harp played in Wales, it became known as a “national” instrument with its own distinctive repertoire, a position it held until the early twentieth century. Much was made of the instrument’s distinctiveness at the series of competitive festivals (*Eisteddfodau*) held at Abergavenny between 1834 and 1853, and thereafter by the determined patronage of August Hall, Lady Llanover (1802–1896). Bassett Jones, official harp-maker to the organizers of the *Eisteddfodau*, produced numerous prize instruments for these events; he was also bestowed with the title of “First maker of triple harps” to Queen Victoria and Prince Albert.

During the early twentieth century, the triple harp effectively fell out of use in Wales, and few, if any, instruments were built. However, from the 1970s, John Weston Thomas (1921–92) created an innovative design for a triple harp, which addressed some of the structural problems inherent in earlier instruments. His more robust instruments have proved popular, especially among folk revivalists. And in recent years, the discovery and restoration of instruments by Bassett Jones has led to changing aesthetic priorities among contemporary harpers, some of whom are actively investigating the sound-world of earlier triple harps.

Kathryn Hockenbury is a US/UK Fulbright alumna and master's student at Bangor University, completing her thesis titled "The Triple Harps of Bassett Jones (1809–1869): Context and Organology." **Stephen Rees** is a lecturer in Musicology at Bangor University. His research focuses on the revival of traditional music in Wales; he is currently preparing a chapter on the instrumental tradition for *A History of Welsh Music* (Cambridge University Press, forthcoming).

PAPER SESSION 7: INSTRUMENT MAKING & PERFORMANCE

The Lambeg Drum in Northern Ireland: Drum Making and Performance

Colin Harte, *CUNY-Music/Irish Studies, NY City Department of Education*

From its speculative origins as a military drum for King William of Orange's conquest of Ireland to its emergence as a symbol of Protestant, Unionist Northern Ireland, the Lambeg drum is an instrument that has a contentious history. Presently, loyal practitioners continue the Lambeg tradition. This paper explores the history of the Lambeg drum, performance practices, and the Lambeg drum making tradition in Portadown, Co. Armagh. The Hobson family's multigenerational Lambeg drum making, skin treatment, shell artwork, and playing serves as the central case study.

Colin Harte earned his PhD in Ethnomusicology at the University of Florida's School of Music, where he founded and performed with the UF Irish Traditional Music Ensemble. He earned his Master's in Educational Leadership from CUNY-Hunter College in 2018. He received his Master's in Ethnomusicology from the University of Limerick. As a NYC Teaching Fellow, he received a Master's in Education from CUNY- Lehman College. He currently teaches ethnomusicological courses for CUNY-Music/Irish Studies and NYCDOE. cfh745@gmail.com; <https://utpress.org/title/the-bodhran/>

The rabecas of Airon Galindo, Pernambuco, Brazil

Erasmio Estrada, *Pernambuco, Brazil*

The *rabeca* is a violin-shaped instrument widely distributed throughout Brazil. It is traditionally played at local *folguedos* (popular celebrations including dance, music, and theatrical representations). In recent decades, the instrument has received considerable attention from popular music performers. As a result, a growing body of CD and video recordings is readily available. All these, together with some appearances of the *rabeca* on TV shows and internet broadcasts, have contributed to an increased interest in the instrument, leading some performers and enthusiasts—such as Airon Galindo from Caruaru, Pernambuco—to build it themselves.

Some aspects of the design of the *rabeca* vary widely from region to region and builder to builder. A number of builders follow designs inherited from old masters, while others use the modern violin as a model. The variations extend to the nature of the building methods, something which leads, more often than not, to unexpected building difficulties. It is fascinating to see how the ingenuity of each maker works while searching for solutions to specific problems arising during the building process. In the particular case of Galindo, there is a combination of experience building and repairing

furniture and the use of unconventional building materials, namely discarded wooden crates of imported equipment, which can bring unexpected consequences for the sonority of the instrument.

Drawing on field data, bibliographical information, and organological research, this presentation examines a *rabeca* made by Airon Galindo with the intention of presenting and evaluating the maker's idiosyncrasies. The impact of some of his building choices on the instrument's playability will be addressed.

Erasmio Estrada is a historical keyboard performer and musicologist. He holds a Master of Music degree from the Freiburg University of Music, Germany, and gained his PhD in musicology at the University of Edinburgh in 2015. He is currently researching aspects of piano culture in Pernambuco at the turn of the twentieth century and *rabeca* building traditions in the same Brazilian state. arsmeus@gmail.com

PAPER SESSION 8: KEYS & GRILLS

The Keyed Trumpet and the Fathers of the Viennese Waltz (1826–1832)

Robert Apple, *University of Memphis*

Thanks to relatively recent research, we now know that the keyed trumpet was used for far more than just solo playing. Rather, the instrument was employed in a variety of contexts, including military bands, chamber ensembles, church orchestras, and the Italian opera pit. My research both corroborates and builds upon that of earlier scholars, and, to date, my catalog of keyed trumpet works has grown to include around 490 sources of keyed trumpet music. One area not widely discussed is purely instrumental music for orchestra. While I have yet to find a symphony that makes use of the keyed trumpet, I have cataloged fifty-three works for dance orchestra that include the instrument, most of which either do not appear in currently published catalogs or are not listed as having keyed trumpet parts.

During three months conducting research in the Wienbibliothek im Rathaus, where the majority of Joseph Lanner and Johann Strauss Sr.'s surviving musical manuscripts are held, I discovered that forty-three of their works written between 1826 and 1832 make use of the keyed trumpet. These works include marches, galops, potpourris, cotillons, and waltzes. Being that these two orchestra leaders are considered the fathers of the Viennese waltz, the fact that they both employed the keyed trumpet so extensively in their dance orchestras during their early careers is a particularly exciting revelation. While both composers made use of the keyed trumpet in slightly different ways, they both employed the instrument for prominent, but brief, solos—typically, during just one of a dance's numbers. Both composers also required their trumpeters to be able to quickly switch between playing the keyed trumpet, natural trumpet, natural horn, and post horn over the course of a single work.

Robert Apple earned his BM in trumpet performance in 2011, and his MM in trumpet performance in 2013. In 2018, he was awarded a Fulbright grant to continue his dissertation research in Austria. He is currently a PhD candidate in musicology at the University of Memphis, where he is also completing a graduate certificate in museum studies. Robert also studies and plays baroque, keyed, and low-f romantic trumpets, and the keyed bugle. rwapple@memphis.edu

Musical Grills: Metal Gridirons to Grill Fish and Play Music in Sixteenth- and Seventeenth-Century Europe

Arianna Rigamonti, *Royal College of Music, London*

“Take a salmond and cut him rounde, chyne and all, and roste the peces on a gredire” (Harleian Manuscript 4016, ab. 1450 A.D., p. 102, British Museum, London). Grilled salmon with a sauce of onions, cinnamon, and ginger is one of the dishes described in a fifteenth-century English book of recipes. The *gredire* mentioned in the recipe is a metal gridiron that was commonly used for cooking food on an open fire. Iconography from the sixteenth and seventeenth centuries shows that this kind of gridiron was used particularly to grill fish; however, when held by a comedian, it could become a musical prop.

Playing this musical grill was a common practice among *commedia dell’arte* characters or other masquerade figures during carnival celebrations in sixteenth- and seventeenth-century Europe. The musical grill was not only a metal idiophone to be struck with a stick—in this case a spoon or fire tongs—but it was held like a violin or a lute, imitating a musical instrument. Using iconographic sources, this paper explores the identity of the disguised musicians who played the musical grill, for which occasions, and how.

Metal gridirons were not the only kitchen appliances used by comedians to make music: pots, spoons, knives, and bellows accompanied the music of guitars, lutes or other actual musical instruments. This presentation addresses the power of comedy and carnival to twist daily objects into sounding tools or imaginary musical instruments.

Arianna Rigamonti is a PhD candidate in Music and Material Culture at the Royal College of Music, London, as a RCM Studentship holder. She completed two internships working with historical musical instrument collections: at St Cecilia’s Hall in Edinburgh and at the Rijksmuseum in Amsterdam. She holds a master’s degree in musicology from the Department of Musicology and Cultural Heritage of the University of Pavia and a violin diploma from the Donizetti Conservatory of Bergamo.

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ROUND TABLE

Instruments in Quarantine: Museums & Their Musical Instrument Collections during the Pandemic

Moderator: Carolyn Bryant

Mimi Waitzman (Horniman Museum, London)

Bobby Giglio (Museum of Fine Arts, Boston)

Cleveland Johnson (Morris Museum, Morristown, NJ),

Jason Hanley (Rock and Roll Hall of Fame, Cleveland)

Katherine Palmer (Musical Instrument Museum, Phoenix)

This round table explores the topic of museums and their musical instrument collections during the pandemic. Each presenter will focus on a particular aspect of their own and their museum’s pandemic experiences. They have had to deal with pandemic-related challenges such as catastrophic decreases in revenue, abrupt closings of museums and

their collections to the public, furlough situations for themselves and others, and of course COVID-19 itself, affecting themselves, family or staff. With museum buildings closed, alternate ways had to be found to continue interacting with the public. Curators pivoted from providing live musical engagement to online presentation; they transferred museum educational programs for young and old to online format; they reconfigured exhibit schedules; and they become experts on the myriad government programs designed to help employees and venues cope with furloughs and closings.

After the panelists have spoken, the conversation will be opened up for questions to the panelists and also for comments from attendees who may wish to describe other museum situations.

Mimi Waitzman, Deputy Keeper of Musical Instruments at the Horniman Museum, recently curated *At Home With Music*, a permanent display exploring domestic keyboard instruments. She leads a project restoring three historical keyboards for use in an enhanced public engagement programme. From 1984 to 2013 she curated the National Trust's collection of keyboard instruments at Fenton House (London). She serves as co-reviews editor for the *Galpin Society Journal*, as Honorary President of the Musical Instruments Resource Network (MIRN), and as a member of CIMCIM's instrument conservation group.

Bobby Giglio studied brass performance and musicology at the Purchase Conservatory of Music, and musicology with a focus on keyboard organology at McGill University. He completed two curatorial internships at the National Music Museum, and since then he has worked on fortepiano research at the Orpheus Institute and museum education at the RISD Museum. He became department coordinator for musical instruments at the MFA Boston in 2018, and in March 2021 was appointed Pappalardo Assistant Curator for Musical Instruments.

Cleveland Johnson is President/CEO of the Morris Museum, immediate past Director of the National Music Museum, and Professor Emeritus and past Dean of the School of Music at DePauw University. Johnson holds a B.Mus. from Oberlin College and a D.Phil. from Oxford University.

Jason Hanley is the Vice President of Education and Visitor Engagement at the Rock and Roll Hall of Fame in Cleveland, OH. It is his responsibility to make sure that every guest who engages with the Museum learns about the history of rock and roll, and leaves inspired by its stories. He holds a PhD in musicology from Stony Brook University, and his book *Music Lab, We Rock!* is available from Quarry Press.

Katherine Palmer enjoys a multifaceted career as a music educator, arts administrator, and performing musician. She is the curator of education at the Musical Instrument Museum in Phoenix (AZ), in charge of developing and teaching interdisciplinary, ethnomusicological content, working with diverse learners from early childhood to older adults. Additionally, she is the executive director of Daraja Music Initiative, a U.S.-based non-profit and Tanzanian NGO that aims to provide music and conservation education related to the *mpingo* (African blackwood) tree.

Carolyn Bryant (moderator) is associate editor of the *AMIS Journal* and has also served AMIS as president, vice-president, and secretary. She was a senior editor for revisions of *The Grove Dictionary of Musical Instruments* and *The Grove Dictionary of American Music*, in charge of articles related to musical instruments. Her research on the early history of AMIS was published in *JAMIS* (2007). cb.hampden@gmail.com

PAPER SESSION 9: WOODWIND INSTRUMENTS & 3D TECHNOLOGY

Out of the Bass Register: Expanding the Realms of Small-Sized Bassoons from the Eighteenth and Nineteenth Centuries

Donna Agrell, Áurea Domínguez, Giovanni Battista Graziadio, Zoë Matthews, and Letizia Viola, *Schola Cantorum Basiliensis*

Since 2017, systematic and in-depth studies of small-sized bassoons have been carried out at the Schola Cantorum Basiliensis, Musik Akademie Basel, Switzerland. These investigations aim to fill gaps in the history of the bassoon family by exploring the historical contexts and repertoire of smaller transposing bassoons. One of the main objectives of the current research project is to assemble a catalogue of instruments located in museums and private collections: currently, it contains more than 100 entries. Our work will conclude with the reconstruction of selected models, using new technologies such as 3D-CT scans and 3D printers as well as traditional building methods.

This presentation is an overview of the work undertaken by the SCB research team over the last four years, including organological descriptions and characteristics of small-sized bassoons, as well as morphological changes seen in different regions and time periods spanning the early eighteenth to the late nineteenth centuries. Analysis of repertoire together with historical contexts introduces a complex methodology; few musical scores explicitly specify “fagottino” or “tenoroon,” although their widespread use is becoming increasingly evident, as seen in a compilation of alternate terminology. The use of small-sized instruments was not limited to Europe, but had expanded to America by the turn of the nineteenth century. A March (ca. 1807) composed for Governor James Sullivan of Massachusetts, for example, asks for a “tenoroon.”

To complement the presentation of data collected on small-sized instruments, our contribution will include musical examples and demonstrations performed by the research team on original and 3D-printed copies of small-sized bassoons from the eighteenth and nineteenth centuries.

The three-year Swiss National Science Foundation project “Out of the bass register,” explores the organological and musicological aspects of smaller bassoons from the eighteenth and nineteenth centuries. It is being carried out by a team of researchers/performers/teachers at the Schola Cantorum Basiliensis (University of Applied Sciences and Arts Northwestern Switzerland) as a follow-up to the two-year SNF pilot project “Fagottini and Tenoroons—Small Forgotten Giants,” completed in 2019. Fagottino Research Team: donna.agrell@fhnw.ch; aurea.dominguez@fhnw.ch; giovannibattista.graziadio@fhnw.ch; zoe.matthews@fhnw.ch; letizia.viola@fhnw.ch; <https://www.historical-bassoon.ch>

Replicating, Repatriating, and Resocializing Native Flutes in North America

Jay Loomis, *Brown University*

Indigenous communities and scholars have engaged in debates on repatriation for decades. At times, clearly a museum should return artifacts to a Native tribe, but in other situations the merits of repatriation are unclear. In this paper I propose that replication should play a more central role in these contentious conversations on repatriation. I argue that the art and science of creating a successful replica can offer practical answers to complicated repatriation questions. In the polarized repatriation debate, I posit that a well-crafted replication project can serve both sides of the issue by taking into account the needs of museums (who want to keep their artifacts), while also serving the communities that are requesting the return of their objects. Collaboration with Native people is key to my discussion of the decolonizing possibilities of making a replica to keep at a museum, while returning the original object to a community of origin, and I examine ways that an effective repatriation project can generate connections between Indigenous communities and museum publics. In my discussion of replicating and resocializing Native American wind instruments, I foreground my recent conversations with the Jemez Pueblo flute maker Marlon Magdalena and the director of the Haffenreffer Museum at Brown University, Bob Preucel. My argument is that a closer consideration of replication practices can be useful to scholars, curators, and museologists as they engage in ongoing debates about repatriation and responsible curatorial practices.

Jay Loomis is a PhD candidate in Ethno/musicology, at Brown University. He plays and constructs a variety of wind instruments made of wood, ceramics, and 3D printed materials. He also composes and records his own works, often in parks and outdoor areas where he can combine the sound of flutes with the sonic environment, from cityscapes to mountain streams. His research areas of interest include organology, flamenco, coloniality, critical race theory, indigeneity, and musics of the Americas. jay_loomis@brown.edu

PAPER SESSION 10: BOWED STRINGS

Bowed Instruments Made in Polish-Speaking Lands Between 1550 and 1750: Attribution and Historiography in European Perspective

Alicja Knast, *National Gallery, Prague*

The Polish school of string-instrument making is a cultural phenomenon encompassing the activity of luthiers in Polish-speaking lands in the sixteenth through the eighteenth centuries; an organized trade in Gdańsk; and documentary evidence distinguishing the nominal categories “gdańskie,” “dankwartowe,” and “grobliczowskie.” Owing to the lack of a concept of national identity in Europe during this era, the category “Polish” did not exist indigenously; but it appears in treatises by Martin Agricola (1545) and Michael Praetorius (1619). The observation of that phenomenon resulted in the introduction of the term “Polish school of string-instruments” in the twentieth century.

The main purpose of this study is to investigate whether the phenomenon of the “Polish violin school” in material (instruments) and non-material culture is an artificial creation that satisfies a national attitude or a phenomenon in which idiosyncratic

elements can be observed. Another aim of the study is to present the Polish lutherie school of the time, especially the Groblicz dynasty. I analyze and interpret written sources and iconography and define the concept of the Polish violin-making school on the basis of reception in Poland and abroad. Analysis of archival records and extant instruments, including dendrochronological research, allows for the dating of artifacts from the Marcin Groblicz workshop to the period *ca.* 1700–*ca.* 1750. Instruments currently dated *ca.* 1600 bear misleading labels, probably inserted as early as the beginning of the nineteenth century. Archival documents and instruments investigated using cross-referencing and comparison are of crucial importance to understanding the Polish school and violin making in Europe.

Alicja Barbara Knast, MA, is a museologist, musicologist, and HAE culture manager. She is currently working on her PhD at London Metropolitan University. Her areas of specialization are capital projects, programming, and policies and strategies in museums and galleries. She led and curated the Chopin Museum's permanent exhibition, Polin Museum's core exhibition, and Muzeum Śląskie's new seat and revitalization of the former coal-mine (Katowice, Poland). Alicja Knast has published articles on museology, cognition, psychology, and organology. Currently she holds a position of the general director of the National Gallery in Prague.

The Workbench as Nexus for Multifaceted Organological Research

Geerten Verberkmoes, *School of Arts, Ghent*

In June 2020, I defended my PhD thesis (Ghent University) on the life, instruments, and working methods of stringed instrument maker and former notary(!) Benoit-Joseph Boussu (1703–1773), who was mainly active around Brussels between *ca.* 1751 and *ca.* 1762. My work unearthed a wealth of new archival information on Boussu. More importantly, among the 51 instruments by Boussu, a violin (MIM2781) and cello (MIM1372) preserved at the MIM Brussels were found to be in virtually unmodified state. Understandably, these two instruments are not allowed to be tuned nor played, hence preventing assessment of their playability and sound characteristics. Making scientifically produced replicas could overcome these restrictions, and that is exactly what was done.

As a first step, the two original instruments were extensively documented, using techniques such as CT-scanning and digital endoscopy (results published in *GSJ* 2016), identifying many idiosyncratic features. Using these results, one cello and three violin replicas were constructed. The replication functioned as “workbench research,” i.e. through testing specific making hypotheses proposed for Boussu and establishing an iterative dialogue between “theory” and “practice.” The making process is extensively documented on a dedicated YouTube channel. Subsequently, the musical and sonic possibilities of the replicas were studied through performance of closely related—albeit largely forgotten—trio sonata repertoire by court-chapel composers active in mid-eighteenth-century Brussels, interpreted by the newly formed Ensemble Boussu. Between 2018 and 2020, seven concert-lectures were organised to explore the instruments and repertoire (concert video). In 2020, a CD of this project was released worldwide by Etcetera Records, receiving positive reviews.

The paper will discuss the catalytic and pivotal role of instrument replication in generating interlocking cooperation among the fields of biographical research,

organology, instrument making, musicology, and musical performance practice. Presumably, our head-hand-heart approach can function as inspiration for comparable future initiatives.

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PAPER SESSION 11: PLUCKED STRINGS

Strap the Guitar to the Player: A Socio-Technical Analysis of the Guitar Strap

L. Roman Duffner, *Anton Bruckner Private University, Linz*

Physical movability and bodily expression characterize the iconic figure of the guitar player, particularly in rock music. While the core components of the “guitar player assemblage” are, certainly, the instrument itself and its (human) player, a rather inconspicuous but heavily involved element or actor is the guitar strap. On first sight, a strap seems a simple, uncomplicated, and somewhat self-explanatory tool in musical practice. However, a closer look at the guitar strap reveals a less straightforward collaborator. It is a tool that has to be added actively and can facilitate and complicate the making of music; it might jeopardize a performance; and it also has a peculiar history. Coming from an actor-network oriented perspective, I analyze the usage and involvement of the guitar strap and similar tools in musical practices. My examination is based upon multiple ethnographic sources.

In my empirical research, I consider visual materials in the form of historical paintings, photographs, and video footage. I also examine written sources such as patents and forum entries, in which experiences are shared and problems discussed. Additionally, I interview guitar players about their experiences and performing practices. My analytical focus concerns historical developments, the materials used, and the technical solutions, as well as design aspects and the involvement of the strap in playing contexts.

My study reveals that a first systematic use of strap-like tools for lute-like instruments coincides with changes in playing techniques, together with shifts in musical taste, at the end of the sixteenth century. The development and diversification of modern guitar straps, particularly of mass-produced straps, is strongly entangled with the development of the electric guitar but also with country-music specific performance practices. Finally, I elaborate on the spectrum and potential meanings of strap adaptations and discuss persisting conflicts that come with its use.

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Understanding the Transformation of the Cittern in Sixteenth-Century Europe

Esteban Mariño Garza, *Royal College of Music, London*

“The cittern’s long and remarkable history provides many surprises ...” With these words scholar and lutenist James Tyler highlighted the complex history of this wire plucked string instrument. In the late fifteenth century, the cittern was born as an attempted re-creation of the ancient lyre and was part of an artistic sphere that saw music as an essential part of humanist studies. However, the instrument’s humanist context was entangled with Europe’s increase of wealth and the rise of new elite social sectors, in which music was cultivated not only as an artistic practice, but as a symbolic instrument of education and social mobility. During the second half of the sixteenth century, the instrument became a widespread commodity in the upper-middle class circles in France, Germany, the Low Countries, and England.

The humanist background of the cittern, its traditional manufacture, and its tuning all changed to fit the demands of domestic instrumental practice during the late sixteenth century. This pivotal change has not been studied by previous scholarship, and few studies have investigated the physical transformation of the instrument, which was a critical process in the history of its cultural significance. This presentation will use a selection of iconographical, textual, and material primary sources to propose how the technical and musical changes that the cittern underwent were part of the musical cultural market of early modern society.

Esteban Mariño Garza studied Cultural Heritage Conservation at the National School of Restoration, Conservation and Museography Manuel del Castillo Negrete (ENCRyM). After finishing his bachelor’s studies, he received his master’s degree in Music with a Specialization in the History of Musical Instruments from the National Music Museum in collaboration with the University of South Dakota. He is currently undertaking his doctoral studies on Music and Material Culture at the Royal College of Music in London.

PAPER SESSION 12: WOODWINDS

The Long-Lasting Implications of Nineteenth-Century Woodwind Characteristics

Rachel Becker, *Boise State University*

The woodwind world became starkly gendered during the nineteenth century as Western society experienced an increasing polarization of gender roles; in contrast to earlier conceptions, flutes and oboes became not just feminine but female, and their players’ masculinity was reinforced. Woodwind instruments were not alone in this; the violin transformed into a woman’s body, seduced and sometimes injured by her male player, and the soprano voice lost its operatic positioning as hero. Meanwhile, the clarinet caused problems for a society determined to assign characteristics and performance possibilities to instruments based on their range and tone. Masculine and low or feminine and high—or a combination of the two genders through its ability to decrescendo from a trumpeting forte to a *dolce* whisper—the clarinet maintained a

descriptive androgyny at odds with the boxes set around the flute, oboe, and bassoon, revealing the artificial nature of this gendering at its conception and now.

These gender assignments have proved long-lasting. Leon Goossens's description of the oboe as "a lady" (1977) is only one example of twentieth-century musicians unabashedly gendering certain instruments as feminine, and in many ways the default musician is still a man; the Vienna Philharmonic only accepted their first female member in 1997. Yet while the discussion of associations between gender and instruments is common in ethnomusicology, these associations and their lasting ramifications often remain unexamined by those perpetuating them in Western music. Samuel Adler's orchestration manual, for example, stresses the importance of matching instruments and roles "psychologically as well as musically" before portraying the flute, oboe, and clarinet in feminine terms. Furthermore, students are still consciously and unconsciously directed towards certain instruments by instructors and peers, based on gendered pre-conceptions reflecting nineteenth-century conceptions of gendered bodies and of the activities appropriate for women.

Dr. Rachel Becker is Assistant Professor of Musicology and Oboe at Boise State University. Her research focuses on issues of genre, virtuosity, gender, popularity, and the development of woodwind instruments. She is currently investigating the social and cultural implications of virtuosic woodwind music and instruction. Rachel remains active as a performing oboist. She has played with the Portland Opera, with the King's College and St John's College, Cambridge, choirs and with the Philharmonia Orchestra.
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"In Amsterdam, a Chalumeau": The Musical Instrument Collection of John Sigismund Cousser (1660–1727)

Samantha Owens, *Victoria University of Wellington*

In April 1716, Philip Perceval wrote from Dublin to his brother, Sir John Perceval, noting that John Sigismund Cousser (1660–1727) was planning "to sett out soon for Germany for 4 or 5 months ... to bring home all his collection of fine musick." As an experienced composer and music director—who had studied in France, spent time in Italy, and held leadership positions at numerous German courts, as well as at the renowned Hamburg Gänsemarkt Opera—Cousser was clearly well versed in the major Western European musical styles and performance practices of his day. Indeed, alongside musical scores the recently appointed Master of the Irish State Musick also planned to return to Dublin with a selection of musical instruments gathered from cities as diverse as Amsterdam, Paris, Antwerp, and Munich.

This paper will examine the lists of musical instruments found in Cousser's substantial manuscript notebook, now held by the Beinecke Library at Yale University. Covering a wide range of instruments (wind, bowed and plucked strings, brass, and percussion), they not only feature items relating to his 1716 trip, but also an inventory of instruments kept in Cousser's house, lists of ranges and tunings for diverse instruments, sets of instructions for tuning keyboards, and registration details for a Dublin organ. Considered together with a selection of other primary source material, this information presents a fascinating picture of the expanding instrumentarium of early eighteenth-century Ireland.

Samantha Owens is Professor of Musicology at Victoria University of Wellington (New Zealand); an Honorary Professor of Music at the University of Queensland (Australia); and a Fellow of the Australian Academy of the Humanities. Her research centres on early modern German and Irish court music, and the reception of German music and musicians in Australasia, 1850–1950. Recent publications have included a monograph, *The Well-Travelled Musician: John Sigismond Cousser and Musical Exchange in Baroque Europe* (2017). samantha.owens@vuw.ac.nz