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Gardunha
Fundão – Castelo Branco

ABSTRACTS

CO2021OC: <https://congressorganimusic.wixsite.com/co2021oc>

Legacy of sound producing in baroque pipe-organ stop 'Vox Humana': impact of chemical composition on timbre quality

Girėnas Povilionis (Lithuania)

Some Baroque pipe-organ dating from 18th–19th c. and extant in Lithuania and close neighbor territories in Belarus and Latvia give a broad primary material to examine the uniqueness of East-Central European areal soundscape, providing a rare authentic example of refined reed pipes *Vox humana* that are characteristic with short resonators of a cylindrical and/or conical shape, of the Regal type. Referring to the collected authentic parts, the chemical analysis of metal pipe composition, the pipe construction and experimental sound producing examples, the report will present some final-stage results from a three-year research project focusing on the intersection of Italian and East-Central European traditions of baroque organ building through the legacy of Caspari(ni) masters. The examination of 1792-year *Vox humana* pipe structure from Kurtuvėnai (Lithuania) church organ (in 2014 a unique set of over 800 old pipes was discovered in church sacristy) has shown a certain similarity with the surviving *Vox humana* pipes in Paslek church organ (1719, Andreas Hildebrandt), Tytuvėnai (1789, Nicolaus Jantzon) and Žemalė (1839, master unknown) organs and confirm the continuation of Prussian tradition in the legacy of the so called Vilnius Late Baroque Organ Building School.

The presentation is the part of the project “*Genesis and Comparative Study of Vilnius Baroque Organbuilding School Stops Vox Humana&Unda Maris: Adaptation of Caspari(ni) and Italian Traditions*”, funded by the Research Council of Lithuania (LMTLT), agreement No S-LIP-18-40.

Girėnas Povilionis (b. 1976), PhD in humanities/art criticism (2006), Assoc.Prof. at the Lithuanian Academy of Music and Theatre. He is a senior specialist at the Centre for Culture Heritage, an organ historian, researcher and restorer, and gives lectures at the Lithuanian Academy of Music and Theatre (LAMT). Between 2009 and 2011 he was a Postdoctoral Fellow funded by the European Union Structural Funds project “Postdoctoral Fellowship Implementation in Lithuania” at the Lithuanian Culture Research Institute. In 2000, he completed his studies for an MA in solo organ playing at the LAMT. He improved his skills in organ building and restoration in France in 1999–2000, at Gotland University in Sweden in 2001 and 2006, and at the Centre for Organ Art (GoArt) at Gothenburg University in 2001–2002. In 2007, he established the public non-profit organization *Centre for Organ Heritage*. Povilionis’ scientific activities encompass research into historic organs and the issues of the preservation and restoration of this heritage. He has presented his research at international conferences and congresses in Lithuania, Latvia, Estonia, France, Sweden, UK, USA, Denmark and Portugal. He has published over 30 scientific articles and 2 monographs; delivered workshops in various towns in Lithuania and given lectures

at the Latvian J. Vitols Academy of Music. He has managed the CD project Lithuanian Historical Organs and the Days of Cultural Heritage in Lithuania. In 2018–2021 he implements a research project on Vox humana pipe organ stop funded by the Research Council of Lithuania.

Variety of microtone notation in contemporary Lithuanian music

Rima Povilioniene (Lithuania)

In the beginning of the twentieth century, increasing attempts to produce microtonal music resulted as a response to the rapid changes taking place in the world and a burst of technological innovation. Microtonal experiments prompted the decline and transformation of the 12-tone temperament, introducing such theoretical ideas as *el sonido trece* (Carrillo) and sixth-tones scale (Busoni), bichromatic music (Möllendorff) as well as the rich and refined oeuvres of Ivan Wyschnegradsky, Alois Hába, their pupils and other followers.

Lithuania, despite being in the European periphery of new music, as early as in the interwar decades (between WW1 and WW2) experienced a very direct influence in the sphere of microtonality. A pupil of Alois Hába, Jeronimas Kačinskas (1907–2005), whom Hába recalled as one of the best students in his class of composition, after studying at Prague conservatory, started to actively promote microtonal music upon his return to Lithuania and faithfully continued his teacher's experiments with quarter-tones and athematic music in his own compositions. The outbreak of WW2 forced Kačinskas to emigrate, and his career with microtonal music was interrupted for a long period, mainly because of the absence of direct followers and/or adherents of quarter-tone music novelties. However, during the postwar period up to the 1990s, very few attempts to employ microtonal elements and use certain pitch notation in the regular score can be noted.

The presentation focuses on the music scores by contemporary Lithuanian composers, providing a diverse vocabulary of symbols. Up to the end of the twentieth century Lithuanian composers applied their own signs that greatly vary from one another but generally intend to express the same action. Starting with the case by Kačinskas, we may see refined ornaments resembling notation by Hába; but from the 1970s composers have used different symbols, reflecting a period full of creative research and experiments; while most signs are linked strictly to certain quarter-tones, other symbols suggest free performance of an undetermined pitch.

The presentation is the part of the project “Sound Utopias: Cultural Impulses and Institutional Contexts of Lithuanian Music (Trans)avant-garde”, funded by the Research Council of Lithuania (LMTLT), agreement No S-LIP-18-39.

Rima Povilionienė (b. 1975), PhD in musicology, is a full time professor at the Department of Music Theory of the Lithuanian Academy of Music and Theatre, Deputy Editor-in-chief of the scientific yearly *Lithuanian Musicology* and an editor at the Lithuanian National Philharmonic. She held a researcher position at the International Semiotics Institute (ISI) at Kaunas University of Technology and at the Centre for Science at the Lithuanian Academy of Music and Theatre. Rima held internships at the Institute of Musicology at Leipzig University (2004) and IRCAM (2012) and attended Eastman School summer courses in Paris, IRCAM (2019). She has been a guest lecturer at Leipzig University, the Tbilisi Conservatoire, the Belgrade University of Arts, the J. Vitols Latvian Academy of Music, Vilnius University, and Kaunas University of Technology. She has edited over 15 collections and published more than 30 scientific articles and 150 critical reviews. She is an author of 4 monographs and research studies, among them on music and mathematics (Peter Lang, 2016) and microtonality in Lithuanian music (Ljubljana University Press, 2020). Her monograph *Musica Mathematica* (in Lithuanian, 2013) was awarded Prof.

Vytautas Landsbergis Foundation Prize for the best musicological work of the year. She is an editor of two collections for Springer in 2017 and 2019. The latter she co-edited with Nick Zangwill and Rūta Stanevičiūtė (*Of Essence and Context: Between Music and Philosophy*, Springer, 2019).

Books:

Rima Povilionienė, chapter ***From Tone Inflection to Microdimensional Glissando: Observations on Microtonal Manner in Contemporary Lithuanian Music***. In: Collective monograph *Microtonal Music in Central and Eastern Europe: Historical Outlines and Current Practices*, eds. Rūta Stanevičiūtė & Leon Stefanija, Ljubljana University, 2020: 67-113. ISSN 2350-6350. <https://e-knjige.ff.uni-lj.si/znanstvena-zalozba/catalog/view/217/318/5161-1>

Rima Povilionienė, ***Musica Mathematica: Traditions and Innovations in Contemporary Music***. Series Methodology of Music Research, Vol. 9, ed. Nico Schuler. Frankfurt am Main, New York: PL Academic Research (Peter Lang), 2016, 288 p. ISBN 978-3-631-71381-5, ISSN 1618-842X. <https://www.peterlang.com/view/product/78884?format=EPDF>

A 'Viola dos Corações' em Cabo Verde | The 'hearts-violin' in Cape Verde **Eduardo Loio (Portugal)**

The Portuguese guitar from the Azores is an important instrument in the history of Morna, a UNESCO World heritage. It was taken to Cape Verde by Cape Verdeans, emigrants in New England where they had close contact with Azorean emigrants. In the second half of the 20th century gained its own characteristics. At present it is still built, but it is disappearing. We present evidence of its presence in Cape Verdean culture and a proposal for 2027.

Eduardo Loio (1971) has a degree in Ceramics at ARCA-EUAC Coimbra. Master in Sculpture at the Faculty of Fine Arts of Porto University. Descriptive Geometry teacher. Developed professional activity as a painter, sculptor, set designer, and plastic arts teacher. Held several painting, sculpture, ceramics and luthery exhibitions. Musician and composer, has developed and participated in several research projects. Director of the Coimbra Music Museum project and of the Loio Luthier School. Coordinator of the "Viola Toeira" Study Group and of the Bendorrinho/Guitarrinho of Coimbra recovery project. Coordinator and Musician of "Toeira Trupe".

Construção artesanal de bombos no concelho do Fundão | Traditional construction of bass drums in the municipality of Fundão

André Mota Veiga (Portugal)

In the diverse active ethnomusicological cultural landscape in the territory of Cova da Beira, the role of the Drum Groups is well present in the folkloric roots of a rural matrix and they are one of the most original manifestations of the Intangible Cultural Heritage of the municipality of Fundão. These membranophones constituted one of the most relevant identity pillars of the various communities in the municipality of Fundão and they are a constant presence in the most important moments in the history and life of the municipality.

The various Drum Groups combine sounds and rhythms, are a source of pride in various communities and occupy a prominent place in their cultural tradition.

But if there is a strong identification in the different locations with their drum groups, there is a gap with regard to the artisans who build the instruments. The drums and boxes, made locally and by hand, are built using locally sourced materials, the result of knowledge transmitted between generations of players and artisans, culminating in the continuity and originality of the playing of the Drum Groups that resonate and percussion in the landscape and in the cadence of the festive and social calendar of the municipality of Fundão.

André Mota Veiga graduated in History in Variant Archeology (Universidade do Minho).
Postgraduate in Intangible Cultural Heritage (Universidade Lusófona).
Master's Degree in Anthropology of Ibero-America (Universidade de Salamanca).
Superior Technician at Museu Arqueológico Municipal José Monteiro in Fundão, Portugal.
Develops research on the areas of Historical and Cultural Heritage at local and regional level, management and collaboration in local projects and cultural activities.

Time – of sound. To sound..... or not to sound.....

Patrícia Lopes Bastos (Portugal)

Reflecting on the idiosyncrasies of Time – as a reflexion of us, as humans. We are “a time” and “a place” – and our perception of what is sound and music varies, as we grow, as we live, as we follow, cross, jump different paths and experiences... Such as “we” are different, epochs are different. And objects and their use, as seen and operated in each time, and by us, become different. So time – as the duration of “life” – gives us various perceptions, of the whole, and from and of us, and of our relation to sound, music, and musical instruments.

Life crossroads in art and positive thinking: It is not possible to describe in a few words even the essence of decades of multiple and intense learning and doing. We may note the strong roles that both science and art have exerted in the life of **Patrícia Lopes Bastos** (Lisbon, 1968), within an ever present love for Nature and the human capacity for positive thinking and creativity. Starting early in the arts (theatre, ballet, singing and playing the piano, visual arts experimentation...), her studies continued into performance practice (keyboard instruments), and later Museology and Organology (for her Post-Doctorate project), sideways to her craze for sports of all kinds. Professionally she began to teach at the age of 18 (music) and continued her devotion to cultural heritage knowledge, preservation and education in manifold ways, namely through writing, setting exhibitions, book editing, websites graphics, and the organisation of activities such as international congresses, concerts, lectures, poetry recitals, workshops, etc., besides promoting cultural awareness through photography, gastronomy, art crafts, and other ways. As a researcher, she has been particularly committed to music (general), to museology (collection management, conservation, valorisation) and to all areas related to organology (namely methodologies for universal and specific measurements, acoustic analysis, technical drawing 2D-3D-4D, classification, terminology, cataloguing, conservation, exhibition, archaeological sites sound studies), management politics and promotional activities. And also to philosophy, to history, to ethics and to biodiversity in an ecological self-sustainable system, clearly demonstrated by the results from her work at Quinta da Lira. As an artist, she has been experimenting with an inner-improvised composition methodology transposed to drawing (of which the series ‘Crossed dialogues’, ‘Drops’, ‘Paths of hope’ are examples), and is involved with a group entitled ‘Pessoas’, which envisage the creation of art as ‘individuals’ without references, without name: ‘Pessoa/s’, as the plural of the philosophical poet of many heteronyms and

personalities, 'Pessoas' as "persons", not prized nor recognised except for the work of art, the creation itself.

The ethnical identity in the timbre of rhythmical improvisation: the case of ritual music in Tunisia
Ali Chams Eddine (Tunisia)

Tunisian ritual music bears in its repertoire a tribute to the different "Marabouts", who each of them represents an ethnic group, whether black or white, the only ethnic differentiation remaining apparent in Tunisian society today. This differentiation hardly represents an obstacle to the membership of the "Marabouts" of black or white ethnicity since the vocation of a "Ṭariqa" (or brotherhood) is open to all Muslims, believers, and practitioners. Each brotherhood uses a significant number of musical instruments, most are percussions, from which we wonders: will this abundance of percussion timbres and their activities be able to differentiate black and white ethnic brotherhood? especially for a researcher deprived of cultural codes.

Thus, this study intervenes to the ethnic differentiation in rhythmic improvisation on sociological and musicological research on the universe of brotherhoods and their organological specificities, relying on the contribution of computer tools in the analysis of timbres to deduce the ethnic imprint of ritual music in Tunisia. Distinguishing an ethnic group from a sound timber is a rich field that will join a multitude of disciplines in the service of a single problem.

Ali Chams Eddine is a doctor in cultural sciences and master assistant of higher education in Tunisian universities, Master of "Qanun" instrument and music producer specialized in Music Assisted by Computer . He has nearly 25 years of teaching practice, and he currently is the Head of the Musicology Department at the Higher Institute of Arts and Crafts of Gabès/Tunisia. In addition to his civil commitments to the environment and culture, his researches focus on «rhythmic discourse» and its exploitation in various social and ritual practices.

An overview on digital technology and handcrafting processes applied to ancient instruments
Angela Bellia (Italia)

This paper aims to explore how digital imaging and computed tomography (CT) can provide us significant results in the study of ancient instruments and valuable information otherwise not available. Despite its methods provide a very high potential in diagnostics and preservation of ancient musical instruments, radiology has not been enough applied in this field of application. As an improved method for the visualisation and analysis of the material density of instruments and of their surfaces and volumes the CT allows useful evaluation for exploring the handcrafting process of instruments as well as the visualisation of invisible fracture lines and lesions in their structures, showing possible modifications, damages and repairs. These methods for processing 3D models of musical instruments provide us useful information for the knowledge of the techniques used by the craftsmen engaged in designing and handling instruments

The **Angela Bellia's** work involves the fields of archaeomusicology, ancient sound studies, archaeology of dance, and digital heritage. After her research in mobility at the Institut für Archäologie in Zürich, at the École des Hautes Etudes en Sciences Sociales in Paris, she carried out her research at the Institute of Fine Arts at the New York University, devoting her attentions

towards the reconstruction of the performative dimension of an ancient Greek *polis* in the West. More recently, she carried out her research devoting her attentions towards archaeology of sound as a new approach in the study of intangible cultural heritage. She has been the Chair of the Italy Chapter and of the Events & Network Working Group of the Marie Curie Alumni Association (MCAA). She participated in many initiatives in Europe in order to promote MCAA's activities and the community of MCAA humanists. Recently, she received the "MCAA Outstanding Contributor Award". At present, she is the Chair of the Archaeomusicology and Dance Interest Group of the Archaeological Institute of America. To see her work: <https://nationalacademies.academia.edu/AngelaBellia>

Angela Bellia – PhD, Senior Researcher, Institute of Heritage Science, National Research Council, https://www.ispc.cnr.it/it_it/ | www.cnr.it

Chair of the Archaeomusicology Interest Group (AMIG), Archaeological Institute of America, <https://www.archaeological.org/committee/archaeomusicology-interest-group/>

<https://www.libraweb.net/collane.php?chiave=TELESTES&valore=collana&h=>

Editor in chief of *Telestes*. An International Journal of Archaeomusicology and Archaeology of Sound

<https://www.libraweb.net/promoriv.php?chiave=147>

<https://nationalacademies.academia.edu/AngelaBellia>

Video-edition for public presentations: the National Library of Laos and its specific aesthetics in 2021

Thongbang Homsombat (Laos)

As the main video editor for any kind of promotion material and as the main curator of the audiovisual collections at the Archives for Traditional Music in Laos at the country's National Library, I always experience changing aesthetics in the working process. The year 2021 again has some specific features regarding emphasis and value markings that have to be included. Also, the way how audiovisual presentations are thought to help inform people beyond borders within the country and abroad, speak a clear language. The video document, which I had to prepare for a special meeting of ASEAN representatives in July 2021, is one example that I want to present. Interesting are not only the different views, but also the music used, the strong will to keep sound quality on high level, and the many things that are not shown, yet the video editor has to be aware of, create a product made by many time witnesses. The presentation of the video will be commented and can be then discussed.

Thongbang Homsombat originates from a small village 90 km far from the Laotian capital Vientiane. As the only one of 10 siblings, she studied at the National School for Music and Dance in Vientiane taking Violin and Music Theory as main subjects. Later, she worked with the Media Section of the National Library and became the main administrator of the "Archives of Traditional Music in Laos" in the year 2002. She is involved in extensive field work throughout the country and in training projects for audiovisual archiving in other Media institutions of Laos. In course of her work, she did her BA in English language at Vientiane's Dongdok University, studied accounting, and sound technology.

Expressive timing and mechanical instruments: exploring temporal idiomatcity in music box performances

Claire McGinn (UK / Nederlands)

Mechanical instruments have been associated with non-expressive, or playback-like, performance. Discourse around music automation technologies has often evoked something lifeless, robotic, endlessly reproducible and always the same. However, in the course of castigating street organ grinders for allegedly unidiomatic renditions, nineteenth-century newspaper reports highlight the fact that, when using a hand-cranked mechanical instrument, there is potential for creating idiosyncratic performances. Indeed, when playing such an instrument, it is actually difficult, if not impossible, to create a completely 'regular' performance: audible temporal fluctuations seem to stem from the resistance of the mechanism, and these could be instructively compared to the audible fluctuations that may pertain to more stylistic and conventional concerns in other kinds of performance. Ord-Hume argues that 'a skilful [mechanical organ] performer could induce much colour into the music by [...] the sympathetic turning of the handle'. But what might this actually look like, how might it compare with other kinds of instrumental performance, and what light could this cast on the much-disputed 'musicality' of street organ grinders?

This preliminary investigation analyses a collection of recordings of music by Joplin and Chopin, played by a number of participants on a modern hand-cranked music box. These, along with commercial recordings by three different pianists, were analysed using Sonic Visualiser. The resulting beat onset data was analysed by creating Self Organizing Maps, which can group multi dimensional data units (e.g., a bar containing multiple beats with different BPM values) into clusters based on degrees of similarity, thus indicating trends in the approach to timing in different performances. The data collected shows how different players approached temporal shaping on the level of larger phrases and individual bars using a music box, beginning to cast a more empirical light on the question of expressive mechanical performance.

Claire McGinn is a Marie Skłodowska-Curie postdoctoral fellow at Utrecht University, working with Professor Maaik Bleeker, Dr Floris Schuiling, Museum Speelklok, and the Transmission in Motion Research Group. This project focuses on mechanical instruments from a number of social, historical and empirical angles, contributing to conversations about relationships between automation, value, labour, (musical) performance and structural inequalities, expanding existing knowledge about historical organ grinder communities in Europe, and increasing understanding of the presence and participation of women in these spaces.

Modernity from the past, a new violin based on traditional italian lutherie and inspired by nature

Massimo de Bonfils (Italia)

The Italian leading Santa Cecilia Conservatory in Rome built a new experimental ergonomic violin model inspired by the Italian traditional Lutherie and the Nature's design.

The Santa Cecilia Italian Conservatory's violin making course began in 2011 with theoretical and practical lessons using a laboratory (it is the only one among all the Italian conservatories). The lessons are not concentrated only on classical lutherie but also on the experimental one, inspired by concepts and evidences known in the world of Nature, such as the Fibonacci series. In 2019 we completed the new Santa Cecilia experimental ergonomic violin model.

Massimo Bonfils: Lutherie teacher (2011-2021): at the S. Cecilia Conservatory in Rome. Lecturer for LUTHERIE in the Advanced University Training Course in Engineering applied to

Musical Instruments organized by the University of Rome La Sapienza (2014-2016) and University of Ancona (2017-2019). Rome, Italy (2016): 1st Santa Cecilia International Violin Making Competition in Rome. M. de Bonfils was organizer and member of the jury (over 100 participating instruments from 24 nations). Elenite, Bulgaria (2017): International Conference on Education, Research and Development, publishing in the issue of Educational Alternatives, vol. 15, 2017 the article "Knowledge and innovation on classic italian lutherie - a competitive education in market economy". Rome, Italy (2014-2019): Conference at the ARDESIS Intl. Festival to promote the Lutherie Course. Paris, France (2017) - European Music Festival at the Italian Embassy, conference-concert: La Lutherie italienne: trois siècles de succès. Oporto, Portugal (2018): Conference at the International Conference European Platform for Artistic Research in Music - EPARM in Oporto, promoting the Lutherie Course at the Santa Cecilia Conservatory. Bari, Italy (2018): Conference on Lutherie during the ViolaFest 2018 held at the N. Piccinni Conservatory of Bari. Rome, Italy (2019): - Book published by the S. Cecilia Conservatory BEYOND STRADIVARI: THE NEW SANTA CECILIA VIOLIN MODEL (Italian version by Massimo de Bonfils and Mauro Fabretti). London, England (2019): - Article with photo and interview on the experimental ergonomic tool Santa Cecilia on The Strad Shanghai, China (2019): Music China 2019 Stand of the S. Cecilia Conservatory of Rome, Lutherie Course (SNIIEC, Shanghai New International Expo Center). Berlin, Germany (2019): Published article by Massimo de Bonfils and Mauro Fabretti BEYOND STRADIVARI: THE NEW SANTA CECILIA VIOLIN MODEL edited by Gisa Jähnichen. Verlag: Logos, Berlin. 2019. Conference at the 22nd Intl. Symposium of Musical Instruments in Lisbon (11 April 2019), promoting the Lutherie Course. Organizer of the LUTHERIE Seminar at the N. Piccinni Conservatory of Bari (February 8-28, 2021). Organizer of the Seminar of ENGINEERING IN STRING INSTRUMENTS LUTHERIE at the N. Piccinni Conservatory of Bari (June 3, 2021)

The acoustemology of Tboli music instruments
Earl Clarence Jimenez (Philippines)

As dynamic objects of culture, music instruments are an indelible part of the everyday life and sensate world of the Tboli people of southern Philippines. While their prominence in ritual, ceremonies, celebrations, and in different stages of the life cycle demonstrate the functionality of music instruments in Tboli life, it is the humanly organized sound emanating from these objects that I wish to point my lens at. Living in a world of sounds, the Tboli people have formed deep connections with the sounds of their music instruments and the multiple aspects of their natural, social, and cultural milieus. These sounds and their aesthetic properties are informed by how the people configure concepts such as gender, space, and spirituality. Thus, an acoustemology (Feld) of Tboli music instruments attempts to tease out how the Tboli people's sense of self and of their world is revealed through the sound of lutes, flutes, drums, gongs, and percussion beams, and their sonic experiences and engagements with these. Thus, these instrumentscapes (Dawe) are an aural representation of Tboli being, and as such, becomes a way of knowing.

Earl Clarence L. Jimenez, Ph.D., is an ethnomusicologist who has done field work among different ethnolinguistic groups in the Philippines, most notably among the Tboli of Lake Sebu, South Cotabato. His research interests include organology, sound archiving, urban soundscapes, sound and religion, and music and the body. He is an associate professor at the Philippine Women's University School of Music.

Mozartiana: a new CD for the grand piano label performed on tangente Flügel and pantalon

Michael Tsalka*, piano (Israel-Netherlands) & **Pooya Radbon** (Iran / Deutschland)

[*Head of the Keyboard Department at the Vanke Meisha Arts Academy (VMAA) in Shenzhen, China]

I am proud to introduce my latest CD, released by the Grand Piano/Naxos label, *Mozartiana*, a compilation of several of W. A. Mozart's complete and incomplete compositions interpreted on two extremely rare historical keyboard instruments, a Tangente Flügel and a pantalon. In 2018, my friend Pooya Radbon contacted me (More concerning Mr. Radbon collection: <https://www.fortepiano-collection.net>). He had just restored a Berner Tangente Flügel (late eighteenth century) and a Maucher Pantalon (c. 1780); would I consider making a recording on them? Our conversation centered on rare arrangements of Mozart's incomplete works. Pooya brought to my attention Franz Beyer's 1995 completion and piano arrangement of Mozart's ballet-pantomime *Pantalon und Colombine*, K. 446-Fs (tracks 2-14). Another dear friend, clavichord builder Sebastian Niebler (from Berlin), showed me his rare edition of *Mozartiana* (tracks 21-28), Edwin Fischer's collected piano arrangements of a variety of Mozart's compositions, from his earliest minuets to one of his most interesting tributes to J. S. Bach, the complex *Fantasy in F minor for Mechanical Organ*, K. 608 (track 24). Pooya and I also discussed works that would suit the idiosyncratic, undamped sonority of the pantalon. Some of the charming and playful dances annotated in Mozart's 1764 *Londoner Skizzenbuch*, K. 15 a-ss, Anh. 109b (tracks 16-20) offered a singular opportunity to explore the instrument's ethereal, undamped sonorities. The selected scores demanded not only technical mastery and reverence for the stylistic practices of the past, but an active imagination and a bold approach to interpretation. During the lecture-recital, I will share with conference participants details on the genesis of the project, a detailed description of the two historical instruments and three selections from the completed recording.

Early keyboard performer and concert Pianist Dr. **Michael Tsalka** has won numerous prizes in Europe, the USA, the Middle East, Asia and Latin America. A versatile musician, he performs repertoire from the early Baroque to the present day with equal virtuosity. He was born in Tel-Aviv, Israel. After studies in Israel, Germany and Italy, he graduated in 2008 from Temple University (Philadelphia, U.S.A) with a D.M.A. in Piano Performance and an M.M. in Early Keyboard Performance and Chamber Music. His mentors included Lambert Orkis, Joyce Lindorff, Harvey Wedeen, as well as Dario di Rosa, Klaus Schilde, Malcolm Bilson, David Shemer, and Charles Rosen. Dr. Tsalka maintains a busy concert schedule with performance highlights including the Forbidden City in Beijing, Palacio de Bellas Artes Theatre in Mexico City, The Royal Concertgebouw, Amsterdam, the Hermitage Museum in St. Petersburg, The Metropolitan Museum in New York, the Grosse Saal of the Mozarteum in Salzburg, Kunsthistorisches Museum in Vienna, the Elbphilharmonie in Hamburg, Sydney Conservatorium of Music, and the Jerusalem Music Center, plus live performances for radio and television stations around the globe (Chicago, Hong Kong, Buenos Aires, Berlin, Munich, St. Petersburg, Beijing, Stockholm, Helsinki, Auckland, St. Louis, Amsterdam, Brussels, Geneva, London, Jerusalem, Sydney). He has held teaching posts in the USA, in Mexico City, in Stockholm, and in New Zealand. Since 2019, He is the head of the keyboard department at the Vanke Meisha Arts Academy (VMAA) in Shenzhen, China. Dr. Tsalka has presented over 130 masterclasses across all continents, and has been the artistic director of festivals in China, Sweden, Spain, the Netherlands, New Zealand, and Finland. Dr. Tsalka recorded 27 acclaimed CDs for Naxos, Grand Piano, Brilliant Classics, Wirripang, IMI, Paladino and the Sheva Collection labels. For further information, please visit: www.michaeltalka.com

Pooya Radbon was born in Tehran, where he learned to play the violin, mostly interested in classical music prior to 1850. After discovering the "informed performance practice" mostly from Nicolaus Harnoncourt, he passionately dedicated his whole life to it so far. He formed the first early music ensemble in Iran, giving concerts and a seminar on HIP at Tehran University. After moving to Bremen (HfK), he studied the baroque violin with Thomas Albert and Stephanie Paulet and participated regularly in masterclasses given by Enrico Onofri. He also had lessons with Sigiswald Kuijken and Elizabeth Wallfisch, with whom he collaborated on various projects, including several radio broadcasts and CD recordings, and appeared as soloist with her and Jap ter Linden. With the Wallfisch Band, they performed concerts in France, the Netherlands, and Germany. He also performed under the direction of Bruno Weil, Wim Becu, Alfredo Bernardini, Detlef Bratschke and Thomas Albert. From the beginning of his residency in Germany, he started to collect fortepianos from the eighteenth century due to his love for Mozart's music. Within a decade he had built one of the world's largest and finest fortepiano collections, consisting of instruments from the early and late Classical period but also numerous Romantic pianos. Although largely self-taught, he learned techniques of restoration from master woodworkers and had the privilege of consulting Christopher Clarke on most restoration projects for more than 1000 hours.

Pooya Radbon endeavors to save the most historically significant keyboard instruments (including harpsichords, clavichords, pantalons, tangent pianos, and spinets) from exclusively private ownership, making them available not only to local musicians but to the wider world through social media. On these platforms he enjoys creating excitement and inspiring keyboardists to learn more about the qualities of historical instruments and the lesser-known repertoire. In 2020 he founded the EFA (European Fortepiano Academy), the aim of which is to create a center for early keyboard instruments with the help of enthusiasts at a high level, inviting fine historical keyboardists from around the world to give lecture-recitals, concerts and masterclasses and to broadcast videos of exquisite historical keyboard instruments.

In addition to his activities as a professional restorer., he continues performing chamber music from the Baroque and Classical periods.

The female presence in the orchestra

Francesca Guerrasio (Italia)

This research entitled "The female presence in the orchestra" focuses on the presence of gender within an apparently harmonious whole that is the orchestra, brought together under the direction of a conductor with the concern of "serving this sacred thing called composition" (Lehmann, 2005). Starting from the assumption that the orchestra represents a collective space where relationships between individuals are hierarchical, we will show how this hierarchy has repercussions both from a professional point of view and from an aesthetic point of view. Thus, to understand what is happening within this workspace, we will first take into consideration the different positions that the musicians occupy on the stage and then look at the feminine contribution and the gender characterization of some instruments.

Organized in two parts, this research will aim, in the first part, at a structural description of the orchestra. We will formulate three hypotheses:

H1: the orchestra is a very gendered field;

H2: some instruments are characterized by a gendered representation;

H3: a feminization of leading roles is underway.

In order to test our hypotheses, in the second part, we will examine a sample of twelve European orchestras. We will refer mainly to symphony and philharmonic orchestras which boast a musical tradition of at least a century and a staff of at least ninety instrumentalists. The only exception is represented by the George Enescu orchestra which with its seventy-eight musicians is the oldest in Romania and remains, until now, the main symphonic organization of this country.

Francesca Guerrasio holds a PhD in music and musicology from Sorbonne University in Paris and a PhD in history and criticism of musical, artistic heritage and entertainment from University of Padua (Italy). Authorized to the functions of Lecturer since 2014 by the French CNU, she is, currently, professor of musical education and assistant professor of history of music, popular music and contemporary music at the University of Salerno (Italy). Professional pianist, she graduated from the Conservatory of Salerno and was nominated in 1999 among the fifteen best pianists of Italian conservatories. As a piano accompanist she worked at the Music and Dance High School for three years and collaborated with the National Dance Academy of Rome.

An introduction to the “Kaba Zurna” tradition in Turkey

Ali Fuat Aydın (Türkiye)

Besides its verbal and performance qualities Turkish music also has a large instrumental field. There are many instruments used in performing Turkish music nowadays; however, there is no extensive research on these instruments. The melodies in the Turkish music repertoire are often played on the combination of davul (which is a large double-sided drum) and the zurna (which is a type of oboe or shawm) in varying configurations mainly in outdoor environments. The kaba zurna, being the largest member in size of the zurna family, is used in some parts of the country. In more urban environments performers of music recreate an idealised version of a more rural repertoire which was traditionally transmitted orally from master to student or from father to son. But today methods of transmission may vary. In this paper, the melodic configurations of the music when played on the kaba zurna, its tonal systems, pitch deviations, the changes in the instruments and the playing techniques, the ornamental devices will be investigated.

Ali Fuat Aydın is a virtuoso on the bağlama, a long-necked Turkish lute, which is a key musical instrument amongst the many traditions of Turkish folk music, and he is especially concerned with Zeybek music, which is mainly found in the western Aegean area of Turkey. As well as carrying out various studies on Zeybek culture, he has also researched topics such as traditional Turkish music structure, methods of notation, the tuning system of folk instruments, untempered note intervals, transposition, instrument-making and its standardization, in fields where as yet no complete consensus has been reached amongst musicologists. Furthermore, he has carried out studies on Greek Music in Anatolia, especially of the music of Smyrna (Smyrneika). He has also been interested in Rebetika, which subsequently developed in Greece, but had some of its origins in the Smyrneika tradition.

Rituals and rites, tempo and spaces in music and dance on both sides of the borderline

Helena Santana (Portugal) & Rosário Santana (Portugal)

In the Iberian Peninsula, cultural manifestations that include simultaneously dance and music are used in several events across time and places. We found them on both sides of the border, not

only in religious events but also in profane rites and rituals, namely the winter solstice festivals that are still celebrated today. These rites and celebrations, with deep mythological significance, can be found in the Pauliteiros performances. In these practices, the musical instruments, namely the idiophones, have a unique role in it. They are used not only to give the performers a musical stand but also to give the tempo, the cadence of steps and the sequences of dances. However, we don't uncover a consensus in their function and origin in this practice. Some historians refer to the existence of this type of performance in some dances used to practice war movements, avoiding unnecessary risks.

Facing this, in this proposal, we intend to analyze the dance ritual of the Pauliteiros, regarding the musical instruments that they use, the movements, tempo and contexts in which it takes place. By studying the performances in the Portuguese border (Terras de Miranda) and on the Spanish side (Galicia and Extremadura), we want to understand its most striking characteristics, the aim of this practice and the music and the instruments used in it, in order to highlight its characteristics.

Helena Santana studied Musical Composition at the Escola Superior de Música e Artes do Espectáculo do Porto. In 1998 she obtains her Docteur degree from the University of Paris-Sorbonne (Paris IV). Since 2000, she is an Assistant Professor in the Department of Communication and Art at the University of Aveiro, teaching several disciplines in the courses of Bachelor's in music, Master's in music, Master's in music teaching and Doctoral Program in Music. He belongs to INET-Md Research unit, conducting diverse research in the field of analysis and theory of contemporary music. In this sense, Helena Santana is co-author of the book (semi) – BREVES, 20th century music notes, and (In) EXISTENCES of SOM, published by the University of Aveiro, among other articles.

Rosário Santana studied Musical Composition at the School of Music and Performing Arts of Porto. In 1998 he obtained a Docteur degree at the University of Paris-Sorbonne (Paris IV) defending the dissertation entitled - "Elliott Carter: le rapport avec la musique européenne dans les domaines du rythme et du temps". Since 1999, she has been the Coordinating Professor at the School of Education Communication and Sports of the Polytechnic Institute of Guarda, teaching various subjects in the courses of Initial Training and Training Complements. She belongs to the INET-MD Research Unit, still collaborating with the Interior Research and Development Unit for IPG, co-authoring the book (semi) - BREVES. Notes on 20th century music, published by the University of Aveiro. His research is also reflected in the publication of several articles on contemporary music, musical analysis, and the arts in education.

Sigal Music Museum

Michael Lynn (USA)

It is a very rare thing for a new musical instrument museum to appear on the scene, especially one already possessing a fine selection of instruments. The Sigal Music Museum, in Greenville, South Carolina, USA, is just such a place. It was founded in 2017 as the Carolina Music Museum, directed by, and featuring the piano collection of Thomas Strange, specializing in American pianos. In 2020 the museum was renamed the Sigal Music Museum following the gift of the spectacular collection (just under 700 instruments) of pianos, harpsichords, and wind instruments, of the late Marlowe Sigal of Brookline, Mass. Sigal began as an enthusiastic collector of early keyboards but once his house was full, he branched out to woodwinds. To list just a few of the top makers included: the collection contains 10 very rare 18thC Recorders by Bressan, Stanesby, Denner, Gahn - Flutes by Laurent, Grenser, Prudent, Villars, Godfroy – Oboes by Fornari, Crone,

Greiner, Richters, Rottenburgh – Harpsichords by Shudi, Kirkman, Dulcken, Taskin, Bull, - Pianos by Broadwood, Erard, Stein, Walter, Sodi, Kirkman – and hundreds more. I will present a short survey of the collection and delve into a few instruments in particular.

Michael Lynn is a collector, and a baroque flute and recorder artist. Michael Lynn performed at President Barack Obama's first Inaugural Luncheon in 2009. He has also performed throughout the United States, Canada, Taiwan and Japan with such ensembles as Apollo's Fire (of which he is a founding member), Mercury Baroque, ARTEK, the Oberlin Baroque Ensemble, Smithsonian Chamber Players, Tafelmusik, the American Baroque Ensemble, Handel & Haydn, the Boston Early Music Festival Orchestra, the Cleveland Orchestra, the Houston Symphony, the Cleveland Opera, and Santa Fe Pro Musica, among others. He can be heard on Wildboar, Gasparo, Eclectra, and Koch International recordings. Mr. Lynn was Professor of Recorder and Baroque Flute at the Oberlin Conservatory of Music, where he was also Curator Emeritus of Musical Instruments. He served as Associate Dean at the Conservatory for 15 years. A noted scholar and collector of flutes, his website can be viewed at www.originalflutes.com. He teaches annually at the Oberlin Baroque Performance Institute, and has taught numerous other workshops throughout the United States. He has contributed a monthly column for Flute Talk magazine, and was the founder of Early Music Facsimiles and has written for Traverso. In 2013 he created the Medici Charitable Foundation, which is dedicated to producing concert performances to benefit medical organizations.

How to sound-guide large groups of people: an ecomusical project in the Shanghai Zoo

Gisa Jähnichen (Deutschland / China) & Paula Stefanini (Brasil)

In May 2021, a small group of researchers mainly coming from the Shanghai Conservatory of Music, tried to find out the impact of long-term music dissemination with low volume in the area the Shanghai Zoo on human and non-human. This joint paper will present a first part of findings, illustrated with recorded material and collected data from direct interviews. As animals have very specific patterns of habituating, the impact of sound plays a bigger role as expected. Also, it becomes obvious that musical sound is less specified as expected and counts rather as one among many human-made noises. Interestingly, there were exceptions to that, which are discussed in this report.

The function of guiding large groups of humans might have been a good point in the initial plan, the habituating of visitors to any kind of public spaces in the surrounding of the large city Shanghai and beyond, may cause an alienation of animals from their ability to communicate through sound. These and a number of other findings will be addressed and discussed.

Paula Stefanini, grown up in Brazil, is a Postgraduate at Shanghai Conservatory of Music focusing on vocal performance. She is interested in all kinds of sound and music.

Gisa Jähnichen is a Professor Dr (Ecomusicology, Performance Practices of Southeast Asia) at Shanghai Conservatory of Music, Chair of the ICTM Study Group on Musical Instruments, Secretary of the IASA T&E Committee, also teaching at Guangxi University of the Arts, Vienna University, Humboldt University Berlin, and as consultant at the National Library of Laos.
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Conch shells and biscuit tins: Caribbean composers challenge conventional orchestration
Christine Gangelhoff (USA / Bahamas)

Instrumentation and orchestration in classical or art music have evolved over the centuries. Some of these changes reflect the history of technological progress. Instruments have been improved, increasing their popularity, and new--sometimes unusual--instruments have been designed, changing the musical soundscape. Contemporary classical music includes great flexibility of instrumentation. Many composers incorporate unconventional sonic items into their works, expanding the timbral palette and stretching the boundaries of what is considered a musical instrument. This presentation will introduce some composers working in this sonic borderland--incorporating indigenous melodies and instruments into their works or recreating the sounds of indigenous instruments with orchestral ones. Composers from Latin America and the Caribbean are finding rich inspiration in the traditions and ecologies of their homelands.

Christine Gangelhoff, DMA, is a multi-dimensional practitioner of music. She is an experienced performer; an enthusiastic teacher and mentor; an advocate for arts and cultural institutions; and a dedicated scholar. She is currently Associate Professor of Music at The University of The Bahamas. Dr. Gangelhoff is a founding member of the chamber ensemble, C Force, whose aim is to showcase little-known classical composers of the Caribbean region in original compositions, transcriptions, and arrangements. Through her work with C Force and her extensive research, Dr. Gangelhoff has helped increase the exposure of this neglected piece of Caribbean culture.

The Holoent and the Muse: permaculture practices and landform listening
Alexander Karvelas (USA)

This paper focuses on the relationships between permaculture listening practices and the acoustic expressivity of the landforms to which they attend. Permaculture has coalesced over the past fifty years as a synthesis of diverse Indigenous ecological knowledges and Western horticultural practices oriented toward increasing biodiversity and social cooperation on a multispecies scale. Permaculturists often describe their work as a scientific and artistic method that gives form and expression to three fundamental principles; "earth care, people care, and fair share" (Henfrey 2018: 33). Exploring the implications of permaculture as an artistic method, I focus on the creative acoustic practices that permaculturists participate in through the tending of gardens. This is a study of the acoustemology (following Feld 1996, 2017) of permacultural engagement with gardens and other multispecies landform assemblages (Tsing 2015: 22) or holoents (Haraway 2017: M30). Drawing from ethnographic field research, multispecies and land-centered ethnographic immersion (Rose and Van Dooren 2016), and close readings of foundational permaculture texts, I describe how permaculture's epistemological commitment to "the coconstitution of the natural and the cultural" informs the practitioners' creative encounters with the landforms that they tend. I also consider the extent to which practitioners experience the sounds of these landforms as musical, and the implications of permaculture listening-sounding practices for multispecies musicalities. This paper synthesizes discourses from sound studies (Eidsheim 2015, Feld 2017), ecomusicology (Titon 2020, Silvers 2020), and ecofeminism (Haraway 2017, Neimanis 2017, Alaimo 2018) in theorizing permaculture landform-listening as a generative framework for understanding more-than-human sonic expressivity.

Alexander Karvelas is a PhD student in ethnomusicology at the University of California, Santa Barbara. My research focuses on the intersections of music, sound, and environment. My

dissertation project engages permaculture landforms as sites of human and more-than-human sonic creativity and collaborative expressivity, with an ear toward the relationship between listening practices and environmental justice work. I also study the modal traditions of the Middle East, Central Asia, and India, attending specifically to the relationship between musical practices and nation-building projects in these regions.

In defense of the 'Cithara lusitanica'
Nuno Cristo (Portugal / Canada)

In the realm of Portuguese organography several musical instruments have been surrounded by myths and ideological agendas, that has constricted a healthy flow of information. The so-called Portuguese guitar (GP) is one of those examples, involving fundamental questions of nationality and cultural sovereignty. From the beginning of the 20th century up until 1982, there was basically a single school of thought regarding the origin of the GP: the instrument evolved from the "English guittar" (EG) and there was no prior practice of it before the introduction of the British specimen in the 18th century. This notion started to be challenged by Pedro Caldeira Cabral in the early 1980s, proposing a continuous culture of the European cittern in Portugal since the 16th century. Later, Cabral comes up with the latinized expression "Cithara lusitanica" as the cultural paradigm, englobing all cittern practice in Portugal.

Departing from a critical analysis of the literature since the early 20th century, I explore the works of prominent scholars and non-academics, pointing out fantasies, misleading messages and contradictions that have been cultivated by some, in detriment of useful knowledge. Disclosing new evidence obtained through archival and iconographic research, I refute the arguments against Cabral's vision, that flourished at the beginning of the new millennium, and I demonstrate that the old theory via EG is now a thing of the past. Then, I give an historical account of the cittern in Portugal, suggesting a probable Flemish connection and I identify a female cittern player from the late 16th century in Funchal, Madeira.

The work is speckled with several specific cases-studies, counterarguments, and organological/technical details, including a new interpretation of the 1795 method for "Guitarra" by António da Silva Leite and considerations regarding tunings and stringing of the Cithara lusitanica.

Born in Lisbon, Portugal (1960), **Nuno Cristo** holds a master's degree in Music from York University (2014). Nuno has worked as an instrument maker/musician/musical director/composer and researcher. As a performer, Nuno specializes in the Portuguese guitarra and the cavaquinho, among other instruments. Nuno has self-produced two CDs, collaborated with Nelly Furtado, Béla/ Menage and others, recorded live for CBC radio, and played internationally in the USA, Macao (China) and Portugal.

Nuno has published the following works: "Decolonizing de Cavaquinho: A New Narrative" in Jähnichen, Gisa (Ed.) 2019. *Studia Instrumentorum Musicae Popularis* (New Series) Vol. VI, 19-40. "Cavaquinho de Portugal"/ "The Cavaquinho of Portugal" in Pereira, Júlio. 2017. *Praça do Comércio. Tradisom* (CD/Book TRAD105), 27-37/ 89-94. "The Immigrant Portuguese Guitar: Destination – Ontario" in *Portuguese Studies Review* Volume 23, Number 1, Summer 2015 (released in 2017), 143-178. "Madredeus" in *Silva Magazine*, Issue #1, Winter 1996/97, Toronto, 34-37.

«Will a new notation system be viable?» Music of Qin (Chinese lute) and its notation systems in history: a case study of “Lament from the Changmen Palace”

Chi Feng (China / USA)

This lecture introduces the development of notation systems for a traditional Chinese plucked instrument, Qin. Meanwhile, I take up the question of how a “perfect” notation would be possible in a modern musicological context.

For the recital, I will play a traditional piece named “Lament from the Changmen Palace” (Changmen yuan 長門怨) for six minutes. Listening to this piece, the audience would recognize the uniqueness of this instrument, so they could expect the challenge of writing down the melody and fingering. There is no fixed pitch for most notes in the Qin music. Many notes are attached with sliding tones or ornaments. Some tones even deviate from the scale and cannot be recorded by a fixed note. Furthermore, the same tone can be played in different strings with different fingerings, and these subtle changes may greatly affect the voice. Thus, the notation must contain necessary information about fingering as well as music. During the transmission of a certain piece in different schools, the tones are relatively fixed, but the rhythm varies. This is why different editions of music score coexist.

The lecture takes an example of a phrase in “Lament.” It discusses the pros and cons of a notation system used since the 8th century, a commonly used pattern since the early 20th century, and four innovated systems in the past twenty years. Meanwhile, I will play this phrase on the instrument to compare what information is neglected by these notations respectively. Finally, my presentation suggests a new notation system, which contains auditory and fingering information as much as possible. Furthermore, this new system based on standard staves facilitates communication and research with musicians and scholars in other fields.

This lecture aims to demonstrate that the flow of time urges us to reform the notation system for traditional music. Exploration to new notations rather than sticking to traditional ones may shed light on future learning and research.

Chi Feng is a graduate student at the University of Colorado, Boulder. Her research focuses on ritual and performing art, especially ritual music, in early Chinese texts. She is a Qin (Chinese Lute) musician. She has held recitals or performances in Shanghai, Yangzhou, Suzhou, and Los Angeles. Her previous works on Qin music focus on notating for Yue Ying’s 樂瑛 (b. 1904) music recordings. She is working with Dr. Qun Cao on an innovative notation system for unique music pieces played by Yue Ying. She is a recipient of 2020 Provost’s Fellowship at the University of Colorado, Boulder, 2017 and 2016 China National Scholarship, and 2016 YAMAHA Music Scholarship.

An investigation of piano timbre preference based on employing equalizer to adjust the harmonic loudness

Yuxiang Cai (China) & Rui Liu (China) & Xuefeng Zhou (China)

In order to improve piano timbre by controlling inconsistent harmonic loudness, many piano manufacturers selected hammering positions at the string length of $1/7$, $1/8$, $1/9$, etc. in the pitch of mid-low range of the piano according to Young’s Law. This kind of approach – such as hammering positions at the cord length of $1/8$ – control the 7th and 9th discord harmonics while lose the loudness of the 8th concord harmonic. However, the contemporary recording techniques (equalizers) of timbre adjustment can be well used without sacrificing harmonic loudness (J. Rämö & V. Välimäki, 2014). Under this circumstance, can ordinary listeners – they getting used to

listening to natural piano timbre – perceive the change in timbre processed by the equalizers? This study aims to explore the effect which the general audience perceive the sound of weakening the loudness of the 7th and 9th harmonics while enhancing the loudness of the 8th harmonics.

Xuefeng Zhou, PhD Professor, College of Music, Southwest University, No.2 Tiansheng Road, Beibei District, Chongqing, P.R. China

The Zildjian cymbal

Audrey Wozniak (USA)

The Zildjian cymbal is marked as an instrument with an ancient Turkish, Ottoman and Armenian past produced by “America’s oldest family-run business”. It is paradoxically rendered an unremarkable “humble object” in its assumed inclusion in military bands, marching bands, jazz bands, and orchestras. This paper analyzes the material qualities of the Zildjian cymbal and the narratives that accompany it which enable its objectification and also disrupt efforts to locate it firmly in one time-space. Drawing on multidisciplinary theorizations of time, materiality, and modernity, I examine how the Zildjian Company’s narrative of blood and alloy lineages animates, objectifies, and commodifies the multiple time-spaces which resound in the cymbal, dialectically enabling and destabilizing the instrument’s iconic status as well as its producers’ racial and cultural assimilation in the United States. Tracing the Zildjian (cymbal-makers?) lineages through historical documentation, ethnography, and the materiality of the cymbals themselves, I situate the rise of the Zildjian cymbal in the context of Armenian migration from the Ottoman Empire to the United States at the turn of the 20th century, considering how the Zildjians’ commercial success has been dialectically interwoven with their ability to navigate constantly shifting expectations of their identity as Armenians. In considering the material and narrative journey of the Zildjian cymbal and its creators, I explore its potential to resound multiple timespaces—in the process, revealing the instability of our place in modern time.

Audrey M. Wozniak is a Ph.D. candidate in Ethnomusicology at Harvard University who writes about discursive and material constructions of kinship and the state. She is currently researching how the concept of discipline has shaped Turkish civil society through examining Turkish classical music choirs in the country and its diaspora. She has published academic and journalistic writing in *Urban People*, *Applied Linguistics Review*, *Georgetown Journal of Asian Affairs*, *China Dialogue*, *TimeOut Hong Kong*, and *ABC News*. Wozniak is also an accomplished violinist and performer of Western and Turkish classical music. Her publications and performances can be found at www.audreywoz.com.

Intonation in the instruments of the brass family: a discussion about developing performance strategies

Enrique Batista Felix da Silva (Brasil) & Isaac Felix Chueke (Brasil / France)

The present research had as a goal identifying the most valuable strategies for helping the development of tuning as far as instrumentalists of the brass family are concerned. A performance in tune on those instruments requires from performers the perfecting of various abilities particularly those relative to musical perception and technical capacity of execution. Acquiring these skills is of great benefit since quite often one needs operating diverse

adjustments in accordance with the musical context, should those be missing a series of obstacles inevitably appearing and an adequate performance thus being affected. Particularly, there was the wish for analyzing and reflecting upon research found in the literature that might cover plural study methodologies as well as teachings referring to tuning development when applied to both the individual and the collective practice of instruments pertaining to the brass family. Thereafter surged the quest for discussing which would be those factors intervening in the perfecting of this skill, factors that could be either of a cognitive or a technical nature. The observed studies were selected according with their importance and their relationship with our study object considering the procedures, results and recommendations. After a discussion and an analysis about the selected research works it was verified how much the development of the tuning systematic on the instruments belonging to the brass family converge towards a process composed of various stages asking for the acquisition of quite specific skills and with each step contributing to a particular phase of this perfecting in performance.

Enrique Batista Felix da Silva, born in Curitiba, capital of the state of Paraná in the south of Brazil, holds a Bachelor of Music in Trumpet (2018) as well as a Master of Music (2021), both degrees received from Universidade Estadual do Paraná (UNESPAR) Campus de Curitiba I – EMBAP. In 2017 he was a finalist at the Competition ‘ Jovem Trompetista’ held by the Associação Brasileira de Trompetistas obtaining the third prize. Trumpetist of Orquestra Sinfônica de Ponta Grossa he regularly plays as guest musician with Orquestra Sinfônica do Paraná e Camerata Antiqua de Música de Curitiba. At Banda Marcial de São José dos Pinhais he teaches trumpet while also serving as conductor of its ensemble. Since 2019 he has been an active member of the research group “Estudos e Prática da Música dos séculos XX e XXI” at UFPR - Universidade Federal do Paraná.

Isaac Felix Chueke, Conductor, Educator, Researcher, Arts Administrator. Professor at State University of Paraná (UNESPAR), active both at the undergraduate and graduate levels, he obtained his PhD from Université ParisSorbonne (mention *Très Honorable*) and a Master's Degree in Orchestral Conducting from City University of New York, nominated for the university's Graduate Award. Decorated *Chevalier de l'Ordre des Arts et des Lettres* by the French Government he is equally distinguished by Czech President Vaclav Havel. As music director and guest conductor he leads various orchestras from Europe, North and South America, Asia. Lecturer at Université ParisSorbonne, State University of New York, New World School of the Arts in Miami, Federal University of Paraná, UNIRIO among others, he formerly served as Head of the Music Department at the National Library in Rio de Janeiro. He is a member of ANPPOM, SMT and co-leader of research groups Literatura & Outras Artes - UFPR, Estudos e Prática da Música dos Séculos XX e XXI - DeArtes/UFPR in Brazil as well as of IEMTP (International Exchanges on Music Theory and Performance), GRMB (Groupe de Recherche Musiques Brésiliennes)IreMus/CNRS and LangArts in Paris, France. With articles published in French, English and Portuguese, his latest topics of interest have been performance, analysis, esthetics, 19th-21th century music, Brazilian music and culture. ORCID: <https://orcid.org/0000-0002-3281-8283>. .|| <https://chuekeisaac.wixsite.com/maestrochueke>

Taiko: the instrument and its evidences of Japanese culture

Juliana Saemi Murakami (Brasil) & Isaac Felix Chueke (Brasil / France)

Taiko (太鼓) is the specific term in Japanese defining the traditionnal and milenar drum from Japan. In a literal translation ‘ great tambor ’, due to its physical constitution and format, it

possesses a capacity of much reverberation and intense sonorous propagation. In its own right *Wadaiko* (和太鼓) addresses taiko as an artistic and musical term perfectly defined in context, referring to a style of execution which rhythmical pieces possess and demand technical as well as physical preparation from the performer, real *prouesses* since are simultaneously present themes, coreographies, facial and vocal expressions. Because it is a manner of execution aiming at an artistic goal it has been possible to expand the forms of exploration and combination amongst the various timbres of the taiko, moreover, with this liberty, creating works equally capable of mingling with instruments, esthetics and musical structures alien to Japanese culture. Researchers Ana Luisa Fridman and Rogério Luiz Moraes Costa bring in their article published at the XXIV Congresso da Anppom an abbreviated approach about the relations established between the musician of European classical background with musical practices established in cultures not belonging to this tradition.

Thus, we suggest that the idea of sound itself backing all musical doings, including the genres, styles and systems through which were constructed these activities, is what makes possible the re-combination, the re-signification as well as the hybridism permeating the various expressive materials and musical procedures. (FRIDMAN e COSTA, *A diversidade a partir de diálogos com as músicas não ocidentais*, 2014, p.8). Considering the growing openness in the learning processes and musical practice referring to this milenar art, we take this opportunity to present the taiko and its use when technically applied, speaking formats, composition material, sound production and philosophies accompanying the making of a performance, the whole automatically associated within a context of Japanese culture, let us not forget knowing in *Wadaiko* its historic and sacred aspects.

Juliana Saemi Murakami is nipo-descendent, born in Japan. Her first instrument the piano, she was early on influenced by Japanese music, her principal instrument nowadays being the taiko. Bachelor in Music Production from Universidade Federal do Paraná, a certificated teacher of taiko by Nippon Taiko Zaidan, also a member of the band Wakaba Taiko based in Curitiba, in 2019 she took part in the series *Sons Nikkei* as a taiko performer playing side by side with guitarist João Egashira and pianist Lilian Nakahodo. Presently developing her Master's degree at Unespar under the guidance of Prof. Dr. Isaac Felix Chueke, her dissertation concentrates on the exploration of sound and combination-insertion of taikos in the realm of the sonority deployed by the modern western orchestra. Since 2020 she has been an active member of the research group "Estudos e Prática da Música dos séculos XX e XXI" at UFPR - Universidade Federal do Paraná.

Afghan musical instruments in a time of peace

Mark Slobin (USA)

In 1967-72, I conducted ethnomusicological research in northern Afghanistan among Uzbeks, Tajiks, and Turkmens. I found that musical instruments followed general patterns of ethnic exclusivity, inter-ethnic practices, and a relationship to the emerging national styles at a time of limited music media (radio only). Decades of destructive instability followed, and while some of what I saw has returned, it is once again under threat as the Taliban take over the North. The talk will survey my experience and findings.

Mark Slobin, Winslow-Kaplan Professor of Music Emeritus, Wesleyan University

Time - questions

Isaac Felix Chueke (Brasil / France), moderator & Alvaro Henrique Borges (Brasil) & Luigi Antonio Irlandini (Brasil) & Yuri Behr Kimizuka (Brasil)

Isaac Felix Chueke, Conductor, Educator, Researcher, Arts Administrator. Professor at State University of Paraná (UNESPAR), active both at the undergraduate and graduate levels, he obtained his PhD from Université ParisSorbonne (mention *Très Honorable*) and a Master's Degree in Orchestral Conducting from City University of New York, nominated for the university's Graduate Award. Decorated *Chevalier de l'Ordre des Arts et des Lettres* by the French Government he is equally distinguished by Czech President Vaclav Havel. As music director and guest conductor he leads various orchestras from Europe, North and South America, Asia. Lecturer at Université ParisSorbonne, State University of New York, New World School of the Arts in Miami, Federal University of Paraná, UNIRIO among others, he formerly served as Head of the Music Department at the National Library in Rio de Janeiro. He is a member of ANPPOM, SMT and co-leader of research groups Literatura & Outras Artes - UFPR, Estudos e Prática da Música dos Séculos XX e XXI - DeArtes/UFPR in Brazil as well as of IEMTP (International Exchanges on Music Theory and Performance), GRMB (Groupe de Recherche Musiques Brésiliennes)IreMus/CNRS and LangArts in Paris, France. With articles published in French, English and Portuguese, his latest topics of interest have been performance, analysis, esthetics, 19th-21th century music, Brazilian music and culture. ORCID: <https://orcid.org/0000-0002-3281-8283> .|| <https://chuekeisaac.wixsite.com/maestrochueke>

Alvaro Henrique Borges, Doctor in Music by the Post-Graduation Program of Universidade Estadual Paulista 'Júlio de Mesquita Filho' - UNESP (2014), holds a Master in Music (2008) and a Bachelor's degree in Composition and Conducting by the same university (2005) besides a degree in Formação Pedagógica em Música (equivalent to Licenciatura Plena) from Universidade Vale do Rio Verde - Unincor (2007). He serves as Associate Professor at UNESPAR-FAP (Bacharelado em Música, Especialização em Música Eletroacústica e Mestrado em Música) where he coordinates the Laboratório de Linguagens Sonoras e Música Eletroacústica - LiSonME and the Curso de Especialização em Música Eletroacústica (Lato Sensu). He has taught at Conservatório Estadual de Música 'Juscelino Kubitscheck de Oliveira', between 2006 and 2012, where he studied the violin (1999). With a professorship at the undergraduate and graduate levels at Universidade Vale do Rio Verde - Unincor from 2007 to 2009 where he founded the Orquestra Acadêmica da Unincor he directed and conducted its activities until 2010. Experienced in the musical domain, with an emphasis on Education and Musical Composition, he mostly dedicates to the following topics: Composition (Eletroacoustic and Instrumental), Contemporary Music Education, Music and Technology, Languages of Sound.

Luigi Antonio Irlandini, Brazilian/Italian composer and performer (piano and shakuhachi), is Professor of Music at UDESC (State University of Santa Catarina, Florianópolis, Brazil) since 2010, where he teaches composition, harmony, counterpoint, analysis, improvisation and classical Indian music at both graduate and undergraduate levels. His music has been performed in Brazil, Italy, the U.S.A., Japan, Argentina, Holland and Ireland. As a researcher, Irlandini studies circular and spiral musical temporalities, contemporary music and spirituality, and the dialectics of ancient and non-European contents in the compositional poetics of the 20th and 21st centuries. He has articles published in academic music journals such as Perspectives of New Music (U.S.A.), Opus, Per Musi and Revista Vórtex (Brazil). Irlandini studied composition with Hans-Joachim Koellreutter, in Rio de Janeiro; Franco Donatoni, in Italy, and with Stephen L. Mosko and Brian Ferneyhough in California. More information at: <https://sites.google.com/view/luigi-antonio-irlandini/home>

Yuri Behr Kimizuka, PhD. Composer, Conductor, Post-doctoral researcher at Federal University of Paraná (UFPR). Doctor in the area of processes of musical creation from ECA/USP, with the thesis "Modelização e pensée sauvage na prática composicional" under the guidance of Prof. Dr. Silvio Ferraz Mello Filho. At State University of Santa Catarina (UDESC) Music Department, he completed a Master's degree in Musicology about George Crumb's Makrokosmos ("Tempo: diferença e repetição no Makrokosmos de George Crumb"). Member of the Brazilian Association of Musical Cognition, his research interests include studies about tempo, processes of musical creation, computer-assisted composition.

Numerology as a way of explanation: the Pañchatūryanāda Classification of Musical Instruments in Buddhist Sri Lanka

Eshantha Joseph Peiris (Sri Lanka / Canada)

The concept of pañchatūryanāda refers to a fivefold classification scheme of musical instruments that is found in Sri Lankan Buddhist tradition. Although the term has appeared in Pali and Sinhala texts since the seventh century, its connotations seem to have varied in different eras. While historical sources do provide clues as to what the five categories referred to, scholars of Sri Lankan traditional music have been largely unable to agree on the precise criteria of the groupings.

Rather than add to the speculation, I instead examine the idea of fivefold categorization in the context of Buddhist and South Asian thought, and I argue that numerical equivalences in taxonomies constituted a way of explanation that created meaning within particular cosmological worldviews. Through this lens, I try to understand what the function and significance of pañchatūryanāda categorization might have been for Sri Lankan ritual musicians in the nineteenth century; while these musicians regularly invoked the fivefold concept in singing ritual texts, they only used a handful of instruments in their ensembles. Using the broader South Asian region as a case study, I also discuss the relationship between standardized historical categories and fluctuating trends in the manufacture of musical instruments.

Eshantha Peiris is a visiting lecturer in Ethnomusicology at the University of Peradeniya, Sri Lanka, and at the University of British Columbia, Canada. He holds a PhD in Ethnomusicology from the University of British Columbia, and M.A and B.Mus degrees in Music Performance and Composition from New York University. He is an associate editor of the journal "Analytical Approaches to World Music," and heads the research group "Centre for the Study of Sri Lankan Performing Arts."

Western transverse flute systems through time

Rick Wilson (USA)

We briefly describe the "systems" of the Renaissance and the Baroque flute, which are relatively simple, though they are far more sophisticated designs than some might think. The term "simple system flute" may be used for the first multikeyed flutes that appeared before 1800 and were in use throughout the 19th century and into the 20th. We will show and demonstrate simple system flutes and explain how (and WHY) they were modified as flutists and makers reacted to the changing times. (As additional keys were added to the simple system flute, these flutes became

very complex; they might have up to 19 keys. So "simple" in "simple system", as I use the term, does not mean uncomplicated. The primary defining characteristic of the simple system is that there are six open--and unencumbered--finger holes that produce a major scale when opened one by one.) The introduction of the conical Boehm system in 1832 with its louder and more even sound was resisted by many but strongly influenced players and makers. Other new systems were introduced (Siccama System, Carte Systems, Card system, Briccialdi System, Pepuschi System, Reform Flute), incorporating some of Boehm's ideas, and were used side by side with the simple system. We show and give sound samples of a number of these systems.

Richard Wilson is a Professor Emeritus of Mathematics at Caltech. His interest in historical flutes began in the late 1970s. He has performed with the Los Angeles Baroque Orchestra, Con Gioia, and other LA area groups, and has given a variety of lectures/demonstrations on historical and world flutes at colleges and workshops using flutes from his collection. He accompanies poetry readings in the US and Japan on the shakuhachi. His writings include numerous articles on his website www.oldflutes.com and an extensive commentary on Thomas Lindsay's *The Elements of Flute Playing* (1828).

"Bombos de Lavacolhos" – The sound that trembles the heart
Karla Bach (Brasil)

"The sound that trembles the heart" (int. 2013), a metaphor used by the drummer and craftsman Américo Simão, expresses the emotional and physical experience provoked by the "Bombos de Lavacolhos" performance, which takes place during three local festivities: "Festa de Santo Amaro", "Festa do Senhor da Saúde", and "Festa do Divino Espírito Santo". The traditional musical practice of "Bombos de Lavacolhos" (literally "drums from Lavacolhos") is played by nine men – drums and flute ("pifaro") – and by a male choir. Each year, on three different calendar festivities, at the Lavacolhos village of the Fundão municipality, the "Bombos de Lavacolhos" play a large performance that involves the Lavacolhos community, migrate people and a large number of visitors. The social dynamics and the individual roles that converge on the practice of the "Bombos de Lavacolhos" are at the center of this research. Sustained on theoretical contributions from the fields of Ethnomusicology and practice theory, some issues raised: Why is this traditional practice maintained in the XXI century? How are constructed the Drums from Lavacolhos? What makes their sound unique? According to the ethnomusicologist Helen Myers, "the fieldwork is the most personal and essential task required for an ethnomusicologist" (Myers 1992:21).

It consists as "being in the world", as Jeff Titon refers to (2008: 31), and promotes an experience that derives from the contact with individuals as a privileged environment for learning about a specific musical practice (Barz and Cooley 2008). This was the principle that guided the fieldwork I carried out in Lavacolhos between 2012 and 2016, concerning the practice/tradition of "Bombos de Lavacolhos".

Karla Bach is currently a member of the UFF National Symphony Orchestra. As Professor at the Brazilian Conservatory of Music for ten years, she created the Bachelor degree in Percussion Performance. In addition, until 2009 she was in charge of the music direction and coordination of the Conservatory's Percussion Ensemble. Karla Bach has toured internationally with the classical guitarist Paulo Pedrassoli. Along with their Brazil performances, the duo has been to Germany, the Caribbean, Morocco and Japan. Her leading activities include the creation and coordination of the Percussion Composition Lab at the Brazilian Conservatory of Music. She has also been a member of the renowned UNESP Art Institute's Percussion Ensemble. A specialist and Master of

Music in Musicology, her studies focused on the paths of Brazilian percussion within the orchestral work of Heitor Villa-Lobos. Karla Bach was a member of INET-MD at the University of Aveiro, Portugal. In 2017, her documentary "Bombos de Lavacolhos - O som que estremece o coração" was selected to the International Heritage Film Festival in Évora, Portugal.

The two times of America

José Pérez de Arce (Chile)

Music is a process that happens in time. But the concept of "time" doesn't exist in many, and perhaps in none of Amerindian languages. To the question "how do time be said in aymara?" the correct answer is "it is not said" (Mendoza 2015: 182). This implies many ways to conceive music. In my experience in southern Andes I can define some of them that expresses in different social spaces. There is music that is conceived as a programmed "concert", in which the score is like a "future" that guides, and there is some music that develops in a "timespace" in constant mutation, such as those who happens during rural *fiestas*, in which the orchestra travels through the village, the fair, the hill and the graveyard. When I assist to a *sikuriada* rehearsal (Andean pan flute orchestra), in Chile, Bolivia or Perú, to said "to meet at 4" is half an hour or one hour later. This is considered a sign of primitive behavior by the political or business bourgeoisie. When I study the "music" of "before Colon" time, I must confront a lost past, something alien, very different from the past of whom studies medieval music, or Roman, or Greek, with which he conceives a continuity. All these examples show us that there are two ways to live the "time" in América, that obey the two paradigms that inhabit the continent; the colonial one, well known, and the other, the vernacular one, ignored. To advance in the knowledge of our vernacular music it is necessary too know this difference.

José Pérez de Arce A. es un musicólogo especializado en las músicas prehispánicas y su legado hasta hoy en los Andes. Doctor en Estudios Latinoamericanos, ha realizado investigaciones en instrumentos sonoros, estéticas acústicas, continuidades, resistencias y trasposos musicales y otros ámbitos de las culturas musicales indígnas y mestizas. Ha hecho aportes a la metodología de investigación arqueomusicológica, y ha relevado importantes aspectos del patrimonio sonoro de la región. Actualmente está elaborando una publicación de su archivo de la organología vernácula del continente sudamericano, el cual es editado en capítulos que son distribuidos para libre disposición en las redes sociales, y que tardará varios años en completarse. Se desempeña además como músico, como museógrafo y como ilustrador científico.

Legend of Passing Time with instruments and captions

Coppice: Noé Cuéllar (USA) & Joseph Kramer (USA)

"Legend of Passing Time with instruments and captions" is an abridged account of Coppice's custom and modified instrumentation since 2009. Ranging from handheld objects and digital models to actual and simulated architectures, Coppice's instrumentation is overviewed as an evolving idea. Presented from within the documentary space of the now defunct Yerkes Observatory in Williams Bay, Wisconsin, Coppice captions the passing of time and the shapeshifting music within it. This presentation is an annex to the audio paper "Stewardship to

Obsolescence and Preservation: Listening to Specimen Music through Yerkes Observatory's Refractor and Reflector Telescopes," published by Seismograf in Spring 2021.

Coppice was founded by Noé Cuéllar and Joseph Kramer in Chicago in 2009, as an inquiry into the capture and generation of music and its relationship to its physical sources. With sustained interest in sound's capacity to cross domains, Coppice crafts pathways between music and technology in a cross-disciplinary language, resulting in work that is an overarching documentation of music in-formation. Coppice's custom instruments have been presented on stages and in performed installations at numerous venues in the United States, and its recordings have been published by artist-run labels internationally.
<https://coppice.futurevessel.com>

Gangha and Pattung music instruments: sounding power to community call in Banaue, Ifugao, Northern Philippines

Lilymae Franco-Montano (Philippines)

This paper explores the meaning of collective sounds of the musical instruments, *gangha* (flat gong) and *pattung* (wooden percussion beam) of the Ifugao people in Banaue. These instruments are played as an ensemble of interlocking sounds that call the community to gather. Percussive sounds are usually used for signaling but in Ifugao society, the collective sounds of these instruments create musical patterns that signal and invite the community to a feast or to a revenge endeavor that calls for a dance. *Gangha's* (flat gongs) festive performance calls for a celebration and communal dance. On the other hand, *pattung* (wooden percussion beam) is played by groups of men to constitute a revenge dance. These two case studies demonstrate the power of sound that enhances body movements and emotions. It calls, informs, and formalizes the community's social responsibility with the assistance of the sounding power of the instruments. Moreover, two different materials are used: bronze and wood. The materiality of the musical instrument adds to the discussion and explores the capacity of these materials to communicate and gather the people to collective performance.

Lilymae Franco Montano is an associate professor at the Philippine Women's University School of Music where she teaches Philippine Music, Global Music, Kulintang, and Ethnomusicology. She recently finished her doctoral degree in Music major in Ethnomusicology in July 2021 at the same university. She is a member of the International Council for Traditional Music (ICTM) wherein she presented papers about her research on musical traditions in Banaue, Ifugao. As a performer, she is a member of the Asia Traditional Orchestra since 2009. She is active in giving out lectures and workshops about Philippine Music in different local schools and abroad.

Playing non-music on the Sri Lankan Horanawa

Chinthaka Prageeth Meddegoda (Sri Lanka)

The Sri Lankan version of the double-reed oboe, the horanawa, has been and is still important to Sinhala Buddhists since it symbolizes "spirituality" and "locality" in the Sri Lankan cultural context. Usually, the Buddhist culture in Sri Lanka implies avoiding music making as an act of entertainment. This paper will discuss this issue in the context of the sensual perception of playing the horanawa in this Buddhist environment. A short excursion into the history of the

instrument may reveal a number of interesting observations. Kulathillaka writes that the horanawa has its origin in West Asia and that it migrated from there to Sri Lanka. To him, the term horanawa implies a foreign origin. He finds alternative terms used for horanawa in history such as “Oththu Thanthiri” and “Pata Thanthiri”. The horanawa falls under the category “Sushira” of the vernacular musical instrument classification system called “panchaturya”. The musicians who played in the context of panchaturya were considered as being of the lower caste according to literary sources. In a number of religious events the horanawa has been as equally important as all the other panchaturya instruments. Buddhist murals found in temples of the southern coastal area depict musicians playing panchaturya musical instruments, however, after the 19th century, in addition to these local musical instruments, the murals included the colonizers’ musical instruments such as wind instruments made of brass, foreign drums, harps, and the violin as Herath and Gajaweera describe. Looking at the aspect of defining music in a Buddhist context and the function of the horanawa, which is also one of the very few traditionally used instruments carrying an instrumental melodic line, this study is based on micro analysis, interviews with musicians and their audiences, and reviewing rare literature in the Sinhala language.

Chinthaka Prageeth Meddegoda, PhD, is a Senior Lecturer at the Department of North Indian Music, University of Visual and Performing Arts, Colombo

To sound or not to sound

Agustín Castilla-Ávila (España / Austria)

At the time of the Florentine Camerata and the rise of Opera, in my opinion, music had the same value as silence today. In the quieter society back then, listening to music was as special as listening to the silence today. For many human beings around the world, achieving this is almost impossible. How does this value exchange affect in the minds of composers today? Our modern world has quickly brought new questions like “Will Artificial Intelligence reach our inner voice?” (for me the inner voice is the highest representation of individualism), which might affect the minds of artists.

I would like to present and explain the series “Still life with silence”), which is intended to contemplation focusing on the graphic value of the silence in music. Can we write for the inner voice? Does silence exist anywhere in the universe? To sound or not to sound...

<https://www.youtube.com/watch?v=iAXHEI3VVdU>

<https://www.youtube.com/watch?v=r8bSIVzCmxc>

Agustín Castilla-Ávila has worked as a composer in Europe, Asia and America. His music has been directed by D. Russell-Davies, J. Kalitzke, T. Ceccherini, A. Soriano, H. Lintu and H. Schellenberger, among others. He has written solo, chamber, orchestra, theater, choreography and five chamber operas. He has published for Doblinger Verlag, Bergmann Edition, Mackinger Verlag, Da Vinci Edition, Verlag Neue Musik and Joachim Trekel. In 2013 he received the Musik Jahresstipendium from the Salzburg Region.

Horns (and trumpets) of Early Medieval England: where is the archaeological evidence?

Lucy-Anne Taylor (UK)

The horn, and sometimes trumpet, feature in both texts and manuscript illuminations from Early Medieval England. It is unclear whether the references to the trumpet meant a substantially different instrument to the horn was also present, or if the word for trumpet (byman) was used due to knowledge of the instrument from the Bible. The horn, unlike the trumpet, featuring in the law codes, epic poems, riddles, manuscript illuminations and carvings, was certainly known and present in Early Medieval England. However, there is currently no archaeological evidence defined as a blasting horn, or trumpet, from that period, unlike other for some time periods and places. The question must therefore be asked of where is the archaeological evidence? Is it just that it has been lost to the archaeological record due to processes such as decay or having not yet been found, or might it be that examples of this instrument are yet to be identified as such? Beginning with an assessment of the literature and iconographic evidence to gain an understanding of what the instrument was like, this paper will then assess the possible archaeological evidence. Through this and looking at archaeological finds of instruments from Europe contemporary to this period a comprehension of possible archaeological finds will be gained. This will also include a discussion of whether the drinking horns may have doubled as blasting horns, as some of the texts may suggest.

Interested in the history of music, **Lucy-Anne Taylor** discovered the research area of music archaeology as an undergraduate student studying archaeology and history at the University of Southampton. This, particularly focusing on the wind instruments of Early Medieval England, would become an area of research on which she would focus throughout her University studies. Now coming towards the end of her PhD entitled 'Anglo-Saxon Wind Instruments: Classification, Characterisation and Function', Taylor has enjoyed opportunities to explore the area of music archaeology, including sharing, and discussing, her ideas with leading music archaeologists such as Cajsa Lund and Graeme Lawson.

A study of thematic preferences of Dai/Thai music melody

Ming Cheng (China) & Xuefeng Zhou (China)

The Dai (a minority ethnic group) in China is cognate with the Thai (the majority ethnic group) in Thailand. According to the results of previous analytical research, it shows that the musical styles of the Dai and Thai have three types of common characteristics: (1) rhythmic metrical regularity (Jiachen Xie, 2019; Huan Xu, 2016), (2) emphasis on melodic tones – especially on the sixth tone (Yong Shi, 2006), and (3) emphasis the last tone of a phrase in Thai music (David Morton, 1976)). Are there more specific presentations of these features? Can these features and presentations be appreciated by the general audience of the Dai and Thai within the local community and the Han Chinese outside the local community?

In order to explore these questions, this study selects a melodic thematic phrase of the Dai piano piece 'Bamboo House Dai' (Ming Cheng, 2018) for investigation and analysis. The first author of this paper composed the piece as a Dai and participated in the recording of the survey sample, which consisted of three recordings played by insiders (a Dai piano student) and outsiders (a Han Chinese pianist study in the USA for 8 years and an American pianist). 120 listeners were surveyed from the insiders (Dai settlement and Thailand) and outsiders (Han settlement). This study confirmed that the aforementioned characteristics of the Dai and Thai music style are appreciated by the insider listeners. In addition to that, this study found that the most appreciated

melodies have a full-bodied duration accent on the last note of the phrase. These stylistic features can be applied to a wider range of Dai and Thai music, providing a reference for performance, singing and dance performances.

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Sounds and instrument symbols of music history in the works of Alfred Schnittke and Al Ravin
Angelina Alpatova (Russia) & Vladimir Lisovoi (Russia)

The authors have compared the concepts of musical works, united by a common idea of interpreting the time of the history of musical art. Alfred Schnittke in his Third Symphony dedicating to the history of German music ("Leipzig", 1981) used the spelled sounds of the names of thirty-three German composers for themes. His main creative concept was based on the overtones and undertones of one sound only for all harmonies, intervals and clusters of the work. Four movements of the work "Track of Time" for harp, flute, violin, cello, harpsichord and synthesizer (2014) Al Ravin has interpreted both as four seasons and four ages or epochs in music: spring, baroque (18th century); summer, romantic (19th century); autumn, modern (20th century) and winter, contemporary (21st century). The musical instruments symbolised every style and trend of music art more than three last centuries. In the fourth movement the mobile as a sign of mass culture appeared. With the sounds and instruments symbols the musical works were belonged to the kind of "instrumental theater".

Vladimir Ivanovich Lisovoi (b. 1955) graduated the Theory and Composition Faculty of Moscow State P.I. Tchaikovsky Conservatory (1986, under the guidance of the Doctor of Arts, Professor E.V. Nazaikinsky), musicologist, composer. Associate Professor (since 2007) of Department of Music Theory and History at the State Specialized Institute of Arts (since 2013 – Russian State Specialized Academy of Arts).

The author of the books «Modern Music. Ethnic Musical Tradition and Creative Activity of Central American composers» (Moscow: Econ-Inform, 2008); «History of Music» (Moscow: Jurait, 2018) and more than 140 scientific publications in the scientific works collections, encyclopedias («The Great Russian Encyclopedia» published by «Russian Encyclopedia», «World Musical instruments»), music periodicals (musical magazines «Musical Academy», «Musicology» etc.) and in collections of scientific conferences materials.

Angelina Sergeevna Alpatova (b. 1961) graduated the Theory and Composition Faculty of Moscow State P.I. Tchaikovsky Conservatory (1987, under the guidance of Professor E.V. Vasilchenko), Musicologist, Ph.D. in Art (1996, under the guidance of Professor T.V. Cherednichenko), the Associate Professor, Candidate of Art Criticism, Honored Education Worker. The Associate Professor of Department of Music Theory of the Gnesins Russian Academy of Music (since 2014).

The author of more than 150 scientific publications and books «Archaic Phenomena in World Musical Culture» (Moscow: Econ-Inform, 2009), «History of Music» (Moscow: Jurait, 2018). Author of idea and project, the organizer of scientific conference «The Faces of Culture: Actual Problems of a History and a Present» (Moscow, 2005-2020). The sphere of scientific interests includes musical anthropology, organology, musical semiotics, psychology of musical creativity.

The Celto-Iberian brass instruments

Peter Holmes (UK)

Brass instruments played a significant role in the musical life of Iron-Age Iberia, a culture in which women played a prominent role and were not subjected to the restrictions seen elsewhere in contemporary Mediterranean societies, outside of Etruria. In the iconography, brass are seen alongside woodwind in the form of the aulos/tibia and here clear gender distinctions are present with the brass being played universally by males and the aulos/tibia predominantly by females. Not only is the cultural use unique in this area but so are the brass instruments themselves. Forms seen in the Iberian context are not present elsewhere and these, along with their cultural usage are discussed in this paper.

Peter Holmes is a music archaeologist who trained initially as an engineer, serving a five-year engineering apprenticeship at Rolls Royce Ltd, later becoming a Chartered Mechanical Engineer. He went on to get a degree in geophysics before embarking upon a PhD in music archaeology in the 1970's. Being an active trumpet player and an engineer, he started early on to modify and then to make brass (lip-reed) musical instruments and the PhD brought together his interests in the field of brass instruments, focussing upon instruments prior to 500AD. It also combined his interest in making things with the application of experimental archaeological techniques to aid in the understanding of the acoustic world of instruments whose only footprint has been physical remains or iconographic representation. In order to understand the inter-relationship between the design and manufacturing technologies of the late bronze age cast instruments, it was necessary to carry out casting experiments to investigate the role of the clay bodies used to make moulds and cores and the techniques used to support cores. This called for several hundred casting experiments to test theories and to make instruments. Since the completion of his PhD, Peter has made dozens of 3D representations of instruments, using authentic materials to facilitate the study of the manufacturing techniques used to make these in the past and to investigate their acoustic qualities. These instruments have come from among other places, New Kingdom Egypt (trumpets), Irish bronze age (Wicklow pipes, horns, crotals), Baltic area bronze age (lurs), Irish iron age (trumpets), British iron age (Tattershall Ferry Carnyx), Etruscan (salpinx, litui, cornua, sistra and other ideophones), Greek (salpinges), Roman (tubae), etc. He is currently working on European iron age brass (lip reed) instruments with a view to recreating the sound world presented by the group of instruments known to have existed during that period.

The deployment of anachronicity

Francesco Venturi (Italia / UK)

We can distinguish three types of anachrony in music. The first is structural, and has to do with the linguistic nature of music, which is based on a sort of Lavoisier's principle where nothing is lost, everything is transformed. Every piece can be thought as a montage of tropes referring to different timeframes. The second type is deliberate, and has to do with the (modern) tendency to look back to the musical past in order to push forward to the future. Deliberate anachronism names all that is retrospective, revivalist, neoclassical, primitive, nostalgic, etc. The third type is deployed, and rather than about text (the music itself), is about context. Deployed anachronicity is what makes the musical past valuable in the present of the music industry. It gives artists a chance to work, by generating value around the anachronistic quality of their music. Such anachronicity is all about the promise to live within the conditions of an othered time. In this

sense, it has to do with an exoticization, but within time. So, while structural anachrony is about language, whereas deliberate anachronism is about idiom, the dispositif of the anachronistic is about discourse. If the musical past has always been a flavour within the modern, and developed into the main element of the postmodern, what is its function today? By considering the international success of Javanese band Senyawa, and introducing minute comparisons with aspects of other artists, in an ahistorical perspective, this paper puts forward the argument that today the deployment of anachronicity has made mainstream the musical past.

Francesco Venturi is an Italian musician-researcher. Composer, vocalist and music curator, he has been involved with anachronism in music since 2012. The research took form of paper presentations, music compositions, performances, concert programmes, articles. He is the vocalist of duo Interlingua and works as a singer and voice artist. He scored award-winning films (*Va ler io Ciriaci*), theatre plays (*Rimini Protokoll*) and dance pieces (*Raffaele Rezzonico*), audio guides (*Donizetti On*). In his PhD, he carries out interdisciplinary research into the queer voice. Since 2018, he runs the concert venue Spettro, in Brescia, Italy.

Extra time for discs – Methods for increasing the playtime in patent specifications of music storage media

Franziska Bühl (Deutschland)

About 400 patents of music boxes have been filed between 1870 and 1930. A noticeable part of them deals with music storage medias. These patents have all the same three ambitions: increase of stability, increase of pitch range and increase of playtime. As the topic of the congress is "Time", this paper deals with the increase of playtime. For this purpose, about 20 patent specifications of „Fabrik Leipziger Musikwerke, vorm. Paul Ehrlich & Co.“ and other persons were compared and their different methods for increase were analysed.

In the beginning, there was the spiked cylinder, which served over centuries as music storage media for music boxes. These were pinned with up to eight different tunes and had a playtime about two minutes. Because the acquisition cost was very high and the exchange of the barrels very arduous, instrument makers searched for a cheap music storage media which was easy to change. These could be found in discs with holes or projections respectively made from cardboard or metal. However, they had only a playtime of about one minute. This led to the fact that the tunes had to be much shorter than the original. It seems to be a particular problem with perforated discs, so that especially Paul Ehrlich aspired after increasing the playtime in a variety of ways. His trials contained fan-shaped, linear and helical sheets. Aside he modified his mechanics for scanning in this way so that the spacing of the scanning levers is as tight as possible and the motion of their tips as small as possible. Other designers did similar trials. However, the solution to this problem only came with the change to pneumatics and thus the use of music rolls.

Franziska Bühl studied "Conservation-Restoration, Art Technology and Conservation Science" at TU München. She finished with Master's degree. During her studies she did internships at Germanisches Nationalmuseum Nürnberg, Kunsthistorisches Museum, Wien, Deutschen Museum, München, and Händel-Haus, Halle/Saale. Following, she did an apprenticeship as an organ and harmonium builder and worked as a journeyman up to 2020. In this year, she moved to Eckert Restaurierungen, where she is employed as conservator-restorer for musical instruments, organ builder and research associate. Since 2021, Franziska Bühl works as research associate

for the researching project DISKOS at the DIGITAL ORGANOLOGY Forschungsstelle am Musikinstrumentenmuseums der Universität Leipzig.

A whistle pattern used in primitive burial practices

Ovidiu Papana (Romania)

This presentation is focusing on an object that studied globally (visually and acoustically), reflects through all its constructive elements a somewhat special (non-musical) destination. Its construction required a fairly large volume of work, compared to other ceramic objects that have a musical-sound destination. Its use as a musical toy is excluded. Its decorative elements with a desolate appearance make it unsuitable for a sound destination found in children. It can be used only for magical ceremonial invocations, being an object built with sound functions different from the artistic ones, in which the sound emissions are integrated within some funeral practices.

Ovidiu Papana is a researcher in the field of organology; he embraced a multiple musical career: conductor of folklore orchestra, music teacher, violin professor, university professor at the Faculty of Music from Timișoara (subject: ethnomusicology). As musical interpreter, he was outstanding in the field of Romanian traditional instruments (violin, jaw harp, whistles) being occasionally a member within folklore ensembles. He currently has a collection of Romanian traditional instruments of 180 instruments, collection covering all the range of instruments used in oral culture music. In the field of organology, he wrote several books on the instruments used in the Romanian traditional music. Its studies present updated features of such instruments. His research has lately been approaching acoustic phenomena from musical instrumental practice: acoustic features of sounds issued by traditional instruments. He is the prized author of a 5 volumes Encyclopedia about the instruments of Romania.

Bell chiming in Slovenia: performative, functional and musical changes over time

Mojca Kovačič (Slovenia)

The processes of using bells and different ways of bell ringing in social life has a long history and can be followed historically and geographically. Through the development of the construction of bell towers and the techniques of bell founding, which made a bell an increasingly complex musical instrument, and through the roles of bells in the social life of people, their musical side also developed.

The paper focuses on a practice of bell chiming (*pritrkavanje*) in Slovenia. It shortly presents the historical development of playing on bells in Europe, focuses on the development of practice in Slovenia and the function that bell chiming once had in society. It then presents the essential musical and performative characteristics of bell chiming along with regional and local characteristics and backs them up with video examples. Bell chiming has gained in visibility and recognition in society in recent decades and many bell chimers have made an effort to introduce the practice of bell chiming to the public. Thus, gatherings, competitions of bell chimers, video broadcasts from the bell towers, presentations on television, radio, performances abroad and on national and municipal holidays began to be organized, which also influenced changes in musical structures, performance methods and musical aesthetics of bell chiming. In accordance with this the paper offers a reflection on how social change and the changed way of life, the role that and

the function that music plays in society today, contributed to the transformation of bell chiming from the original ritual function to a musical performative one.

Mojca Kovačič is an ethnomusicologist at the Institute of Ethnomusicology ZRC SAZU. She is interested in cultural, social and political aspects of all kinds of music and sound expressions. Through studies of folk song, instrumental music, and contemporary music and sound phenomena, she explores the principles of musical structures and performances and illuminates their relationships to issues such as gender, nationalism, cultural politics, folklorization, identifications, migrations and minorities. In recent years, she has focused more on the study of urban soundscapes, the affective potentials of sound, cultural dynamics in migrant contexts and bilingual expression in popular music practices.

The design and scales of Native American flutes

Rick Wilson (USA)

The first part of our presentation will be about surviving ancient rim-blown indigenous flutes of the American Southwest. There is debate on how they were made, how they were played (what kind of embouchure), and even which end they were played from. We will focus on the "Broken Flute Cave flutes" excavated from a cave in the Prayer Rock district of Northeast Arizona in 1931, and which may date to the 7th century. Only in the 21st century have modern replicas been made and seriously played. The latter part of our presentation concerns the modern form of the Native American Flute, the two-chamber duct flute with an external block. Its form is in several ways unique to North America. While these flutes were in continuous use in many Indian Nations since the early 19th century, their use decreased in the 20th century as native life and culture changed. The late 1960s saw a revival and a dramatic popularity increase among non-natives. The scale was more or less standardized in the 1980s. Recently some makers are producing accurate replicas of early 20th century original instruments with their historical tunings. We will give sound samples that illustrate the sound and scales of (replicas of) both types of flutes.

Physical instruments in virtual acoustic environments. Strategies and concepts for the generation and access to virtual acoustic objects

Dominik Ukolov (Deutschland)

The perception of acoustic objects in musical instrument museums remains mostly silent and non-interactive, since justified conservation concerns cannot permit a daily playing by the visitors. Nevertheless, quite a few instruments are theoretically playable and are restored or prepared for concerts or recordings with historical performance practice, provided that no significant damage is to be expected as a result, a prior clarification of the critical points has taken place and the playing is under conservational supervision. After such a restoration and its purpose has been fulfilled, the instrument once again remains in a silent state and serves as an object that can only be experienced visually and that could theoretically sound through a physical interaction.

In the digitization project TASTEN, which was funded by the German Federal Ministry of Education and Research (BMBWF), 36 historical keyboard instruments from the Museum of Musical Instruments at the University of Leipzig have been restored to a playable state through extensive restoration work and recorded for the first time, tone by tone and noise by noise, in order to be able to obtain not only acoustic information but also virtually playable digital copies.

These virtual instruments can be played, for example, via MIDI keyboards or the computer keyboard, both in digital audio workstations (DAWs) such as Ableton/Cubase etc., directly as a standalone application or in the web browser, for example on our lexical platform 'musiXplora'. With the use of virtual instruments, the silent exhibits can be experienced interactively and made available worldwide, but the recording and programming of the instruments requires acoustic and mechanical frameworks for an authentic implementation. In my doctoral project, the strategies for recording historical musical instruments will be examined in more detail, evaluated, and developed into a recording assistant software. Furthermore, techniques for processing the audio material and methods for an open source programming with a focus on the implementing of acoustic properties will be researched, which should result in a new standard for virtual acoustic objects, whereby three-dimensional sound fields and augmented reality environments will also be considered. Ultimately, a web platform will be created to share and openly discuss the generated virtual acoustic objects. This doctoral thesis will be carried out within the FMER-project DISKOS, which will result in digitized sound information carriers that will be compatible with and able to 'play' the virtual acoustic objects.

Dominik Ukolov studied musicology at the University of Leipzig and completed his master's degree in August 2020. He taught as a tutor for electronic/electroacoustic music and worked in the digitization project TASTEN and currently in the research project DISKOS, both funded by the German Federal Ministry of Education and Research. After his studies, he worked at CESEM (Center for Sociology and Musical Aesthetics) in Lisbon until July 2021, focusing on the music aesthetic aspects of virtual instruments. Currently, he is preparing his doctoral thesis on musical instruments and sound information carriers in virtual space, developing strategies for the extraction of virtual acoustic objects and interactive concepts of cross-platform access.

Digitizing piano rolls – views and perspectives for interpretation research

Heike Frike (Deutschland)

In a comprehensive digitization project (TASTEN) supported by the Federal Ministry of Education and Research (BMBF) at the Musical Instrument Museum of the University of Leipzig, large holdings of the collection have been made accessible. On the one hand, selected keyboard instruments were digitized with regard to their sound disposition and sound stock. The second essential part of the TASTEN project was the digitization of 3.200 valuable piano rolls in the museum's collection. Our current research project (DISKOS, also BMBF-funded) is aiming to decode the hole code on piano rolls, card discs etc. and transfer it into a common format. This paper wants to show how digital research possibilities can offer to musicology completely new perspectives in many respects. Thus, this paper deals with the fact that we regard a piano roll as a visualization of a virtuoso performance: The intangible element of the historic interpretation, the performance itself, is – for the first time in history – repeatable and encoded on the piano roll. These insights in historic performances should have a direct epistemological implication on the core of musicological research, namely a work's representation in a written score. A solid juxtaposition of interpretation and notation is made possible for the first time by the comprehensive digitalization of piano rolls and must – especially when composers interpret their own pieces – have effects on the musicological perception of the work's concept. Furthermore, for the first time, piano rolls provided performers with a medium that enabled them to hear and reflect on their own playing. This undoubtedly led to a radical change in musical interpretation, which has received little attention in musicological research to this day. Reflecting upon the conference topic „time“, a case study will have a closer look at Robert Schumann's „Träumerei“ in

a recording by Fanny Davies, a pupil of Clara Schumann: Whereas Robert Schumann stipulates a tempo 1 crotchet = 100 MM, his wife proposes a significantly slower tempo. What can we learn from historic piano rolls about the tempo her generation of students chose?

Heike Fricke, PhD, works and teaches at the Forschungsstelle digital ORGANOLOGY at Musikinstrumentenmuseum der Universität Leipzig, where she is conducting the research projects TASTEN and DISKOS. 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 published articles in *MGG*, *New Grove*, *Lexikon der Holzblasinstrumente* and wrote several books. She is the editor of the German special magazine *rohrblatt* and the *CIMCIM Bulletin*.

The pendulum, the world, and Clementi

Zami Ravid (Israel)

Music has a wonderful feature. A basic combination of two or three characters to any pattern creates a sense of 'half'. However - when we complete the second half, the impression will be created that the combination we received - is itself half of something larger. And even when we double that part and 'complete' - again we are left with the feeling of 'half' of something big. So almost infinitely. Surprisingly at some point the sense of ending does come. One does not have to be a musician to feel this pendulum-effect. Popular music follows, in general, this symmetry. Classic composers put traps, and break this pattern – in order to create interest and surprises. What happens when a pianist, for example, fall into the trap? – We'll see in this mini-lecture with mini recital.

Zami Ravid writes: Long before Graduating "Cum Lauda", (Piano Department, Rubin Music Academy, Tel Aviv) I have always been attracted by the pianist-accompanist part in music, which is my present proficiency. Accompanying and sight-reading got me acquainted not only to a large repertoire, but to a large variety of instruments' capacities, and to many (similar) problems that professional and amateur musicians encounter along their careers. So, I divided my time between the stage, and education. Organ recitals, piano solo with orchestra, opera coaching, conducting, versus teaching, from "Suzuki-method" to master-classes in Israel and abroad. The next stage (since 1990) was to build up my private music instruments museum (in my private home, in Metula, a little picturesque village in the Galilee) which includes a collection of about 250 instruments. For the public who visits my studio I perform keyboard-recitals, lectures and demos of the various instruments. Besides being a guest-Lecturer in "Tel-Chai" College for the last 12 years, I pursue my research, and give "lecture/recitals" on different subjects such as "The neglected pedal" (Portugal 2014), Debussy (France 2012), Beethoven's accents, "Musical accompaniment and its role as a significant factor - in the development and in the decline of classical music", the Temple-instruments, and Time.