

Book of Abstracts

25th Symposium of the ICTMD Study Group on Musical Instruments

Organized by the ICTMD Study Group on Musical Instruments





Hosted by the New York Institute for the Humanities and Social Studies



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PROCEEDINGS PROGRAM

25th Symposium of the ICTMD Study Group On Musical Instruments

Day A, 9 April 2025

Session 1 (10:00 – 11:30): Chair \rightarrow Rastko Jakovljevic

- 1. Opening Ceremony (20 Min)
- 2. Exploring Black Joy Through Banjo Performance: The Musical Life of Dr. Joan Dickerson Maya Brown-Boateng (35 Min)
- 3. Experience of reconstruction of Kyrgyz traditional signalling instruments (wind and percussion) in the musical life of Kyrgyzstan

Abetekova Altynai (30Min)

Session 2 (12:00-13:30): Chair → Chinthaka P. Meddegoda

1. Development of Robotic Musical Instruments in Japan: A Historical Perspective

Rinko Fujita (online; 25Min)

- 2. The Boudha Bubble: The Sounds of a Panheterotopia Bernard Kleikamp (30Min)
- 3. The Fear of Losing it: Real Dancing to Unreal Music Gisa Jähnichen (30Min)

Session 3 (14:20-16:10) Chair → Gisa Jähnichen

- 1. The Potential Contributions of AI to Korean Traditional Music Jin Yun-kyung (online; 25Min)
- 2. From 3D Printing to AI Generating: Philosophical Implications in the Rise of the "Informaphones"

Christopher A. Miller (online; 25Min)

3. Integration of Creativity in Music Production and Representation: A Pragmatic Investigation of Technological Innovations in Software and Hardware Tools

Ahmad Faudzi Musib (online; 25Min)

4. The Collision of Digitalisation and Chinese Traditional Musical Instrument Guzheng - Exploration and Application of AI for Guzheng Communication Zhang Yu + Mao Yue (30Min)

Session 4 (16:30-18:00): Chair → Chinthaka P. Meddegoda

- 1. Reviving Lost Sounds: When Traditional Musical Instruments Meet Computer Synthesis (AI) Nikola Vukanovic (30Min)
- 2. AI Musicking: Innovative Approaches to Creative Instrumental Practices through Machine Learning

Umut Eldem, umut.eldem@ap.be, Giusy Caruso, Adilia Yip, Chiara Percivati (30Min)

3. The Socio-Cultural Functions of the Daula Nishadi P. Meddegoda (30Min)

FREE TIME

Day B, 10 April 2025

Session 1 (10:00 – 11:30): Chair \rightarrow Rinko Fujita (online)

1. Experiencing a Materialized Musical Instrument: On the Kazakh Dombra Sculpture's "Production of Space" in Public

Huang Wan (online; 25Min)

2. The Instrumental Music Performances at Pasar Seni in Kuala Lumpur: Sonic Order in Public Space

Zu Lingshan + Lin Zhi (both online; 25Min)

3. The Computer as an AI Instrument in Live Composition and Performances Hippocrates Cheng (online; 25Min)

Session 2 (12:00-13:30): Chair → Rolando Perez

- Holographic Voices in the Mexican Public Space: Construction of Communities and Political Corporalities in the Vocaloid Scene of Mexico City Julio E. Vargas López (30Min)
- 2. Instrument Materiality, Environmental Sustainability, and Musical Messaging in Naga Performing Arts

Christian Poske (30Min)

3. The Challenges Faced by the Harmonium Used in Sri Lanka's Public Musical Life

Chinthaka P. Meddegoda (30Min)

Session 3 (14:30-16:00) Chair → Timkehet Teffera Mekonnen

1. Double-Reed Instruments along Cuba's History

Rolando A. Pérez-Fernández (30Min)

- 2. Shifts and Persistence in Spiritual Nuances of Traditional Yoruba Drum Technology and Performance: A discourse on the dynamics of Bembé and Dùndún drums Technology and Performance in Ibadan, Southwest Nigeria Kehinde Faniyi, Timothy Ajiboye, Adenike Gbadamosi & Adefowope Adeleke (30Min)
- 3. "No marriages without it": Ancient Afro-descendant Tarimba as a Constructor of Social Space in Costa Chica, Mexico

Carlos Ruiz Rodríguez (30Min)

Session 4 (16:30-18:00): Chair → Chinthaka P. Meddegoda

1. Traditional and Historical Trumpeting within Contemporary Public Life of Vilnius

Gaila Kirdienė (30Min)

2. Instruments of the State Music Ensemble of Sri Lanka and the Ambiguities of Cultural Identity

Lahiru Gimhana Komangoda (30Min)

 Recent Developments and Innovations Concerning the Fretless Guitar Klaus Näumann (online) + Markus Flinzberger (30Min)

Session 5 (20:00-21:00)

Business meeting of the ICTMD Study Group on Musical Instruments. The suggested agenda is as follows:

- Introducing the next place
- Election request
- How to nominate
- How to vote
- Publication issues (Deadline for final submissions to SIMP IX: 15 May 2025) and Miscellaneous

Day C, 11 April 2025

Session 1 (10:00 – 11:30): Chair \rightarrow Huang Wan (online)

1. Musical Instruments of the Tamil Peoples of Batticaloa, Sri Lanka Kamani Samarasinghe (online; 25Min)

2. The Role of Musical Instruments in On-Stage Vocal Performances: A Habitual Approach to Singing Practice

Geethika Abeysekara (online; 25Min)

3. Gugak and the Law

Jocelyn Clark (30Min)

Session 2 (12:00-13:30): Chair → Gisa Jähnichen

1. **Docerola, Corridos Tumbados and the New Guitarist Generation** Ramiro Godina Valerio (30Min)

2. The Symbolism and Numerology in Ancient Greek Lyre and Early Chinese Guqin:

A Comparative Study

Patrick Huang (30Min)

3. Resonating Change: Musical Instruments, Conflict and Crisis Rastko Jakovljevic (30Min)

Session 3 (14:30-16:00) Chair → Rastko Jakovljevic

1. Ladies Singari Melam: Drums, Fun and Dance as an Integral Part of Functions and Temple Festivals in South India

Karin Bindu (30Min)

2. The Zither Niujingqin in Wenzhou Guci Storytelling: Instrumental Music Heritage and Cultural Dynamics in Wenzhou's Urban Landscape Francesco Serratore (30Min)

3. Trumpet Music and Intercultural Dialogues at the Guca Festival Jelena Arnautovic (30Min)

Session 4 (16:30-open end) Chair → Timkehet Teffera

1. Are Sámi Drums Really "Drums"? The Ontological Revolution of Goavddis from Concealed to Public Life

Nicola Renzi (30Min)

2. Beyond Public and Private: The Transcendental Secrets of Guqin Performance Hoh Chung Shih + Xu Yunheng (55Min) + Concert and switching to a jam session

FREE TIME

Session Day D, (whole day of 12 April 2025)

- Visiting the musical instruments' section of the Metropolitan Museum (The Met) by courtesy of the curators of the Department of Musical Instruments The Metropolitan Museum of Art, Head of the Department Jayson Dobney, and Curator Emeritus Ken Moore. To be announced during registration time.
- Visit Central Park in Manhattan. To be announced during registration time.
- Departure or continuing travel.

ABSTRACTS

CHANGING MUSICAL INSTRUMENTS AND ARTIFICIAL INTELLIGENCE

The Boudha Bubble: The Sounds of a Pan-heterotopia

Bernard Kleikamp, bernard@panrecords.nl (The Netherlands)

In the Kathmandu suburb Boudhanath (or Boudha), live an estimated 20.000 ethnic Tibetans all practicing Tibetan Buddhism. Boudha is a primary Buddhist pilgrimage site because of its stupa, which is the largest on earth. The "Boudha Bubble" holds some 40 Tibetan-Buddhist monasteries on a surface of 2x2 sq. km. On any day one may expect to come across public musical display(s), whether it is accompanying a wedding or a funeral, or just any of the meditational prayer services ('pujas') in a monastery which are open to anyone and which can be heard on the streets as the monastery doors are always open. Boudha inhabitants do their daily kora stupa circumambulation before or after work, accompanied by (musical) sound(s) and chanting emanating from the six or so monasteries immediately surrounding the Boudha stupa. These public musical displays often have a religious character, with instruments like drums, bells, cymbals, telescope trumpets, and shawms being used. They shape the social, economic, cultural, temporal, aural, visual, and spatial dynamics of the Boudha Bubble.

Using footage, I collected during fieldwork in Boudha and elsewhere in the years 2012 - 2019, I intend to show examples of the various public musical displays in Boudha, then analyse their function and impact.

Note: Philosopher Michel Foucault in the mid-1960s defined heterotopia as a cultural, institutional, or discursive space that is somehow different: disturbing, incompatible, contradictory. Heterotopias are intense worlds within worlds, mirroring and transforming what is outside ("a utopia where you can go to", "another place").

In my 2020 publication "The Boudha Bubble: A pan-heterotopia of Tibetan Buddhism", I argue that a great number of related heterotopias on a limited surface can be defined as a pan-heterotopia (the terminology is mine). I argued that the Boudha Bubble, with its many Tibetan-Buddhist monasteries around the stupa, is such a place.

Development of Robotic Musical Instruments in Japan: A Historical Perspective Rinko Fujita, rinko.fujita@gmail.com (Japan)

Improvements in control theory, image processing, and voice recognition technologies in recent years have broadened the applications of robots from industrial technology to entertainment purposes. Moreover, as advances in AI technologies have made human-robot interactive communication more feasible, various companies have begun to release small robots that can be

used on a personal level. Interestingly, a similar development is gradually being observed in the music industries in Japan.

The term "robotic musical instruments" or "musical robots" is generally used for a broad range of musical machines that produce music autonomously using various kinds of mechanical parts. In the 1980s, the project team at Waseda University in Tokyo/Japan, developed the piano robot WABOT-2, a pioneer musical humanoid with the capabilities of communicating with humans, reading musical scores, playing an electronic keyboard, and accompanying singing. Since then, various research institutions have been conducting research and development of robotic musical instruments. This paper reviews the development of robotic musical instruments in Japan and discusses the background and current status of the development, as well as the goals of the creators.

The Fear of Losing it: Real Dancing to Unreal Music

Gisa Jähnichen, gisajaehnichen@web.de (Germany/China)

In a number of regions, real dancing is the most common appearance during festivals and ceremonial opportunities.

This paper will try to consider the possible and fictional ways in which an AI could take over the production of musical instruments and how AI has an impact on dancing as an expressive activity coordinated according to instrumentally patterned music. Examples are collected on diverse, relatively isolated territories throughout the world. This can be a specific analytical step in order to make experiences in media technologies better understandable. Limited local resources may play a specific role in the discussion. A strict differentiation between mood dancing and ceremonial requirements from staged performances is obviously more important than the previous division into music for one's own mental and bodily needs of expression and those mass-commercial ideas that were often the center of attention to make some debatable final suggestions. In the center of the investigation will be seen the switching between real and unreal things and feelings explored from different perspectives through the interpretation of data collected during fieldtrips and in accessible and preparatory literature. What makes musical instruments real, and what adds doubts to this reality? Which functions have added artificial components? Which result may be felt in the dances? How are observations used in this regard? This paper might be a step further in the direction of analyzing the connection between instrumentally supported dancing in need of musical/motional communication and manifold technologies of moving.

The Potential Contributions of AI to Korean Traditional Music

Jin Yun-kyung, piri1211@karts.ac.kr (South Korea)

Recently, a technical university in Korea (POSTECH) has developed an algorithm that teaches AI the music of "Suyeonjang," a court music tradition from the Korean peninsula, opening up the possibility of creating multiple compositions in the Suyeonjang style without the need for composers. Traditional Korean music has historically been learned through a master-apprentice system, where long-term imitation of the master's vocalization and instrumental performance is key

to mastering a piece. Unlike Western music, there hasn't been much development or research in practice pieces specifically designed to improve the performance of particular traditional compositions. However, with the advent of AI algorithms, easy access to step-by-step practice pieces for learning traditional music has become a reality. POSTECH's program can extract features like rhythm, key sounds, and embellishments of Suyeonjang and produce various practice pieces in this style. This allows musicians to easily acquire numerous practice pieces that are effective for training in the characteristics of Suyeonjang. This presents a groundbreaking opportunity for traditional instrument musicians. Although there are pessimistic views about AI replacing composers and performers, such discussions seem more relevant in the context of the mainstream culture industry that drives the cultural sector. Traditional music, which exists as a protected entity in almost all East Asian countries, faces challenges in attracting capital and specifically integrating cutting-edge technology. Moreover, there are not many composers seriously dedicated to developing new compositions for traditional instruments, resulting in a minimal presence of such works compared to popular music. In this context, the development of computer programs that can generate practice pieces and provide coaching on pitch and rhythm is likely to have a more positive than negative impact on learning traditional instruments. However, serious consideration of how best to utilize the developed algorithms has not yet been undertaken. Therefore, this study aims to examine the process of utilizing practice pieces for traditional instruments generated by the AI developed by POSTECH, discussing the implications and limitations.

The Collision of Digitalization and Chinese Traditional Musical Instrument Guzheng - Exploration and Application of AI for Guzheng Communication

Zhang Yu, yukizhang0816(a)gmail.com, Mao Yue (China/Malaysia)

The Guzheng is one of the most studied Chinese traditional instruments in China. Music has always been transmitted orally. In recent years, artificial intelligence and other new technologies have broken the limitations of traditional music inheritance, and with the gradual application of computer music and artificial intelligence technology in the field of music, the "human-computer interactive" teaching aid platform has come into being, which makes the guzheng's mode of dissemination increase in a variety of ways and means. These teaching aid systems can help beginners manipulate their instruments more simply. These systems are hardware and software systems consisting of interactive projection, audio and video feedback, AI noise reduction technology, and recognition algorithms that can intuitively project playing information and capture the effect of performing the instrument. At the same time and for the guzheng characteristic timbre, a posture intelligent recognition algorithm is used, the guzheng user's rhythm, pitch, fingering, posture, and other playing effects are recognized and scored, and the interactive mode is completed through the scoring system, which realizes the human-computer interaction and teacher-student interaction. AI empowers traditional musical instruments, activating the vitality of traditional instrumental music through technological empowerment.

Beyond Public and Private: The Transcendental Secrets of Guqin Performance

Hoh Chung Shih: hohchungshih@yahoo.com, and Xu Yunheng (Singapore)

Guqin was spectacularly launched into public limelight at the 2008 Beijing Olympics, and later endowed with tremendous multimedia exposure, igniting wide public imagination on the quintessence of Chinese music. However, there is a private aspect within its performance practice and a long history of mythical and arcane values. In this paper, we would like to reveal this almost private aspect through analyzing several well-documented popular classical works, to show how this privacy in individual practice transcends personal cultivation and social responsibilities.

The notation and playing techniques involve kinesthetics, meditative practices, and ideologies related to self-conceptualization and public duties within Late Imperial China. Coupling with music and performance analyses, we would also examine the research work of recent scholar-performers, Wu (1990), Liang (1972, 1973), Mäder (2001), Goormaghtigh (2010), and Yung (1984,1994, 2017), who had explored the issue through their reflections but fell short of detailed analysis, along with classical texts produced by practitioners upon whom the present day Guqin tradition draws its genealogies. Thus, this paper will try to track how the practice transcends both its private and public aspects while questioning our understandings of what music is for guqin players.

Integration of Creativity in Music Production and Representation: A Pragmatic Investigation of Technological Innovations in Software and Hardware Tools

Ahmad Faudzi Musib, faudzimusib@upm.edu.my (Malaysia)

In music production and sound design, sound designers, Composers, and users aim to utilize music technology most efficiently to bring inspiration closer to their desired expressive outcomes. This study examines the Arturia ARP 2600 and its Behringer ARP 2600 Semi-Modular Analog Synthesizer, taking inspiration from Dewey's pragmatic philosophical approach, which focuses on the ideas' practical applications within the framework of ongoing experiences, educational theories, and social theories. In particular, the practical effects of technology that affect how music is portrayed and shared are examined in this research. It is possible to assess the functional effects of the ARP 2600 and its clones' integration of sound representation and distribution technologies on accessibility, performance, and music production by closely evaluating these technologies.

Reviving Lost Sounds: When traditional musical instruments meet computer synthesis (AI)

Nikola Vukanovic, nikola.vukanovic@gmail.com (Serbia)

AI technology is a wide-ranging tool that transforms every walk of life and enables people to rethink how we integrate information, analyze data, and use the resulting insights to improve decision-making. Since the 1950s, when computer scientists began experimenting with the idea of

using algorithms to create music (The Illiac Suite by Lejaren Hiller and Leonard Isaacson), AI and machine learning technologies have advanced to the point where AI-generated music has become a viable and exciting field. Seven decades of research and development provide us also to revive lost sounds of ancient traditional musical instruments (barbiton, salpinx, aulos, and syrinx of ancient Greece). On the other hand, archaeological data provides us with the physical remnants of these instruments, but the knowledge of how they were played, how they sounded, and perhaps the technique and the context of their music has largely been lost to time. Reconstructing these sounds requires a delicate balance of science and artistry, piecing together fragments of history with the precision of a detective and the creativity of a composer. As AI continues to develop and improve, it brings new creative possibilities today, as well as challenges and ethical considerations, which will be addressed with this research.

AI Musicking: Innovative Approaches to Creative Instrumental Practices through Machine Learning

Umut Eldem, umut.eldem@ap.be, Giusy Caruso, Adilia Yip, Chiara Percivati (China/Belgium)

As the technological aspects of AI generation are quickly evolving and are under scrutiny, an artistic methodology and framework relating to the use of AI & ML in terms of contemporary musical human-machine co-creative practices have yet to be thoroughly explored. This field needs to be investigated based on the current and potential future impacts of such tools in the aforementioned practices. This paper aims to show the results of our research on developing specific artistic strategies regarding musical AI tools in the human-machine co-creative process through studying and applying the data generated by instrumental practices. Two case studies of contrasting musical practices are studied in the form of 3D-printed extensions for the bass clarinet and the manza xylophone of the Azanda people in the DR Congo. The timbre, musical patterns, and rehearsal practices of the musicians are recorded to construct AI models that can generate musical data in the form of timbre (through the RAVE model) and patterns (through OpenAI MuseNet) representing diverse instrumental practices. The resulting AI representations of the artist-researchers' practices were then used to create and apply AI models as co-creative partners and performers on the stage.

From 3D Printing to AI Generating: Philosophical Implications in the Rise of the "Informaphones"

Christopher A. Miller, c.a.miller@northumbria.ac.uk (United Kingdom)

In his book Non-Things, philosopher Byung-Chul Han argues that "digitalization puts an end to the paradigm of the thing" and thus completes the turn from nature and craft begun by the industrial revolution (p.3, 2022). My paper launches from Byung-Chul Han's ideas in paraphrasing the question that drives his brief volume, asking, "What becomes of [musical instruments] when they are penetrated by information?" The quick succession from 3D-printed musical instruments to those generated computationally by Artificial Intelligence is, from an organological perspective, a rapid evolution to a class of musical instruments that leaps across an ontological divide. My paper

seeks to map the topography of that space by placing Byung-Chul Han's analysis of things (and non-things) into dialogue with Graham Harman's object-oriented philosophy, which maintains that such musical instruments are still very much real objects. If systematic classification buckled under the pressure of electronification (Weisser and Quanten, 2011), then it surely explodes in the current environment. I argue that Harman's concept of the "quadruple object" offers organology a lens with which to engage in a usefully speculative branch that constructs the future (Miller and Bennett, 2008) of our field. The only alternative, as quantum computing offers an approach to infinity, may be to simply succumb to what Byung-Chul Han describes as "infomania."

The Computer as an AI Instrument in Live Composition and Performances

Hippocrates Cheng, cheng16@iu.edu (online, China/US)

This proposal explores the transformative integration of artificial intelligence (AI) with musical instruments, focusing on the computer's role in redefining music creation and performance. By examining the intersection of AI and music, I delve into how technological innovations have transitioned the computer from a mere tool to an active participant in the musical process. This exploration covers the historical evolution of musical instruments through to the advent of AI, highlighting how computers facilitate new forms of musical expression and collaboration between humans and machines in real-time settings. The proposal aims to investigate the implications of AI in live composition and performance, addressing the challenges and opportunities this integration presents. Through case studies and examples of AI-driven music projects, I seek to understand the impact of AI on the traditional paradigms of musical creativity, performance, and the broader cultural reception of music. This investigation is poised to offer insights into the future of music, where AI and human creativity coalesce to forge new pathways in musical expression and experience. In this research, three AI instruments for live composing and performance models will be examined:

1. Google Magenta Project: An initiative by Google to explore the role of AI in the arts. Magenta focuses on developing deep learning and reinforcement learning algorithms that can generate songs, images, drawings, and other materials. It includes tools like TensorFlow and models that allow for the creation of new musical experiences, demonstrating AI's capacity for creativity.

Example: Magenta's AI Jam: Making Music with TensorFlow Models

2. Dadabots: This project uses deep learning to generate music and sound in the style of existing bands and genres. It's known for creating non-stop live streaming music on platforms like YouTube, showcasing AI's ability to perform live without human intervention.

Example: Nuns in a Moshpit (w/ Vulvodynyia) (feat. Plini bot) - AI Song Contest 2022 3. AIVA (Artificial Intelligence Virtual Artist): AIVA is an AI program designed to compose symphonic music, such as soundtracks for films, games, and commercials. It uses deep learning algorithms to analyze a vast database of classical music, learning from the patterns to compose new music. Example: I am AI - AI Composed Music by AIVA.

MUSICAL INSTRUMENTS IN PUBLIC LIFE

Experiencing a Materialized Musical Instrument: On the Kazakh Dombra Sculpture's "Production of Space" in Public

Huang Wan, phoebehw@126.com (China)

In recent years, various scales and styles of Dombra sculptures have appeared in Kazakh settlements in the northern regions of Xinjiang, China. The Dombra is a musical instrument ubiquitous in Kazakh daily life. Why does it emerge as sculpture in a public space? Based on my fieldwork since 2019 and inspired by "production of space" by Henry Lefebvre in Humanistic Geography, this paper argues that, firstly, the exaggerated and deformed Dombra sculptures transcend local watching and become an eye-catching thing for outsiders. It is one result of capitalization and symbolization in the process of intangible cultural heritage preservation, the purpose of which is to expand its popularity, attract more tourists, and drive the local economy. Secondly, fearing the loss of tradition with more external cultural influx, local government resorts to public education via Dombra sculptures of a historical style in public, to pull local viewers, especially the young generation, back to history and rebuild their sense of place and national pride. Thus, the Dombra sculpture in public spaces is not a thing, but a "hypercode" (Lefebvre). The subjects are involved in a specific texture of meanings, and their viewing becomes a poetic, timeless, and insight-provoking rite of "admiration", through which space is produced.

Holographic Voices in the Mexican Public Space: Construction of Communities and Political Corporalities in the Vocaloid Scene of Mexico City

Julio E. Vargas López, jevl.etnomus@gmail.com (Mexico)

In 2004, Yamaha launched Vocaloid, an innovative music production software enabling users to create vocal melodies using sound banks-consisting of recorded vocals from singers and voice actors. This virtual instrument quickly became a global cultural phenomenon after the collaboration with the company Crypton Future Media, which designed the characters Piapro, whose maximum exponent is the virtual diva Hatsune Miku. In this context, my research delves into the impact of Vocaloid in Mexico City. Employing an ethnomusicological approach, I applied theoretical concepts of the music scene (Peterson & Bennett), decentralized distribution model (Zaborowski), identity, and somateque (Preciado) to analyze the data gathered from interviews and ethnographic observations during various fan-organized events in Mexico City between 2023 and 2024. Through this work, I aim to comprehend how Mexican youth, by means music created with Vocaloid, not only generates new artistic productions but also forms communities, support networks, labour opportunities, identities and new corporalities endowed with a voice capable of transforming the virtuality of the digital space into a political materiality of the public space. In summary, this research seeks to contribute to the global dialogue on the relevance of studying contemporary

musical technologies, specifically our perception of new musical instruments and their influence on the agency and construction of identities, bodies, and communities in urban contexts.

Instrument Materiality, Environmental Sustainability, and Musical Messaging in Naga Performing Arts

Christian Poske, poske.christian@gmail.com (Austria)

In northeast South Asia, Nagas have lived for centuries in the hills of what is now Nagaland, Assam, Manipur, Arunachal Pradesh in India, and northern Myanmar, where Westernization and Christianization led to unprecedented socio-cultural upheavals over the past 150 years. Nonetheless, research on Naga musical instruments has so far centered on traditional manufacturing processes, conventional cultural meanings of musical instruments, and customary restrictions on instrumental music performances (Mongro 1999; Marschall 2008; Oppitz 2008). Yet modernization has brought significant changes in Naga musical practice in the past decades, affecting the availability of natural resources used for instrument manufacturing processes, artists' choices of instrumentations and arrangements, and the modalities of disseminating instrumental music. Contemporary fusion bands introduced novel musical instruments made from natural raw materials, bridging the chasm between tradition and modernity for live and online audiences. In this paper, I discuss how changing lifestyles have affected the sustainability of instrument manufacturing processes among Naga communities, how contemporary artists use traditional, modern, and newly invented instruments to convey their cultural-environmental messaging to listener-ships, and how online platforms facilitate the dissemination of these messages to global audiences.

Double-Reed Instruments along Cuba's History

Rolando A. Pérez-Fernández, mautiatihuel47(a)gmail.com (Cuba/Mexico)

The past and present usage of double-reed instruments in Latin America in religious performing contexts, as an outcome of the effort of Spanish missionaries to propagate Christianity, is very well known. It is represented by the chirimía, which has thus far been associated with two different groups: the indigenous and mestizo population, and Afro-descendants, both of them exclusively on the mainland. However, recent historical research has revealed that the chirimía was also used by enslaved Africans and/or Afro-descendants, on one of the Caribbean islands: Cuba, during the 17th century. It was played in churches located in that country's easternmost region, although its usage did not outlast the 1600s. A long time thereafter, in the early 20th century, the corneta china, a local version of the suona previously introduced in Cuba by Chinese immigrants arriving since 1847, emerged, affecting once again eastern Cuba, where its usage has been widely adopted, and that instrument became a regional symbol. Notwithstanding the large time span between occurrences of the double-reed instruments, and their geographically opposite provenance, western (Spanish) and eastern (Chinese), both, taken together, reflect the complex ethno-demographic history of said Caribbean Island in the context of the New World.

Shifts and Persistence in Spiritual Nuances of Traditional Yoruba Drum Technology and Performance: A discourse on the dynamics of Bembé and Dùndún Drum Technology and Performance in Ibadan, Southwest Nigeria

Kehinde Faniyi, omokehindefaniyi@gmail.com, Timothy Ajiboye, Adenike Gbadamosi & Adefowope Adeleke (Nigeria)

The paper explores the distinctive features of the bembé, an outer-faced cylindrical drum, and dùndún, an hourglass-shaped drum of the Yoruba community, both enriched with symbolic spiritual significance. It stems from an ethnographic investigation into the intersection of traditional and contemporary uses of these musical instruments. Employing the purposive sampling method, the study collected data from contexts in Ibadan where evidence of spiritual nuances persisted, shedding light on how the sacred and authentic essence of the bembé and dùndún drums remains steadfast in selected sacred settings. However, influenced by technological dynamics, performance shifts, ecological crises, expanding markets, and human capital, the paper reveals that the adaptation and appropriation of bembé and dùndún drums in contemporary religious contexts in Ibadan have largely overlooked their spiritual nuances. Within the framework of agential neoliberal paradigms, the new production and market orientation of the bembé and dùndún drums are framed as 'instru-spiritual evolution.' In conclusion, the paper addresses a gap in Yoruba musical arts by presenting an experimental narrative on the profound shift and apparent persistence of spiritual ideals and practices in bembé and dùndún drums' performance and technology. These aspects are identified as integral components of Yoruba musical complexes.

"No marriages without it": Ancient Afro-descendant Tarimba as a Constructor of Social Space in Costa Chica, Mexico

Carlos Ruiz Rodríguez, ruiroca@hotmail.com (Mexico/US)

Studies of musical instruments and public life generally tend to focus on social processes grounded in present city settings. However, what happens with musical instruments involved in processes of identity and locality construction that take place in isolated rural environments of the past? This paper addresses a peculiar and little-known musical instrument called tarimba, which remained in use until the mid-20th century in a restricted Afro-descendant area of the Costa Chica region in southern Mexico. Tarimba was a monochord ground zither, essential to a form of musical entertainment known as bailes de alambre (wire dances). For a long ago, tarimba has been favored to construct an important public space for meeting people and the development of a sense of community. According to local testimonies, no festivity was possible without the presence of this musical instrument. Drawing on ethnographical material and organological literature this paper focuses on three issues: 1) instrument making linked to local natural materials of this isolated area, 2) the way this musical instrument and its performance practice fostered an important space of

community participation, cohesion and social reproduction in the past, 3) tarimba's Afrodescendant backgrounds and its relationship with other musical instruments of Latin-America.

The Challenges Faced by the Harmonium Used in Sri Lanka's Public Musical Life
Chinthaka P. Meddegoda, chinthaka.pm@vpa.ac.lk (Sri Lanka)

This contribution is dedicated to the use and distribution of the harmonium, a free reed musical instrument, in Sri Lanka, where the British heritage item was often applied in musical dramas, spoken plays, religious, and ceremonial contexts. It developed its own life on the island and is now more widely spread than some other imported musical instruments, such as the piano, violin, and diverse guitars. The main research question might be the question of its sustainability throughout time and the diversity in use over the history of the past 30 years. School curricula and public disseminations had a big part in keeping the harmonium's place of purpose. However, technology allows for more than this, and one can find the harmonium nowadays more often as an electronic sample or as a stage performance supporting item in contexts other than traditional contexts. Another interesting observation is the admiration of the harmonium as a musical instrument of the musical elite and of the well-trained professionals in their field. All these stigmatizing and labelling ideas have to be thoroughly scrutinized and investigated through interviews and report tools that must be made available to everyone.

The Role of Musical Instruments in On-Stage Vocal Performances: A Habitual Approach to Singing Practice

Geethika Abeysekara (Sri Lanka)

In the context of on-stage singing performances, the significance of background music cannot be overstated. A distinctive trend is the habitual integration of a musical instrument by individuals during their vocal routines. This study explores the prevalent practice of using a musical instrument as a tool for singing practice and examines the impact of this habit on the overall on-stage performance. The purpose of this study is to examine the effects of singing along with a musical instrument and the variations in singing without one. This study explores the reasons for this musical integration and aims to comprehend the differences in singing experiences with and without instrumental backing by using extensive interviews as a qualitative research approach. This study aims to offer nuanced insights into the subjective experiences of people who participate in singing activities with musical accompaniment by gathering data through in-depth interviews. It is anticipated that the results would clarify the perceived advantages, difficulties, and creative factors related to vocal performance harmonization of voice and instrument. By deepening our awareness of the intricate relationship between singing and instrumental accompaniment, this study enhances the conversation about musical expression and performance.

Traditional and Historical Trumpeting within Contemporary Public Life of Vilnius Gaila Kirdiene, gailakirdiene@gmail.com (Lithuania)

This presentation explores solo and ensemble trumpeting on traditional long wooden trumpets (Lith. daudytė, triūba or ragas 'horn') within the public life of Vilnius, the capital of Lithuania, from the 1960s to the present. Encompassing historical, anthropological, educational, and geopolitical perspectives, I reveal how the function of these signal, ritual, and interaction instruments of shepherds and peasants has been expanded into a multifaceted urban use. Various roles are assigned to traditional trumpeting in numerous Vilnius events, ranging from folklore festivals, processions, fairs to polyphonic sutartinė music concerts and annual calendar celebrations, such as the summer solstice, the autumnal equinox, or Earth Day. Likewise, it is significant for Lithuanian Olympians to have a daudytė played at symbolic firelightings near the King Mindaugas Monument. In 2006, the Vilnius Horn and Daudytė Players Club was founded. Nowadays, playing as well as making these trumpets attracts not only men, but also women. I also discuss how the ceremonial trumpeting of the 14th-18th century of Vilnius craftsmen and especially nobility has been investigated and considered purposeful to revive during regular open historical shows at the rebuilt Palace of the Grand Dukes of Lithuania, in recent decades.

Instruments of the State Music Ensemble of Sri Lanka and the Ambiguities of Cultural Identity

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The State Music Ensemble (SME) of Sri Lanka was founded in 1976 when a socialist-oriented government was led by the prime minister, Sirimavo Bandaranayaka. The purpose of establishing the State Music Ensemble and the State Dancing Ensemble was to maintain standards in performances at national and international cultural events (Komangoda, 2024). At the inception, it was guided by W.B. Makuloluwa who was a keen Sri Lankan Folk Music enthusiast cum scholar. At the commencement of the SME, the ensemble used to include indigenous musical instruments, Indian instruments, and a few Western string and percussion instruments. Addition of the non-indigenous instruments has been occasional and has depended on the particular musical presentation. Later, the permanent composition of instruments in the SME has changed more into synthetic instruments. In the 1980s, Sri Lanka experienced the trend of utilizing synthetic musical instruments by music bands, which is examined as if the trend has made an impact on the changes of the repertoire and composition of instruments in the SME in this work. One other concern of the study is that, since the establishment of the SME, no instruments that represent minor ethnicities like Tamils and Sufi Muslims have been included.

Docerola, corridos tumbados and the New Guitarist Generation

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When I was doing the fieldwork about bajo sexto's [Bajo sexto is the chordophone played in the Mexican northeastern music ("Musica norteña")] economies in the Mexican Northeastern and South Texas regions, during 2018 and 2019, an interesting phenomenon appeared, it was the increasing presence of a musical instrument known as docerola in the music shop's sales and in the music from the radio, and specifically, in corridos tumbados or belicos, where singers like the Billboard Latin Music winner Peso Pluma are its main exponents. Nowadays, this phenomenon continues its increase. An example of it is that part of the new generation of guitarists in Monterrey city (Mexico), in private lessons or classes in the School of Music at the University, enjoys practicing and learning this kind of music, and of course, the docerola appears as a referent. The docerola, or the twelve-string guitar, is used in the Mexican corridos tumbados (songs that describe activities related to the violence, drugs, and weapons in Mexico). In this text I study the presence and dynamics of the docerola in and between the new generation of guitarists in Monterrey city (Mexico), because this is an example of the actual influence of the narco-culture (drug trafficking culture) in the Mexican society and the changes that it (could) represents in the social and cultural life. The principal objectives to expose in this research are:

- To know the meanings and functions that these instruments, music, and culture represent for these guitarists;
- To outline part of the economy around this musical instrument in places like music shops, recording studios, and more;
- To investigate if these instruments and music have an opportunity to be considered in a music institution as teaching items.

Gugak and the Law

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Article 9 of South Korea's constitution provides that the government "shall strive to sustain and develop ... cultural heritage and enhance national culture," but, over the years, gugak (Korean traditional music and dance) has been mostly ignored by the country's lawmakers. However, in June 2023, the National Assembly passed the Gugak Promotion Act, which aims to "conserve and transmit," "foster and promote," and "invigorate the gugak cultural industry" (emphasis mine). A few months later, in August, the Traditional Cultural Industry Promotion Act, which aims to lay a foundation for a traditional cultural industry, promote economic development, and enhance the cultural lives of citizens, became law. Together, these acts seek to transform gugak from a traditional performing art in need of preservation into dynamic, competitive cultural content suitable for entry into the international performing arts market. This paper looks at the effects of these new laws on "old music," gayageum sanjo in particular, and how, especially under the

pressures of AI and the attention industry, older laws are fraying along with the institutions and genres they once sought to protect.

The Symbolism and Numerology in Ancient Greek Lyre and Early Chinese Guqin: A Comparative Study

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String instruments had significant meaning across regions in antiquity. In China, guqin (古琴) is long considered an instrument that symbolized the literati culture, and its seven strings were considered to represent the five basic elements and two sages. However, various earlier myths and archaeological findings revealed that the string number of guqin once varied during the Pre-Qin (before 221 B.C) period (Yang, 2016). Similar scenario can be observed from the case of the ancient Greek lyre ($\lambda \acute{\nu} \rho \alpha$), despite polychordia features can be clearly found in literal and iconographic features (Maas, 1992, the instrument was gradually standardized and became seven-stringed, then associated with the name of muses as well as various features in Greek music theory. In my presentation, I will first describe the polychordia and standardization of strings between the early Chinese guqin and ancient Greek lyre by summarizing various historical sources, then try to analyze them to find the similarities and differences in factors that lead to such string standardization. Lastly, I will compare both traditions within their cultural context to further explore the theory and mechanism that is hidden underneath.

Exploring Black Joy Through Banjo Performance: The Musical Life of Dr. Joan Dickerson

Maya Brown-Boateng (USA)

With over 35 years of experience within the banjo community, Dr. Joan Dickerson expresses a passion for the instrument and its history through her commitment to education, musicianship, and participation in a variety of banjo styles. As a Black woman, she navigates the intersections of gender and race through her encounters with the joys and discomfort, praise and dismissiveness, and the feelings of belonging and objectification within banjo performance spaces. As such, her life offers an incredible record of resilience and musical collaboration that allows us to reimagine the banjo as a material object that mediates personal, social, political, and cultural relationships. Drawing from our personal conversations, her private archives, and our classic banjo lessons, this paper offers a biographical view of Dickerson's decades-long

classic banjo lessons, this paper offers a biographical view of Dickerson's decades-long contributions to Pittsburgh's banjo scene, and it extends the discussions about women in banjo across racial and historical politics. More broadly, this paper recognizes how Black musicians can be confronted with aggressive and unsafe performance spaces that require them to reclaim ownership of the banjo's traumatic history, the physical instrument itself, its image in the arms of a Black individual, and the right to produce its beautiful sounds. By reclaiming this instrument, Black banjo players are challenging the borders that subsume Black music and are blurring the definitive lines that have been drawn around racialized sounds in the United States.

Resonating Change: Musical Instruments, Conflict and Crisis

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This research investigates the profound influence of musical instruments within social movements, examining how these tools of sonic expression become powerful agents for social change. Following the role of musical instruments in different movements (i.e. Arab Spring, First Quarter Storm in the Philippines, Serbia's October 5, BLM in New York, etc.), and many other uprising movements, the debate is how music, and thus instruments, does not represent just a soundtrack for these major events, but how they form the very essence of the musical opposition to authoritarianism. From ancient times to contemporary protests, the research explores how instruments such as zurle, gusle, drums, trumpets, guitars, horns, or percussion not only provide a sonic backdrop but also serve as symbols of resistance and solidarity. Through such analysis, it is important to emphasize the multifaceted profiles of musical instruments and how they play a role in shaping the identity, unity, and resilience of social movements, while music, in general, amplifies the voices of activists and fosters global connections or "musical cosmopolitanism".

Trumpet Music and Intercultural Dialogues at the Guca Festival

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The music festival Guca was launched in 1961 in the small town of Guca, Serbia, and since then has had a prominent social and cultural role. Originally, the festival's aims were the preservation and promotion of traditional trumpet music and some other segments of Serbian cultural heritage. Gradually, Guca has been transformed into a large-scale commercial festival of world music that each year attracts hundreds of thousands of visitors worldwide. The former folk music festival of local importance became in the 21st century a postmodern pastiche of folk and popular culture, and a mass spectacle primarily known for its good entertainment and a unique hedonistic experience usually described by visitors and mass media as 'Balkan madness'. Trumpet music performed at Guca is the main catalyst for the atmosphere of carnival jouissance, thus creating, according to J. Lacan and R. Barth, feeling beyond plaisir, a mixture of joy and pain. Being attractive to various generations and types of people, trumpet music in Guca is an important source for intercultural dialogues. It helped overcome postwar traumas and rebuild dialogues between Serbia and other countries. No matter where they come from, visitors at the Guca festival communicate through dancing to irresistible trumpet music.

Musical Instruments of the Tamil Peoples of Batticaloa, Sri Lanka

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Musical instruments play a pivotal role in the cultural fabric of communities. This research delves into the rich musical heritage of the Tamil community in Batticaloa, Sri Lanka, exploring the diverse range of traditional musical instruments that play a pivotal role in their cultural expressions. Through a comprehensive ethnographic study, this research examines the historical significance, craftsmanship, and sociocultural context surrounding these musical instruments. Data were collected using a combination of qualitative interviews, field observations, and archival research to document and analyze the various musical instruments unique to the Tamil peoples of Batticaloa. The Parai, for instance, continues to be associated with the Parai Mela Kooththu, a tradition of dancing with the drum accompanied by a double-reed instrument called Sornali. Other instruments such as Mathalam, Uduku, Nadaswaram, and Thavil each carry a distinct cultural narrative, contributing to the vibrant musical tapestry of the region. Findings reveal not only the cultural significance of these musical instruments but also their multifaceted role in fostering community identity, preserving historical connections, and serving as living embodiments of artistic heritage.

Ladies Singari Melam: Drums, Fun and Dance as an integral part of functions and temple festivals in South India

Karin Bindu (Austria)

Singari Melam is regarded as a variety of Chenda Melam, an orchestra consisting of various Chenda drums and cymbal layers. Performances of Singari Melam have been integral parts of temple festivals in Kerala and Tamil Nadu, but more recently also serve as entertainment during functions such as weddings, school festivals, and inauguration ceremonies. Ingari Melam teams consist of male drummers, women-only troupes, or gender mixed groups. Team Rudrathalam, the first women-only Singari Melam troupe from Nedumangad block panchayat, was formed in 2017 to empower women, especially women belonging to scheduled castes and tribes. Public performances on a regular basis provided them with new possibilities for income and new social roles as performers. They also served as role models for other female groups such as Chembadathalam, Singarimelam Swaralayam Kuruvattoor Kozhikodu, Varnamudra Kudumbasree Ladies Singari Melam, and female professionals such as Shilpa Sreekumar. The excitement of the powerful rhythms and dance movements is not only strengthening community engagement and social relations within the country, but also abroad – several booking sites offer Singari Melam groups for private and official functions. Online research and narrative interviews with South Indian Percussionists will provide further insights into this topic.

The Instrumental Music Performances at Pasar Seni in Kuala Lumpur: Sonic Order in Public Space

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Located in the heart of Kuala Lumpur, Pasar Seni MRT (Mass Rapid Transit) Station is one of the busiest interchange MRT stations in the city. Pasar Seni stands for Art Market and is surrounded by many city landmarks and art activity areas such as the Central Market, Chinatown, and the Kuala Lumpur Railway Station. Pasar Seni Station's quarterly theme is "Arts on the Move," which is a mobile performance art that includes instrumental and vocal music and dance, together with permanent art installations to stimulate the station's artistic atmosphere and some buying habits of the people. The high flow of people brought by urban rail transit is connected with artistic activities. The public space in the metro station is a joint feature to be in-built into the performances. By observing the performance activities in Pasar Seni station and conducting interviews with instrumental artists, the authors will focus on this feature of using public spaces for performances. The paper explores the relationship between musical instruments and public life in the Pasar Seni station, as well as the intended shaping role of musical instruments in urban public spaces.

Recent Developments and Innovations Concerning the Fretless Guitar

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The guitar is probably the most widespread musical instrument in the world and has been picked up in various cultures (Africa, south and north of the Sahara, India, a.o) and adapted for specific musical idioms. One variant thereof is the fretless guitar, which, due to its non-determinism regarding a specific tonal system, could theoretically be used in any musical culture. Despite this potential, the instrument still plays a rather marginal role, although in the last two decades it has become increasingly relevant. In our presentation, we will look at early forms, especially the electrified version (Beatles, Frank Zappa), how the instrument then spread and was further developed (metal and glass fingerboards, technical aids such as sustainiacs, e-bows) and is now consciously taken up by musicians in order to adopt other initially "foreign (guitar) musical idioms" and reinterpret them. Besides their own experiences, the statements are based on interviews with Ron Bumblefoot Thal (Bands: Sons of Apollo, Guns N' Roses), Tom Monda (Band: Thank You Scientist), Steve Vai (Bands: Frank Zappa, Whitesnake, David Lee Roth), and Dweezil Zappa. Above this, Turkish musicians, such as Sinan Cem Eroğlu, were interviewed insofar as the fretless guitar plays a prominent role in Turkish music, and techniques from traditional instruments (oud, saz, tanbur, kaval, and ney) are often transferred to the fretless guitar.

The Zither Niujingqin in Wenzhou Guci Storytelling: Instrumental Music Heritage and Cultural Dynamics in Wenzhou's Urban Landscape

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This research delves into the rich cultural heritage of Wenzhou, China, focusing on the tradition Wenzhou Guci storytellers, in which the Niujingqin, a unique zither used during the Guci performances, holds a prominent place in Wenzhou's cultural landscape, serving as a conduit for oral narratives and folk tales passed down through generations. Through its melodies, the Niujingqin encapsulates the essence of Wenzhou's vibrant storytelling tradition, fostering community cohesion and preserving local folklore. Additionally, we can say that the Wenzhou Guci, embodies the soul of Wenzhou's rural community music, reflecting the region's agrarian heritage and spiritual connections to the land. As integral components of Wenzhou's musical heritage, Wenzhou Guci contribute to the city's cultural identity, enriching public life through their performances in temples, markets, and village gatherings. By examining these musical traditions within the broader context of Wenzhou's cultural landscape, this research sheds light on the interplay between musical instruments, storytelling, and community dynamics in shaping urban environments.

Are Sámi Drums Really "Drums"? The Ontological Revolution of Goavddis from Concealed to Public Life

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The goavddis is "not just a drum. It is more-than-a-musical-instrument", Juhán promptly rectifies after being asked about the membranophone featured in his artwork.

Conversely to how presented in ethnographic literature, this object is seldom regarded as a musical instrument in Indigenous discourses by virtue of its ancestral usage as an oracular tool. Not attributed to music-making, its ritualistic percussion was criminalized by ecclesiastical forces across Fennoscandia. Concealed from the public sphere, only a few goavddis survived a centuries-long colonial purge. It was not until the 1970s — amidst broader struggles for Sámi self-determination and cultural reawakening — that these objects reclaimed a public life, even taking on protagonist roles in the Indigenous resistance. Within these societal changes, the goavddis underwent an ontological revolution, being re-functionalized from an oracular tool to a musical instrument embraced on stage and in the studio. Based on fieldwork discussions and Sámi written sources, this paper intends to offer a contribution to the historiography on Sámi drums, confronting the critical definition of goavddis within- and beyond-music in light of Indigenous ontologies. Findings underscore how public and private realms provide distinct responses to the pivotal question: when does a goavddis cease to be a drum and when does it assume musical agency instead?

Experience of Reconstruction of Kyrgyz Traditional Signaling Instruments (Wind and Percussion) in the Musical Life of Kyrgyzstan

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In the period from the early 19th century to the present day, signaling instruments, which were once in wide use and had a large repertoire, were until recently considered to have disappeared from the musical life of the Kyrgyz, known for their virtuoso performance and extensive repertoire. Historians and performers cite the main reasons for their disappearance as follows:

- A sharp reduction in the number of performers who were also composers in one person during the period of Kyrgyzstan's accession to the Russian Empire.
- Disbanding of the culture of traditional military training, where these instruments were also used, and future performers were trained.

Collection of information and mapping of "cultural traces" of these instruments was carried out in 2 ways - cooperation with technologists who have information about methods of making these instruments, and the study of literary sources that mention and describe music and performers on these musical instruments. As a result of the work, a group of musicians worked on recording the production technologies, discussing ways of transmission and preservation. composing original music for solo and ensemble performance.