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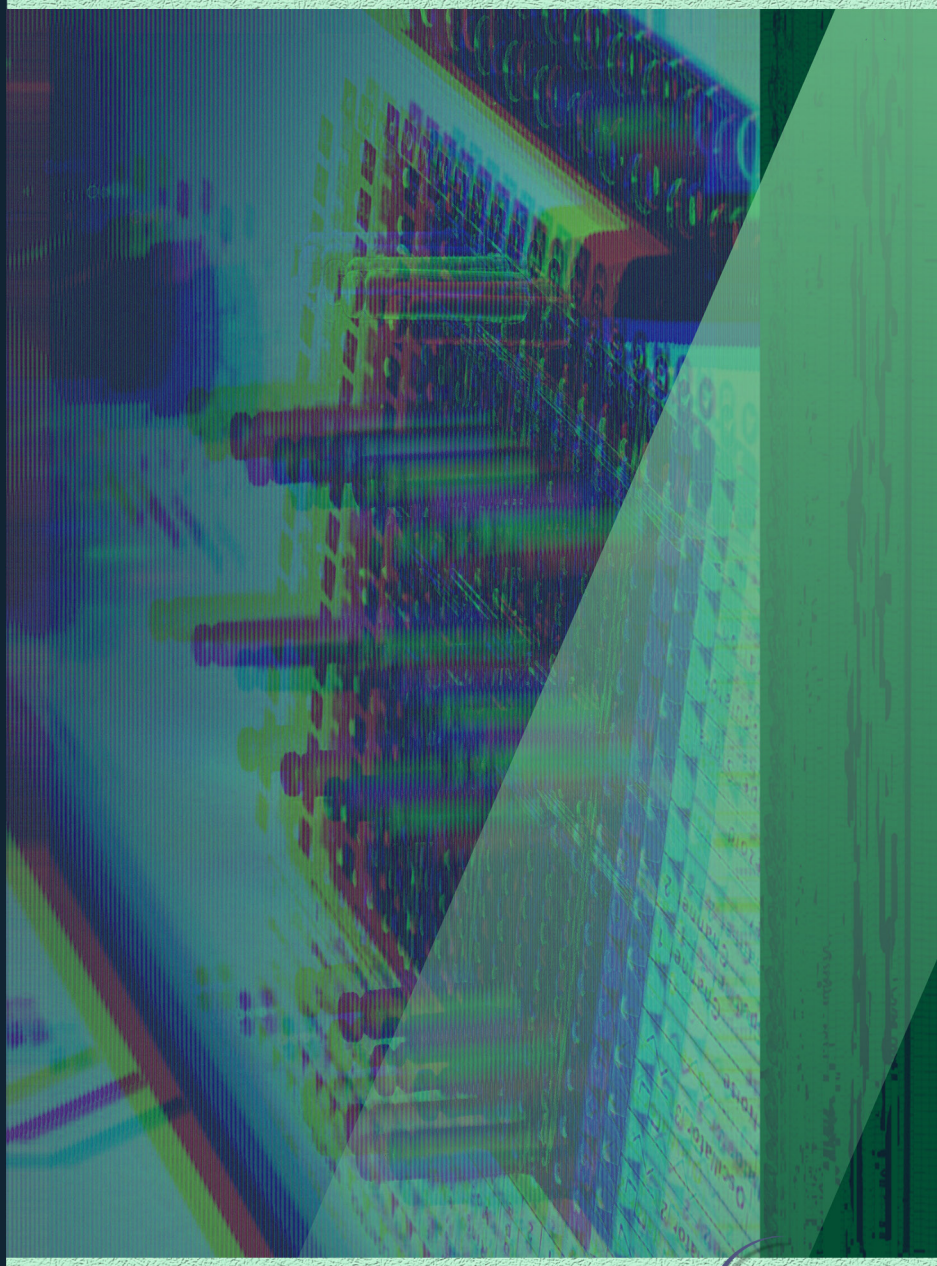

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INSAM Journal of Contemporary Music, Art and Technology is an international peer reviewed journal dealing with topical issues in contemporary art music, visual and performing arts, and technology. The journal encourages interdisciplinary and transdisciplinary approaches and innovative views on these subjects, aiming to create a platform for communicating new ideas and theoretical and artistic impulses.
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EDITOR'S FOREWORD

The 14th issue of the *INSAM Journal of Contemporary Music, Art and Technology* – the first we are publishing in 2025 – features studies and reviews that explore topics of interest from the past nearly eight years: the impact of technology on music and art, the redefinition of traditional artistic formats, soundspace, artificial intelligence in music, and social media. With the final article before the Review section, we are also highlighting radio art as the main theme for our December issue.

The paper that opens the issue, authored by Pedro Pablo Cámara Toldos and Inés María Monreal Guerrero, explores *Saxophone +*, an artistic research project that reimagines the traditional solo concert as a multidisciplinary, dramaturgical experience – integrating video, electronics, gesture, and spatial design. By positioning the performer as a multifaceted creator – musician, director, and scenographer – the project challenges the passive role of the audience and emphasizes the expressive and interactive potential of contemporary performance through technological and interdisciplinary innovation. In the first article on this research topic published in our journal (with the second part forthcoming in the next issue), Srđan Atanasovski examines how listening is governed in late capitalist societies through what he terms "auditory discipline." Drawing on Henri Lefebvre's rhythmanalysis, he reveals how sonic environments are shaped by power, calling for a postmusicological shift that frames listening as a political and embodied practice. İsmail Eraslan proposes an AI-driven methodology for analyzing musical form and style in Ottoman-Turkish compositions, combining computational tools with musicological frameworks. This approach facilitates detailed comparative analysis and transformation tracking across periods and styles. In her study, Ruirui Ye examines how digital technologies influence the pedagogy, performance, and dissemination of Zheng music, a traditional Chinese instrument. The study reveals a hybridization of tradition and innovation, where digital tools empower new forms of creative expression and global reach. In the first in-depth scholarly examination of this particular radio artist, Marija Maglov's article offers a detailed portrait of Arsenije Jovanović's radiophonic art,

focusing on his compositional methods and philosophical approach to sound – a fitting tribute to this author, who passed away recently.

The Review section contains three contributions regarding recent publications and an event. In the first one, Ana Đorđević reviews a recent monograph written by Serbian musicologists Milan Milojković, Ira Prodanov and Ljubica Ilić, which deals with soundscapes of Novi Sad, the second largest city in Serbia. Rijad Kaniža reports on the 6th edition of Sound Exhibition and Live Electronic Music Concert, held in early July in Sarajevo. Finally, Bojana Radovanović Šuput offers insight into Juan Bermúdez's recent monograph *Musicking TikTok: A Musical Ethnography from a Glocal Austrian Context*.

We are grateful to all the authors who chose our journal to share their work, our reviewers for their helpful insights and comments, as well as to our proofreader and language editor, Anthony McLean. The image on the cover reveals a detail captured by Rijad Kaniža, which shows storied semi-modular analogue synthesizer EMS VCS-3 that was recently discovered in Sarajevo and that belonged to composer Josip Magdić (1937–2020).

As we close this issue, we look ahead to our next publication, which will mark the 15th issue and celebrate eight years of the *INSAM Journal* and ten years of INSAM Institute for Contemporary Artistic Music – a milestone that underscores our mission to foster a dynamic platform for contemporary music and art research.

In Belgrade, July 15, 2025,
Dr. Bojana Radovanović Šuput,
Editor-in-Chief

Main Theme:

New Technologies in Contemporary Music

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SAXOPHONE +, BEYOND A STAGE CONCERT FORMAT

Abstract: The boundaries of classical music have long been blurred, with numerous artists redefining the concert as a multidisciplinary experience that integrates various arts and technologies. The research detailed in this paper explores the transformation of the traditional concert format, positioning the performer as a multifaceted artist who assumes roles beyond interpretation, such as stage direction or musical acting, expanding the expressive possibilities of musical performance.

Through artistic research, this study conceives the concert as a dramaturgical space where different art forms converge. The project *Saxophone + (stage concert)* exemplifies this vision, featuring collaborations with composers such as Abel Paul, Óscar Escudero, Camilo Méndez, and Andreas E. Frank. The resulting works incorporate gestural elements, video, electronics, and sculptural instruments that transform not only the saxophone's sound but also its visual and performative presence. These elements challenge the traditional passive spectator model, transforming both space and audience interaction.

This paper presents one outcome of an ongoing artistic research project, which aims to rethink the role of the concert performer and to redefine

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the solo concert format through interdisciplinary experimentation, with a particular focus on developing new stage and concert formats. Drawing on performance studies, contemporary composition, and the integration of multimedia technologies, the project explores how expanded practices – such as gestural performance, video, and sound sculpture – can challenge traditional paradigms of musical presentation. By integrating technology and innovating the concert format, the study highlights the importance of engaging contemporary audiences in new and immersive ways. The findings point to the necessity of rethinking traditional concert formats in order to better respond to the expectations of contemporary audiences, emphasizing the value of interactivity and spatial reconfiguration. *Saxophone +* serves as an introduction to this evolving conception, redefining the performer, the concert, and the audience.

Keywords: stage concert, saxophone, interdisciplinarity, contemporary music, extended performer, extended techniques.

Introduction

The borders of music, especially in the classical field, have experienced a growing blurring in recent times. More and more artists are fusing music with other art forms, such as visual arts, dance, and emerging technologies such as virtual reality and artificial intelligence. According to Nicolas Bourriaud's theories on contemporary art, interdisciplinary approaches enable artists to blend diverse media and perspectives, fostering innovative expressions that respond to complex social and cultural issues (Bourriaud 2002). A good example of this are collectives, ensembles, and research groups such as *DieOrdnungderDinge*, *MusicExperiment21,* and *Colectivo ErgoSound*.

In this way, they transform the traditional show into multisensory experiences, exploring new forms of artistic expression and emotional connection with the public. This approach challenges traditional aesthetic conventions and the notion of musical genre. In this context, and through constant observation of concert programs, the interest arises in a format that transcends the labels of the genre and focuses on the stage concert as an integral work: *Saxophone +*.

For decades, significant efforts have been devoted to designing concert experiences that captivate audiences across both the classical and contemporary music fields. This includes not only individual concerts but also the program-

ming of festivals and concert series, which frequently explore specific thematic frameworks or adopt monographic approaches to offer deeper artistic engagement. Examples of this approach can be found in the work of groups such as *Die Ordnung der Dinge*, *Experiment21*, or *Colectivo ErgoSound*, which design their performances with strong conceptual coherence. Redefining its format is now a key premise that drives our artistic research and enhances our innovative concert concept.

The 21st century continually demands new modalities of artistic expression. Researchers such as John Sloboda assert that the conventional concert format and traditional performance practices show signs of stagnation, requiring a voice adapted to these transformations (Sloboda 2001). This leads us to rethink the traditional concert as an artistic act that requires an active audience, in line with Sloboda's assertion that audience engagement is crucial for meaningful musical experience. In a technological society where audiences are increasingly participatory and interconnected, the concert format must evolve to foster interaction rather than passive reception. According to Manovich: "new media not only change the way we create and consume culture, but also the way we think about it" (Manovich 2001, 55).

Our artistic research project explores innovative saxophone concert formats, integrating multimedia resources and interdisciplinary collaborations. Inspired by the art critic Grant H. Kester, who believes that collaboration can create art greater than the sum of its parts, this project focuses on co-creation between composers, performers, and stage directors. It challenges traditional hierarchies and supports the idea of art as something valuable for everyone (Kester 2011).

The saxophone is the centerpiece of this project. Although historically associated with specific extended techniques and experimental practices, it has evolved as a versatile instrument embraced by both classical and contemporary composers. As noted by Jean-Yves Bosseur (1998), the saxophone's unique timbral qualities and technical capabilities have encouraged composers to explore new sonic territories. Similarly, John-Edward Kelly (2001) emphasizes the instrument's adaptability in pushing the boundaries of traditional performance techniques through interdisciplinary approaches and electronic integration.

Collaborations with composers such as Óscar Escudero, Camilo Méndez, Abel Paul, Simon Steen-Andersen, and Andreas E. Frank have given rise to scenic and multidisciplinary works that expand the instrument's repertoire. These

collaborators were chosen not only for their significant artistic impact but also due to our previous successful partnerships and the strong artistic rapport we share, which fosters a productive and innovative creative process.

With the growing presence of electronic media in art, the performer transforms into a "media actor": they master their instrument, follow scenography, recite texts and explore other instruments, expanding their artistic role (Auslander 2022). Additionally, research on post-instrumental performance practices highlights how performers go beyond traditional instrumental techniques by incorporating multimedia, movement, and interdisciplinary elements, thereby redefining the boundaries of musical performance (Lizarazu 2018). We are especially interested in the mutation of the traditional concept of the performer, who becomes the creator not of all the elements of the concert, but rather assumes the roles of stage or concert director, stage manager, director and, obviously, performer. The aim is to create a work of art that is interpreted by the creator, similar to the "composer-performer", a hybrid form that is more common in disciplines such as dance or theater than in music.

In this way, the borders of music in contemporary aesthetic thought are no longer fixed and absolute; the musical idea passes through the individual aesthetic thought of the creator, without being subject to predetermined styles as in other times in history (Binotto 2004).

In *Saxophone* +, technology plays a central role – not as an end in itself, but as a tool to enrich the artistic proposal and expand the expressive possibilities of the performance. Integrating electronic resources, video and projections, the project seeks to educate an active public and encourage sound and visual experimentation (Emmerson 2007). Collaboration with specialized technicians guarantees an effective integration of these resources in the artistic productions.

Finally, *Saxophone* +, as we will see later, seeks to redefine two fundamental aspects of any representation: the space and the audience.

Hybrid methodology

This concert is created mainly from an artistic research methodology. Initially our task was to locate its scope of study and its possible applications. Taking into account that the research is grounded in the principles of artistic research, it is

crucial to distinguish between the analysis of artistic events that have occurred, more typical of disciplines such as musicology, and the creation of knowledge through artistic practice and experimentation, such is the case we present. In this sense, the research presented is part of a creative process that, as Paulo de Assis points out, privileges the exploration of future possibilities, adopting a perspective oriented towards innovation (Assis 2018, 100).

Our research is based on a flexible methodological approach, which prioritizes the creative process over immediate results. According to Jacques Lacan, value lies more in the process of exploration than in measurable results (Lacan 1999, 128). This approach does not seek definitive conclusions, but rather encourages open and dynamic thinking, providing a starting point for future projects and artists.

With a marked interdisciplinary character, our research is developed around the saxophone and its performing possibilities, integrating practical work and theoretical reflection. According to Assis, we understand this project as a bridge to new creative perspectives, hoping that other performers, composers and stage directors find inspiration in it to develop their own paths (Assis 2018, 184). This transdisciplinary approach not only expands artistic possibilities, but redefines the creative act as a continuous and collaborative process, constantly evolving.

In the current artistic field, collaborative creation has gained prominence, challenging the romantic idea of the work of art as the exclusive product of a single author. Collaborative creation in art is not a novel practice; it has numerous antecedents that have been the subject of reflection by various authors. Kester explores the evolution of this practice from movements such as Dada to the present (Kester 2011), while Claire Bishop analyzes co-authorship, teamwork, and audience participation as contemporary expressions of collaboration (Bishop 2006). However, Boris Groys underlines the importance of collaboration as an essential component of the total work of art, emphasizing its social impact (Groys 2016). These perspectives underpin our methodology, which is aligned with the vision of artistic work as a dynamic and interdisciplinary process.

This paradigm shift reflects the complexities of interdisciplinarity, where success depends on teams made up of specialists in different areas. Our methodological approach, based on collaborative and group creation, focuses on carefully selecting the necessary collaborators for each project, with the aim of achieving a coherent and enriching integration.

The starting point of our methodology is to clearly define the type of research being undertaken, as this determines the selection of the collaborators essential to the project. In response to the gap identified in the introduction – the limited exploration of concert formats that integrate interdisciplinary elements and technological media – we recognized the need to involve not only composers but also a technician specialized in lighting, projection, and sound. Their expertise is crucial for developing performative environments where visual and sonic elements are integrated from the outset, rather than added at a later stage, thus enabling a truly interdisciplinary artistic process. Additionally, we recognized the importance of including a stage consultant to ensure scenic and dramaturgic consistency of the concert. Although we had certain knowledge in this field, collaboration with a specialist allowed us to delve deeper into aspects that exceeded our individual capabilities.

The composer selection process, a crucial aspect of our methodology, was based on criteria such as artistic identity, career, previous experience, adaptation to the needs of the concert and the previous relationship with the performer. We also valued characteristics such as flexibility, openness and knowledge of the saxophone, especially for pieces that required this instrument. This choice, although subjective, was guided by experience and intuition, accepting the possibility of errors as an inherent part of the creative process.

Rather than offering a blank canvas, we chose to provide structured guidance to the composers, under the premise that limitations stimulate creativity. As Stravinsky observed in *Poetics of Music*, "The more constraints one imposes, the more one frees oneself of the chains that shackle the spirit... and the arbitrariness of free will" (Stravinsky 1947, 65). This belief guided our methodological framework: constraints were not intended to limit artistic freedom, but to encourage focused and inventive responses within a shared creative context. Carefully designed parameters allowed composers to explore their artistic voice while maintaining coherence with the project's overarching goals.

Additionally, our guidelines are not uniform for all collaborators. Each composer receives premises adapted to his specialization, whether in scenic, visual, sound or performative aspects. This approach reflects our belief that the most innovative results emerge when each individual's unique strengths are leveraged.

Our collaborative method is based on co-authorship, where creative skills are distributed between composers and other specialists. This approach requires intense exploratory work, functioning as a living laboratory that evolves through different phases of creation and testing. In this context, the figure of the stage advisor does not replace our responsibility as main performers, but rather complements our work through consensus and active collaboration.

A key objective of our project is to enable its repeated performance in diverse contexts and festivals, as the opportunity to present the work multiple times is essential to the very purpose of our artistic research, which relies on practice-based iteration and refinement to explore different interpretations, respond to diverse audiences, and progressively develop the work's expressive potential. To achieve this, we have adopted a flexible methodology that prioritizes economy of means without compromising artistic standards. This led us to develop two versions of the concert: one that optimizes logistics and another that prioritizes the artistic ideal, even if this implies greater technical challenges, such as the transport of multiple instruments or the use of projectors.

Once the technological tools and instruments necessary for the project were defined, it was determined what type of technicians and engineers should be part of the team. This logical order ensures that technical decisions are aligned with creative objectives. In this phase, the participation of an electronics, video and lighting expert was essential, with clearly delegated responsibilities assigned to each specialist.

The methodological model prevents the performer or concert director from assuming technical roles outside of their specialization, which could compromise artistic quality. Instead, the specific talent of each team member is enhanced, ensuring that all technical and creative aspects are attended to by professionals trained in their area.

In short, our methodology is constantly evolving, adapting to the needs and discoveries that arise throughout the process. This flexible nature allows us to incorporate improvements and adjustments that enrich the project. Even as these reflections are written, we have experienced substantial changes in our approach to collaborative creation. We fully identify with the words of Lucia D'Errico, who maintains that artistic work is intrinsically open and experimental, more of an ongoing process than a finished product (D'Errico 2018, 69). This

approach motivates us to continue exploring new forms of collaboration, with the conviction that there is always room for learning and innovation.

In summary, the methodology of this research is mixed, which combines a large part of the methodology of artistic and, to a lesser extent, musicological research. It is deeply intertwined with its object of study, fostering a creative process that combines artistic practice with rigorous theoretical reflection. This interdisciplinary approach allows us to develop new concert formats that respond to current needs, exploring and expanding the limits of musical expression.

***Saxophone* +, the concert**

Saxophone + is presented as a stage concert that is integrated into a current in Europe that questions the traditional form of the classical music concert of the last 50 years. Some of its main characteristics include the definition of music as an inherently interdisciplinary art, which is faithfully reflected in the *Saxophone* + program. This entails the redefinition of the concert as a dramaturgical space. Following the premises of Hans-Thies Lehmann, all the elements that have been, to a greater or lesser extent, discarded by the classical concert in the last century – such as the role of the musician as performer, space, lighting, projections, and the expansion of the instrumental vocabulary through live or pre-recorded electronics – are put at the service of the creation of a new hybrid form of concert (Lehmann 2006).

This concert is also an introduction to a new conception of the instrumentalist and the soloist concert. To this end, the concert will use an episodic form, where the different works will be cataloged through prepositions and locutions. For example: "(Saxophone) INSTEAD OF" for the arrangement of the flute work by Salvatore Sciarrino, "(Saxophone) WITHOUT" for the work *Hidden* by José P. Polo, "(Saxophone) NEXT TO" citing the work *beside besides* by Simon Steen Andersen, where different versions of the work are pre-recorded and shown simultaneously. These "titles" precede the works in the form of animations that are projected on different elements of the scene. In this way, it has been possible to create a narrative form that links the various proposals into a coherent whole. The musician goes through the different stations that appear on stage, presenting a different proposal in each one of them.

Program

The program is designed in such a way that some works can alternate with each other, which provides flexibility to the concert and prevents it from being a closed event. Between each work, a fragment of *Self-reflecting Next To Beside Besides* will be projected.

1. (Saxophone) NEXT TO – *Self-reflecting Next To Beside Besides* (2003–2020). Simon Steen-Andersen (1976) // (Saxophone) NEXT TO – *Between me and myself V* (2016). Andreas E. Frank (1986).
2. (Saxophone) WITH – *Eídolon/Eikón* (2023). Abel Paul (1984).
3. (Saxophone) INSTEAD OF – *Canzona di Ringraziamento* (1985). Salvatore Sciarrino (1947). Version for soprano saxophone by Pedro P. Cámara de 2015.
4. (Saxophone) WITHOUT – *Hidden* (2012). José Pablo Polo (1984).
5. (Saxophone) WITH – *Disappeared Quipu[s]* (2023). Camilo Méndez Sanjuan (1984).
6. (Saxophone) NEXT TO – *POV* (2017) Óscar Escudero (1992) // *-Tiest* (2017). José Pablo Polo (1984) // *New piece* (2025) by Helga Arias (1984).

Space and scene

The renewed interest in the concert space is not new, as Nicholas Cook's words demonstrate: "There is a long tradition of classical music being staged at alternative venues ranging from stately homes to art galleries, and Nonclassical is just one of many recent ventures to bring music of the classical tradition to new places and to encourage the socialised listening practices conventionally associated with jazz clubs rather than concert halls" (Cook 2013, 392).

Our object of study is not limited solely to conventional physical space, but seeks to transcend it by analyzing traditional space and considering how to adapt it for renewed use. In fact, each space is carefully studied to adapt our project to a wide variety of rooms. Rather than imposing limitations, our goal is to remove barriers and serve as an example of how the concert can adapt to new settings.

Some researchers, such as Christopher Small, adopt a critical view of the Western classical concert, considering it as a conservative act that reinforces

social hegemonies (Small 1998). In our concert, we seek to democratize the roles of artists and audience, transforming it into a representation where although there are defined creators and performers, the public plays a more active role than simply that of recipient. The traditional architecture of the auditorium not only hinders interaction among audience members but also conveys the message that their role is to listen rather than engage or respond (Ibid.). As we will see later, our intention is to involve the audience in the concert through direct encounters with the musicians during the performance, thus breaking with the typical passivity of some shows and promoting a more dynamic interaction. Returning to Cook, "it is partly that you lose the auditory dimension of the movement on stage. But more important is how the combination of acoustic, visual, and kinesthetic movement carries the music beyond the stage to suffuse the social as well as physical space of the auditorium" (Cook 2013, 392).

Spatial scene layout

We started from an ideal for our concert: an open-plan rectangular space that lacks a stage and does not have seats fixed to the floor, which would partially limit the movement and freedom of the audience.

1. (Saxophone) NEXT TO – *Self-reflecting Next To Beside Besides* (2003–2020). Simon Steen-Andersen (1976) // (Saxophone) NEXT TO – *Between me and myself V* (2016). Andreas E. Frank (1986).

The first work of the concert requires the selection of an ideal space for the projection (1). This space will be the same for the closing work of the concert, for practical reasons and to avoid the need for multiple beamers, which could be problematic in some venues. The projection is carried out on the performer, so it is necessary to project on a wall or a screen that allows clear viewing from the floor.

The example in Figure 1 shows a very particular space where we had to project on the doors of the room to be able to achieve the full-size scale.

Figure 1. Live performance of *Between me and myself V* by Andreas E. Frank. Neomudejar Museum, Madrid (© Rubén Vejabalbán. Photo: Rubén Vejabalbán)

2. (Saxophone) WITH – *Eídolon/Eikón* (2023). Abel Paul (1984).
The space reserved for the variant "(Saxophone) WITH" are the two narrow ends of the room, in the case of this work it will be place 2a.

3. (Saxophone) INSTEAD OF – *Canzona di Ringraziamento* (1985). Salvatore Sciarrino (1947).
This work is the only purely acoustic piece in the entire concert and has been planned to be performed in the center of the hall due to its sound characteristics, which are fragile and delicate (3).

4. (Saxophone) WITHOUT – *Hidden* (2012). José Pablo Polo (1984).
Due to the technical characteristics of the work, which must be performed with a table and a chair, we have chosen the opposite end to position 1, that is, position 4 of in Figure 2.

5. (Saxophone) WITH – *Disappeared Quipu[s]* (2023). Camilo Méndez Sanjuan (1984).
As we have seen previously, this piece is performed in position 2b, right in front of its counterpart "(Saxophone) WITH".

6. (Saxophone) NEXT TO – *POV* (2017) Óscar Escudero (1992) // *-Tiest* (2017). José Pablo Polo (1984) // *New piece* (2025) by Helga Arias (1984).
For the last work of the concert we return to the initial position (1), the place designated for works with video.

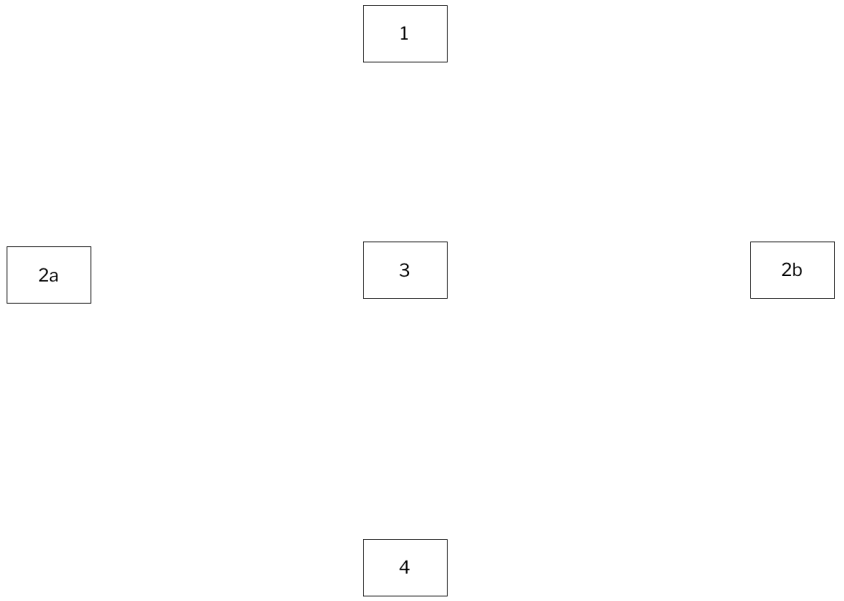

Figure 2. *Saxophone* + concert positions.

Dramaturgy

As previously stated, our scenic budgets seek to eliminate the borders between the arts. In addition, we also aim to eliminate other borders between musical styles. Returning to Cook again: "As has long been standard practice with pop singers, especially since the development of the wireless microphone, choreography becomes an interpretive dimension of performance, with effects that range from the projection of structure to the production of narrative or dramatic meaning" (ibid.).

Using the previous scheme as a guide, we will now present how the scenic route has been conceived that provides unity to the works, shaping the concert as an integral work.

During the four transitions between the works, which also require movement and brief preparation, a fragment of the first work, *Self-reflecting Next To Beside Besides*, will be projected. This piece has been recorded for live performance or for playback in any of its versions, offering multiple possibilities, from the duo to the virtual quartet or the virtual trio with live performance. In this case, the last option was chosen to open the concert.

In the last 30 seconds of the performance of the first piece, the performer leaves the scene and goes to position 2a to prepare to perform the first piece "(saxophone) WITH". In this way, we are exploring a concept that we find significant: the integration of transition within the work. Thus, the transition will cease to be so in the remainder of the concert.

The first work is performed "(saxophone) WITH". While moving to position 3, the center, 40 seconds of *Self-reflecting Next To Beside Besides* are projected.

After the performance of the work "(Saxophone) INSTEAD OF", the performer goes to position 4 while another fragment is projected in another format of *Self-reflecting Next To Beside Besides*.

At the end of the work "(Saxophone) WITHOUT", we proceed in the same way as in the previous ones. On this occasion, the projection will be one minute due to the more complex preparation of the following work.

Figure 3. Performance and environment of hanging objects of *Disappeared Quipu[s]* by Camilo Méndez. "Artists meeting Amelia Moreno", Quintanar de la Orden (Toledo) (© Camilo Méndez.

At the end of the second piece "(Saxophone) WITH", we go to the dressing room to take off our concert clothes and put on the street clothes in which we arrived at the concert. Then, we move to position 3, the center. Simultaneously, there is a projection of the work that serves as a link to the entire concert, but on this occasion without sound. Once in the center, we sit down and address the audience by asking some questions such as:

1. What did you think of the concert?
2. Would you return to a concert like this?
3. Could you catalog what kind of music or what type of arts have been involved?
4. Why don't we usually attend concerts of current experimental music?
5. Do you have any curiosity that you would like to know?

Once the conversation with the audience is over, the work is projected again. The intention of this meeting with the audience is to give the feeling that it is the end of the work, of the concert.

We move to the initial position 1 and perform the second piece "(Saxophone) NEXT TO". Once finished, we do not wait for applause and leave the room through the same place where the audience entered.

Our target here is to eliminate the traditional applause, which may not be heard throughout the concert, as well as the closed ending of the performance, seeking to allow the concert to continue in the audience's imagination.

Public

The audience has been one of the great concerns during this investigation. The decline in audiences in traditional concert halls is a proven fact today. Studies on this issue, such as the one carried out by J. Sloboda (2013), have confirmed that in recent decades we have seen a decrease in the number of people attending live events. This decline is quite significant and has occurred in many countries. According to data from the *National Endowment for the Arts* in the United States, between 1985 and 2010 we lost 30% of the audience for classical music, opera and ballet. It is important to note that this decline is not observed in other artistic disciplines (Sloboda 2013).

In our quest to engage audiences in the concert, we believe that one of the barriers contributing to this exodus is the conventions of the traditional concert across all genres, characterized by well-defined spaces between musicians and audience. At *Saxophone+*, our goal is not limited to the elimination of the conventional stage, but extends to the transformation of the space intended for the public. The stalls are reconfigured to offer a varied seating arrangement, including folding chairs and cushions, allowing each individual to freely select their place within the concert. This way, each person can sit in the desired direction, as close or far away as they prefer, and can even choose to stand or alternate between sitting and standing. Areas have been previously designated for cushions (closest to the performer), chairs and for those who prefer to stand, thus ensuring that vision is not interrupted at any time.

Another purpose of the concert is to encourage interaction with the audience, so we planned the meeting with the public almost as if it were a work in itself.

Another question is the applause, which we leave open to the audience. By avoiding applause as a convention, we neither seek to prohibit nor encourage it. It will always be an unknown factor at the end of the concert, especially.

In our ideal venue, like the one at *Gare du Nord* in Basilea (Switzerland), we have a bar at the entrance to the performance. This allows everyone to get the drink they want, and this remains open throughout the concert.

Lightning

The lighting in the room prior to the concert should be dim. During works in position 1 a *black-out* is required. For the rest of the works and transitions, light lighting is needed, as a lectern light is available. During the meeting with the public, general lighting in the room was thought of. At the end of the concert, once the performer leaves the room, the room lights will be turned on again.

Technical staff

To carry out this concert, two people are required in the room:

1. A sound technician with experience in this type of performance, who will coordinate with the performer and composers in advance.
2. A lighting technician.

For the design of this concert, we received influences and advice in terms of scenography and dramaturgy from the following concert, theater, and stage directors: Iñigo Giner, Paulo de Assis, Rafael Villalobos, Michael Höppner, and Jürgen Flimm. They were collaborators in concert design, significant influences on our artistic practice, and important mentors throughout the doctoral thesis period.

Conclusions

The incorporation of artistic disciplines and innovative technologies can offer a different way to enrich the performing experience, potentially responding to these new requirements and fostering a deeper and more meaningful interaction between artists and spectators.

In this context, we have expanded the interpretive possibilities of the saxophone, exploring new forms of expression and redefining its role in current music, as demonstrated by the repertoire generated over the past decades and its presence in contemporary music festivals such as Wien Modern and Eclat Festival. This approach has allowed the saxophone to be revalued as a highly versatile instrument adaptable to a variety of musical contexts. Likewise, we have generated new expressive opportunities, laying the foundations for its future development.

Although some of the initial questions of our research have found answers, others remain unresolved, and new questions have emerged that open up further horizons for exploration. This process should not be understood as an end, but rather as a beginning within our artistic research, both in our work as performers and in the search for new ways of conceiving the concert. Among the unanswered questions are whether this type of concert format better reaches and engages contemporary audiences, while the findings so far suggest that the saxophone, integrated within an interdisciplinary context, may contribute positively to its artistic vitality and future development.

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SAXOPHONE +, BEYOND A STAGE CONCERT FORMAT (summary)

How can the solo concert be reimagined as a dramaturgical experience in contemporary performance practice? This artistic research explores that question through *Saxophone* +, a staged concert that position the performer as creator and multifaceted artist. Moving beyond the traditional concert format, the project integrates visual, theatrical, and technological elements to transform the performance space into a dramaturgical environment where multiple art forms converge.

Developed through an artistic research methodology adapted to the creative act, *Saxophone* + redefines the solo concert experience with the saxophone as its central instrument. Collaborations with composers such as Paul, Escudero, Méndez, and Frank have led to the creation of works that incorporate gestural elements, video, electronics, and other instruments—expanding the sonic possibilities of the saxophone while reconfiguring the spatial and performative dimensions of the concert.

A fundamental objective of this study is to challenge the passive spectator model by fostering a more immersive and interactive experience. The project explores how the physical space of performance can be adapted to enhance audience engagement, replacing the rigid traditional stage with a fluid, participatory environment that reconsiders the boundaries between performer and public.

Technology plays a key role throughout the project. The integration of electronic media, interactive visuals, and spatialized sound design not only enriches the aesthetic experience but also addresses the evolving expectations of modern audiences. These elements enable new forms of expression and interaction that go beyond conventional concert presentations.

Ultimately, the research suggests that the traditional concert format no longer fully meets the demands of contemporary audiences. *Saxophone* + proposes a renewed approach to performance practice through interdisciplinary collaboration and technological innovation, redefining the relationship between performer, space, and audience. By merging music with theater, technology, and spatial reconfiguration, the project contributes to a broader discourse on the future of musical performance, offering a model where artistic expression and audience experience are equally central.

Ultimately, this research reveals that the conventional concert format no longer fully satisfies a segment of today's audience, necessitating a reimagining of performance practices. By embracing interdisciplinary collaboration and technological advancements, *Saxophone* + introduces a new perspective on the role of the instrumentalist and the solo concert, redefining the relationship between performer, space, and audience. The findings suggest that innovation in concert design is not merely an artistic choice but a necessary evolution to maintain the relevance of live performance in the contemporary cultural landscape.

In conclusion, this study contributes to the broader discourse on the future of musical performance, advocating for a concert format that transcends traditional boundaries. By merging music with theater, technology, and spatial reconfiguration, *Saxophone* + serves as a model for a renewed approach to concert design, where artistic expression and audience experience are equally valued.

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POLICING THE LISTENING: CAPITALISM, SENSORY GOVERNANCE, AND AUDITORY DISCIPLINE[1]

Abstract: This article investigates the politics of listening in late capitalist societies, focusing on how auditory perception is shaped, regulated, and policed through spatial, technological, and affective regimes. Developing the concept of the policescape – a spatialized system of sonic governance – it examines how listening is disciplined in everyday life. Drawing on Henri Lefebvre's rhythmanalysis, the article outlines a postmusicological approach that shifts attention from musical objects to the politics of listening itself. Two key mechanisms of auditory discipline are analyzed: the public/private divide and what is termed *horror silentii*, or the fear of silence. These mechanisms enforce acoustic hierarchies, reinforce social boundaries, and suppress collective sensory presence. Central to this disciplinary regime is the fantasy of the auditory gated community – both as a physical structure and an aspirational fantasy of control – the neoliberal ideal of absolute control over one's sonic environment. Within this logic, unwanted sounds in private space are experienced not as mere disturbances, but as personal failures of sovereignty. Listening, I argue, is not a neutral sensory act but a political operation embedded in structures of power, rhythm, and exclusion.

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Keywords: listening, soundscape, rhythmanalysis, Henri Lefebvre, auditory discipline, sensory governance, *horror silentii*.

Introduction: Listening in the Policescape

This article is the first part of a two-fold research project that explores how listening is shaped, regulated, and policed within the broader landscape of late capitalist society.[2] It aims to demonstrate that listening is not a neutral or purely aesthetic activity, but a socially embedded and politically consequential practice – one that is increasingly subjected to forms of what I term *auditory discipline*. This discipline, operating through spatial segregation, technological mediation, and affective conditioning, is central to what I call the *policescape*: a system of sonic governance that structures everyday life by regulating the sensory field.

The article takes as its starting point the premise that *listening*, long considered marginal or secondary in political theory, is in fact crucial to the reproduction of capitalist power relations. In particular, listening practices are entangled with systems of spatial control, commodification of attention, and the privatization of perception. By shaping how, where, and to what we listen, auditory discipline contributes to the fragmentation of social experience and the suppression of collective auditory presence – what I will later call the *sonic commons*.

Grounded in a situated perspective shaped by post-globalization and peripheral urban experience, this study uses rhythmanalysis as both a methodological and epistemological framework. Drawing on Henri Lefebvre's concept of rhythm as the patterned organization of time, space, and energy, I propose a form of *postmusicology* that moves beyond the disciplinary confines of musicological analysis. Rather than centering music as an autonomous object, this approach centers listening as a critical lens for understanding capitalist modernity, urban transformation, and the political organization of everyday life.

2 The second article, titled "Listening Against: Sonic Commons and Radical Amateurism as Practices of Resistance," will build on this critique by shifting focus to practices of opposition and collective reappropriation of sound. There, I explore how destabilized and expressive forms of listening, together with modes of amateur sound production, offer a blueprint for resisting auditory discipline and reimagining the politics of listening from below.
Together, these two articles advance a conceptual and political framework for understanding the sensory logic of late capitalism and the possibilities of listening as a form of struggle.

This first article lays the critical groundwork by identifying and analyzing two dominant mechanisms of auditory discipline: the *public/private divide* in listening, and the phenomenon of *horror silentii* – a pervasive fear of silence that animates capitalist sonic culture. These mechanisms, I argue, not only condition listening habits but also suppress the emergence of the sonic commons, understood as shared auditory space open to collective attentiveness and mutual recognition.

This article builds upon my earlier explorations of rhythmanalysis and sonic governance, particularly those developed in the context of soundscape studies and post-Yugoslav political space. In previous work, I have analyzed how urban acoustic regimes operate as affective and spatial technologies of control (Atanasovski 2016), and how listening intersects with political subjectivity and resistance (Hofman and Atanasovski 2022). The present study brings these trajectories into a consolidated theoretical framework by introducing the concept of *auditory discipline* – a term that captures the way listening is shaped, modulated, and governed across sensory, spatial, and ideological registers. Rather than simply extending prior arguments, this article reframes them around a new conceptual lens that foregrounds listening not merely as a culturally or politically inflected activity, but as a site of disciplinary power. In doing so, it also sketches the contours of what I propose as *postmusicology* – a methodological turn toward listening as embodied, situated, and rhythmically structured practice. Both of these concepts – *auditory discipline* and *postmusicology* – are offered here as points of departure for a broader theoretical project on sonic governance and resistance.

Methodology: Rhythmanalysis and Postmusicology

Why Lefebvre?

Henri Lefebvre appears, perhaps ironically, as a thinker profoundly out of joint with his time (cf. Atanasovski 2016a). Operating at the intersections of Marxism, philosophy, and the critique of everyday life, Lefebvre never fully belonged to either the modernist orthodoxy or the postmodernist turn. This marginal position is precisely what makes his thought productive for the present. Lefebvre's theoretical work was never about the invention of new systems or the

staking of epistemic territory; it was about inhabiting contradiction, performing critique through conceptual displacements, and thinking from within the materiality of the world (Elden 2004, vii; Lefebvre 1991). In this spirit, Lefebvre proposed a science of space, a science of rhythm, and ultimately a form of theory inseparable from life. He did not write about everyday life – he wrote from it, listening not only to the sounds of the city but to the silences, murmurs, and repetitions that compose its secret scaffolding. Rhythm, in his hands, becomes something more than a temporal category: it is the vehicle through which the social becomes flesh, the everyday becomes legible, and critique becomes sensuous (Lefebvre 2004, 15–18). My interest in Lefebvre begins here – with the conviction that the analysis of sound, space, and listening cannot be reduced to technical procedures or representational logics. It must begin with the body, extend into the spatial, and return to the political. It must resist the fetishism of meaning and instead attend to the brute materiality of rhythm. It must, as Lefebvre insists, take seriously the possibility that to listen to a street, a house, or a city is no less legitimate than to listen to a symphony. That listening, too, is thinking (Lefebvre 2004, 27).

Rhythmanalysis as Situated Listening

Lefebvre's *Éléments de rythmanalyse* (1992) offers a singular approach to analysis: not a model to be applied, but a practice to be inhabited.[3] The rhythmanalyst does not interpret from afar; she listens with her body. Her ear is not attuned to meaning, but to pattern, cadence, return, interruption. She registers rhythms not as signs but as forces – temporal dispositions inscribed into space, the city, infrastructure, labor, the home, the breath. She does not decode; she resonates (Lefebvre 2004, 20–21). In this, rhythmanalysis is resolutely practical. As Lefebvre writes, "he listens – and first to his body; he learns rhythm from it, in order consequently to appreciate external rhythms" (Lefebvre 2004, 19). The

3 Lefebvre's rhythmanalysis and spatial theory have been taken up most extensively in the fields of architecture, urban studies, and critical geography, where they have informed analyses of spatial production, bodily regulation, and infrastructural governance. As Łukasz Stanek has demonstrated, these concepts emerged not as abstract philosophy but through Lefebvre's direct engagement with postwar architectural modernism and state-led urban research in France (Stanek 2011). While this interdisciplinary reception has been generative, it is notable that musicology has been comparatively slow to incorporate rhythmanalysis – despite its explicitly sonic vocabulary and clear relevance for embodied listening. This work seeks to address that gap.

body serves as a metronome – not metaphorically, but materially. The rhythmanalyst thinks with the body, not in abstraction, but in lived temporality.

Rhythm, crucially, is not synonymous with movement. Movement can be mechanical; rhythm is measured. Rhythm presupposes measure – the social inscription of repetition. Everywhere there is rhythm, there is law, norm, calculation, expectation. Rhythm is the medium through which capitalist modernity regulates the everyday, disguising obligation as flow, discipline as cadence. And yet, it is precisely through rhythm that interruption becomes possible. The same rhythmic structures that subjugate can be turned, twisted, broken, held too long (Lefebvre 2004, 15–16). This double valence – of control and subversion – is what makes rhythmanalysis politically charged. It reveals not only the structure of time, but its excess. As Lefebvre remarks: "Rhythms. They reveal and they hide." To listen rhythmically is to perceive both the law and its failure. To hear not only the beat but the silence that surrounds it (Lefebvre 2004, 20).

Toward Postmusicology

This attention to rhythm, materiality, and the lived grounds a methodological shift I describe as postmusicology. Unlike the critical musicology of the late twentieth century, which aimed to expand the canon and politicize musical meaning, postmusicology turns away from the musical object entirely. It refuses to privilege the work, the score, the composer, the performance. Instead, it begins with listening – as embodied, spatial, situated practice. Not listening to music, but listening as method (Voegelin 2010, 12). Soundscape studies, with their ecological orientation, have gestured toward this turn. But as I have argued elsewhere, the institutionalization of soundscape research has produced what might be called a conservationist paradigm – one that captures sound as heritage, fixes it in place, and distances the listener through technologies of mediation (Atanasovski 2016a; cf. LaBelle 2010). Rhythmanalysis offers a different approach: it insists on presence, on lived duration, on non-mediated listening as a way of inhabiting the social (Sterne 2003, 217–224). Here, the body becomes the site of knowledge – not as an object to be examined, but as an instrument of inquiry. Listening becomes political not because of what it hears, but because of how it listens. Postmusicology thus does not seek to repair musicology's blind spots. It seeks to desert its terrain. It imagines a musicology not bound to music, but to rhythm, body, and space. It turns from the score to the street, from the

symphony to the threshold, from the institution to the common. In doing so, it reclaims listening as a form of life, a technique of resistance, a way of making the world felt otherwise.[4]

The conceptual turn toward postmusicology cannot be understood outside the broader disciplinary crisis that musicology has faced since the late twentieth century. As several authors have noted, the field has undergone a process of epistemic omnivorism – adopting concepts and methods from anthropology, cultural studies, media theory, and philosophy (Kerman 1985; Born 2010; Atanasovski 2024). This interdisciplinary expansion has contributed to the fragmentation of musicology's identity and raised persistent questions about its central object, methods, and institutional role. In many post-socialist contexts, this crisis was sharpened by the delayed confrontation with questions of ideology, mediation, and materiality in musical research.

Against this background, postmusicology – as proposed here – does not reject the field, but reorients its foundations. Rather than organizing itself around a privileged object such as the musical work, it begins with listening: not as passive reception, but as situated, rhythmic, and political engagement. Postmusicology focuses on how sound functions within regimes of power, how bodies are disciplined through auditory norms, and how space itself is produced sonically. It argues that listening to an airport concourse, a protest, or a gated community may yield insights as musically and politically significant as listening to a symphony. In this way, postmusicology seeks to reclaim the politics of the audible and reimagine musicology as a mode of situated critique.

4 While this study privileges a rhythmanalytical and postmusicological perspective, it does so in dialogue with a growing body of research that approaches sound as an infrastructural and political phenomenon. Scholars such as Karin Bijsterveld (2008), Jennifer Stoever (2016), and Gascia Ouzounian (2021) have shown how auditory regimes emerge from historically situated practices of exclusion, spatial control, and institutional mediation. Bijsterveld's work on noise abatement in modern Europe, Stoever's analysis of the sonic color line in American racial politics, and Ouzounian's investigations into urban acoustic planning all demonstrate that listening is a deeply stratified, power-laden activity, one shaped as much by social policy as by cultural codes. This project shares their premise – that listening is never neutral – but differs in its methodological trajectory. Instead of tracing specific histories of sound regulation, it proposes rhythmanalysis as a way to grasp the spatial and affective textures through which auditory discipline operates.

The Public/Private Divide and the Policing of Attention

The division between public and private is not merely a spatial distinction – it is a sensory regime, a political rhythm, and a neoliberal fantasy. The fantasy takes shape in the figure of the *gated community*, not only as a form of physical enclosure, but as an aspirational structure of feeling. In late capitalism, the individual subject is judged by their ability to establish and maintain absolute sovereignty over their private environment, especially its sonic dimensions. To be a successful subject is to hear only what one chooses, and to exclude all else. The gated community thus becomes the auratic emblem of neoliberal maturity: a space of isolation presented as autonomy, of enclosure masquerading as freedom. Its auditory equivalent is the private home – or more precisely, the idealized, acoustically sealed unit. Within it, every intrusive sound from the outside – neighbors' footsteps, a distant siren, a barking dog – is not merely an irritant. It is an existential wound, a reminder of failure to maintain auditory sovereignty, and thus of one's shortfall as a neoliberal subject.[5]

The gated auditory space is not merely a metaphor for individualized control over sonic experience – it is a material aspiration encoded into everyday consumer choices. Soundproofing becomes a marker of class: to dwell in acoustic privacy is to live in structures built with superior windows, thicker walls, and sound-dampening materials. Cars marketed as "quiet rides," apartments boasting "double-glazed silence," and household investments in white-noise machines or noise-canceling headphones all reflect the same desire: to filter out the sonic presence of others. Listening to the urban outside – neighbors, traffic, street life – is increasingly framed not only as an inconvenience but as a failure of personal advancement. In this logic, unwanted sound becomes a symptom of economic precarity, while auditory isolation becomes a performance of self-sufficiency and neoliberal success. This framework, however, contains a contradiction: the

5 This logic mirrors what urban scholars have documented in the design and ideology of actual gated communities, which promise not only physical safety but the fantasy of complete self-sufficiency and detachment from collective life. As Setha Low argues, gated communities are not only about crime prevention; they are affective infrastructures that "manufacture the illusion of personal autonomy and control over the environment" (Low 2003, 13). The dream of the gated community is not simply to be safe – but to be uninterrupted. In the auditory realm, this becomes the fantasy of perfectly curated sound, untainted by the presence of others.

very processes that enable the expansion of quiet, gated soundscapes – urban redevelopment, new construction, infrastructure growth – are themselves sources of intense and prolonged noise. Construction sites, with their relentless sonic violence, interrupt the fantasy of sonic autonomy, even as they promise to extend it. This paradox becomes most apparent in moments where construction sites publicly "apologize" for the noise, posting preemptive signs that acknowledge and legitimize the sonic anxiety of neighbors (see Figure 1). Such gestures recognize the validity of the auditory discomfort, while asking for its temporary suspension.

Figure 1. Residential development in Belgrade, July 2025.

In contrast, those same sounds encountered in public space rarely provoke the same affective reaction. Why? Because public space does not promise sovereignty; it demands exposure. The sonic presence of others is anticipated, tolerated, or ignored. But once those sounds transgress the membrane of private space, they are experienced as betrayal. As Peter Szendy argues, the neoliberal subject is not simply an ear but an *eardrum of property*: the threshold of hearing becomes the threshold of ownership and control (Szendy 2008).

This sensory bifurcation is enforced and aestheticized by technologies of auditory enclosure: noise-cancelling headphones, soundproofed architecture, and increasingly, urban planning that manages sonic flows alongside pedestrian ones (Thompson 2002). As Michael Bull has shown in his study of personal stereos, such technologies do not only shield the individual from urban noise – they constitute micro-utopias of self-management (Bull 2000). They transform listening into a private, portable activity, divorced from the contingencies of public life.

This transformation of listening is mirrored in architectural practice, where sound has historically been treated as a problem to be eliminated rather than a dimension to be engaged. Modernist design has long privileged visual clarity and spatial transparency, while relegating acoustics to a subordinate technical concern – managed through insulation, absorption, and silencing, rather than treated as an integral part of spatial experience (Lahiji and Friedman 1997). The result is a built environment that encourages auditory passivity, where silence is designed, rather than discovered, and where sound appears only in its most functional or aestheticized forms. In this context, architecture becomes complicit in the production of auditory enclosure: not simply by blocking external noise, but by scripting sonic experience according to principles of control, efficiency, and containment. Walls, corridors, and ceilings are not neutral structures – they are acoustic interfaces that shape the rhythm and direction of listening. The contemporary subject thus moves not only through spatial partitions, but through carefully engineered auditory thresholds, designed to secure the comfort of the individual while minimizing the unpredictability of shared sonic space.

Auditory Discipline: Definition and Analytical Scope

The concept of auditory discipline refers to the systematic shaping of listening practices through spatial, technological, and social mechanisms that normalize how we hear and how we are expected to relate to sound. Building upon the Foucauldian notion of discipline as a form of micro-power that operates through the body, auditory discipline encompasses both the overt and subtle ways in which sound and listening are regulated in late capitalist societies.

It manifests in at least three interrelated domains:

1. Spatial organization of listening – The separation between public and private spaces enforces distinct auditory behaviors: disinterested inatten-

tiveness in public, and total control in private. These normalized modes suppress the emergence of sonic commons by foreclosing shared or collective auditory experience.

2. Technological mediation – Devices such as noise-cancelling headphones, soundproofing architecture, and close-miking techniques promote an individualized and controlled listening environment. Such technologies not only isolate the listener from the surrounding world but also internalize discipline by reinforcing sonic detachment as a desirable state.
3. Affective and aesthetic regimes – The pervasive fear of silence (*horror silentii*) in everyday life encourages the continuous presence of commodified or ornamental sound (e.g., background music), which reduces the auditory space to a backdrop for consumption. These regimes aestheticize and depoliticize sound, neutralizing its potential to disturb, interrupt, or politicize the listener.

Rather than being a neutral sensory act, *listening is a mode of inhabiting the political space* – a situated, bodily practice through which subjects are attuned to regimes of power. In this context, auditory discipline operates not by silencing, but by modulating attention: training individuals to hear selectively, disengage emotionally, and remain acoustically passive. In this sense, auditory discipline is a key mechanism of the *policescape*: the urban soundscape not as background, but as a tool of everyday governance, shaping what can be heard, how it is heard, and what remains unheard.

This politics of listening is further complicated by the ways in which sound is culturally and morally coded. As Marie Thompson (2014) argues, the very category of "unwanted sound" is not a neutral descriptor of volume or frequency, but a politically charged decision that reflects affective hierarchies and normative anxieties. Noise, in this view, is not just what disturbs – it is what does not belong. It is that which exceeds the sonic expectations of a given social order, often marked by class, race, or behavioral codes. Through this aesthetic moralism, certain sounds are designated as disruptive not because of their acoustic properties, but because of the threat they pose to imagined social coherence. Auditory discipline thus does not operate only through spatial or technological means; it also functions through moral economies of sound – where peace, civility, and clarity are associated with control, and noise with danger, excess, and contagion.

In this moralized soundscape, listening becomes a form of social sorting, and silence a reward for compliance.

Listening in Closeness and the Aesthetics of Sonic Insulation

One of the dominant auditory aesthetics of our time is *closeness* – the experience of hearing a voice, breath, or gesture as if it were located just next to the ear. This aesthetic, shaped by techniques such as close-miking,[6] compression, and stereo separation, creates a feeling of intimacy. But this intimacy is, in fact, engineered. What we perceive as closeness is often the result of technological insulation – removal of background, space, and context. In this way, the aesthetic of closeness parallels the broader tendency toward sonic isolation in everyday life. The listener is not immersed in a shared soundscape but protected from it. The world is filtered out. As Jonathan Sterne has noted, modern sound reproduction is built on the ideal of clarity, which depends on removing noise, distance, and reverberation (Sterne 2003, 217–224). The result is a highly selective listening environment that privileges the "pure" signal over its surroundings.

This preference for clarity is not neutral. It is connected to larger cultural values: control, precision, self-containment. The aesthetics of high-fidelity sound, quiet interiors, and focused attention all feed into the idea of the rational, self-directed subject. In this way, aesthetic choices reinforce forms of auditory discipline. To listen in this way is to learn what deserves attention and what does not. It is to internalize a hierarchy of sounds: central vs. peripheral, meaningful vs. ambient, private vs. shared.

This hierarchical logic pervades musical production and media design alike. Podcasts are produced to simulate the feeling of one-on-one conversation, even when broadcast to thousands. Audiobooks, ASMR recordings, and singer-songwriter ballads all rely on the same technique: remove the space between source and listener, eliminate environmental noise, and create the illusion of proximity (Kane 2014, 25–42).[2] But this is not proximity in the political sense – it is managed affect, a simulation of relationship that bypasses the social. Such listening

6 Close-miking is a recording technique in which a microphone is placed very near to the sound source – often just a few centimeters away. This practice minimizes the capture of ambient sound and reverberation, resulting in a highly focused, detailed, and intimate audio signal. Originally developed in studio recording to isolate instruments or voices in multitrack setups, close-miking has become a dominant aesthetic in contemporary audio production, from music to podcasts to ASMR content.

may feel intimate, but it is structurally isolating. What is left out – room tone, distant voices, ambient activity – is what connects the listener to the world. By filtering it away, sonic insulation discourages engagement with collective auditory space. It reaffirms the logic of enclosure: you hear what you are meant to hear, and you hear it alone.

There is also a temporal aspect to this aesthetic. Insulated listening is often immediate and compressed, optimized for short attention spans and individual consumption (Cox 2009, 19–26). In contrast, listening that includes noise, space, and delay requires patience. It slows down perception and opens space for ambiguity. In that sense, it carries a different political potential: not to deliver content efficiently, but to disrupt habits of attention.

Sonic Ignorance and the Habit of Not Listening

Modern urban life trains us not only in what to hear, but also in what to *ignore*. This learned inattention is not a personal failure or sensory fatigue – it is part of the auditory discipline that structures contemporary subjectivity. To live in the city is to be immersed in sound and yet to move through it without listening. Sirens, traffic, background music, automated announcements – all these sounds form a continuous auditory backdrop that we are expected to register, but not engage. It is a trained habit, a socially constructed form of non-listening. As Barry Truax notes, the human auditory system is capable of focusing attention on particular sounds while relegating others to the background (Truax 2001, 18–24). But what is heard and what is ignored is not merely a matter of biology – it is mediated by culture, architecture, technology, and ideology. Urban design contributes to this pattern. Public address systems, security alarms, ambient music in commercial zones – all rely on predictable auditory codes (Voegelin 2010, 42–45). These sounds are intended to signal compliance, orientation, or consumption. They are not meant to be questioned. Over time, they recede into the category of the unremarkable. The more often we hear them, the more they disappear.

This is the rhythm of regulated inattention. It organizes our experience of space without requiring active thought. Peter Szendy (2008, 31–38) describes this condition as one in which we do not possess our hearing – we are possessed by it. We become conduits for auditory information that structures our behavior without ever becoming fully present in our consciousness.

Crucially, not all sounds are equally eligible for ignorance. Some are coded as ignorable, others as attention-worthy. Muzak in elevators can be tuned out. An unexpected cough in a concert hall cannot. This reveals that not-listening is itself a hierarchical process. What is allowed to disappear and what must be heard reflects deeper social and political arrangements. These arrangements also work through repetition. Lefebvre (2004, 15–21) emphasizes that rhythm always includes repetition with variation. Repeated auditory patterns become environments unto themselves. Over time, we no longer hear the announcement on the train or the beep of a scanner at the store. Their function is fulfilled not by being noticed, but by being *there*. Their power lies in their banality (ibid., 38–43).

Yet, the very banality of these sounds makes them effective tools of governance. They remind us, subtly and rhythmically, of where we are and how we should behave. In that sense, sonic ignorance is not passive – it is regulated. It is part of what Lefebvre calls *dressage*: the training of the body to move, feel, and respond in predictable ways (Lefebvre 2004, 38–43). Listening, in this regime, is not encouraged. What is encouraged is acoustic compliance.

Understanding these patterns of non-listening is essential. Before we can ask how to listen differently, we must first understand how we have been taught *not* to listen.

***Horror silentii*: Capitalism's Fear of Silence**

In the sonic regime of late capitalism, silence is not simply the absence of sound – it is a structural threat. Silence suspends the rhythm of productivity, interrupts the circulation of meaning, and creates an opening for unpredictability. In a system built on regulation, flow, and the monetization of attention, silence is a void that demands to be filled. Its persistence feels intolerable, even dangerous.

I name this condition *horror silentii* – the fear of silence. Not merely psychological discomfort, this fear is embedded in the organization of space, time, and consumption. The everyday is saturated with background music, automated announcements, and ambient sound precisely so that silence cannot emerge. These sonic layers create an auditory buffer zone against stillness, holding the listener within a regime of managed perception.

This logic aligns with what William Bogard (2000) has theorized as the operation of "smoothing machines" – systems designed not to prohibit or repress,

but to regulate perception and behavior by eliminating discontinuity, unpredictability, and interruption. In his account, contemporary governance functions increasingly through processes of anticipatory modulation: instead of responding to disruption, these systems preempt it by engineering environments that are smooth, rhythmic, and frictionless. Applied to auditory life, this means that sound is not only curated – it is calculated, smoothed, and continuously adjusted to maintain affective equilibrium.

This horror of silence is especially visible in *threshold spaces* – airports, malls, corridors, hotel lobbies – zones of transition where people are not expected to dwell, but to move, consume, or comply (cf. Augé, 1995, 34–37). These zones mediate between public and private, mobility and stasis, anonymity and identification. These are the spaces where silence might otherwise arise: moments between activities, between decisions, between identities. But capitalism fears the threshold, because it carries the risk of ambiguity. To neutralize that risk, it fills these spaces with *designed soundscapes* – curated playlists, instrumental loops, tonal branding.[7] Music here functions not as art, but as temporal infrastructure (cf. Sterne 1997). Like the rhythmic churning of factory machines in an earlier industrial era, background music gives pace and direction to circulation. It keeps the body moving, the mood stable, the purpose clear. As Theodor Adorno (2002) observed in his critique of Muzak, such sound is not meant to be listened to – it is meant to listen for us: to pre-empt restlessness, to substitute presence with function.

Importantly, the fear of silence is not just institutional – it is also internalized. Many people report unease when in a quiet room, on a silent street, or in a car without music. This unease is not innate; it is learned. It reflects an auditory dependency shaped by continuous exposure to structured sound. As Salomé Voegelin (2010, 14–18) writes, silence invites the listener to hear themselves – to confront their body, breath, and interiority – and this can be deeply destabilizing. The commodified listener is trained to avoid that confrontation.

7 Airports, for instance, exemplify this logic to an extreme. They are transitional spaces par excellence: sites of surveillance and circulation, commerce and displacement. Their architectural and auditory design is aimed at suppressing uncertainty and enforcing behavior through predictable sonic cues – boarding music, PA announcements, ambient loops, and branding sound logos. In my study of the Belgrade and Vienna airports, the recent renovations of these spaces included not only infrastructural overhauls but also the introduction of curated sonic environments that match the national branding strategies of their flagship airlines (Air Serbia and Austrian Airlines; Atanasovski 2016b).

One can illustrate the logic of *horror silentii* by analyzing the placement of speakers in contemporary built environments. Just like CCTV cameras, speakers are installed at thresholds, corners, ceilings, and transitional zones – spaces where flows of bodies converge or shift. Both devices occupy the same topography of control: elevated, peripheral, omnipresent. Cameras monitor behavior; speakers modulate it. One sees, the other speaks – but both function as infrastructural tools of behavioral management, becoming infrastructurally interchangeable. This convergence is not accidental: it reflects a deeper fusion of audio-visual governance in everyday space, where the line between watching and commanding, seeing and sounding, blurs. Both technologies are not merely about presence – they are about regulation through presence.

In cafés, bars, and shops, speakers are often placed not at the center of activity but at the thresholds: above doorways, near windows, or directed outward toward the street (see Figures 2 a–b). This edge-positioning extends the auditory perimeter of the locale, colonizing the liminal zone between public and private and effectively projecting a curated sonic identity beyond the walls. Similarly, in residential buildings or office complexes, background sound – often in the form of soft music or artificial ambiance – is introduced into hallways, stairwells, and other in-between zones. These are not places where people dwell, but where they pass through, wait, or transition. In such spaces, silence is treated as a threat – a potential site of discomfort, hesitation, or reflection (see Figure 3).

In this sense, *horror silentii* is not a fear of a lack of sound, but a lack of command. It is the moment when the discipline of attention fails, when rhythm becomes uncertain, when perception is no longer guided. In silence, listening becomes open-ended, and with it, thought becomes uncertain. The subject may begin to listen in a way that is no longer useful to the system. The *policescape*, in its sonic form, is built precisely to prevent this. It fills space in advance of need. It anticipates silence as a failure and compensates with repetition. The logic is preventative: if every space is already speaking, the subject will not begin to hear otherwise (cf. LaBelle 2010). Understanding *horror silentii* allows us to recognize not only the presence of sound, but its function: to foreclose silence as a space of interruption, and thereby to foreclose the possibility of an alternative temporality, one not ruled by productivity, efficiency, or consumption.

Figure 2 a–b. Central Belgrade, July 2025.

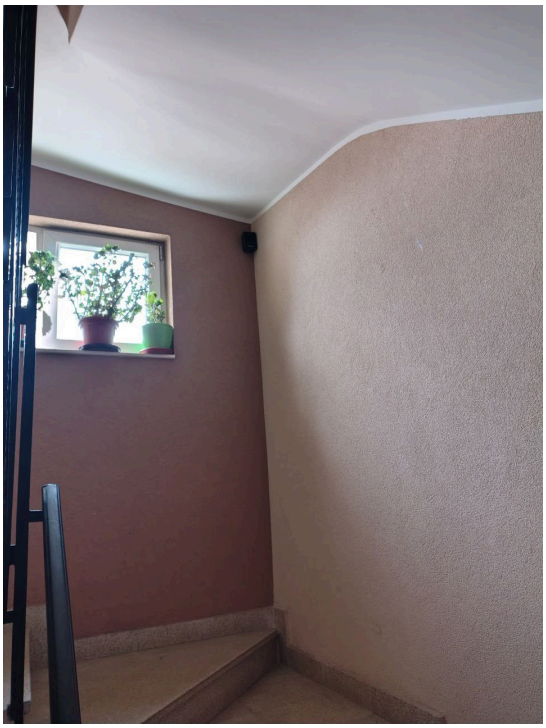

Figure 3. Residential building hallway in Belgrade, July 2025.

Conclusion: Listening, Discipline, and the Sonic Policescape

In this article I have argued that listening in late capitalist societies is not a neutral, individual act, but a deeply structured and socially disciplined practice. Through spatial segregation, technological mediation, affective habituation, and sonic saturation, auditory discipline functions as a subtle but pervasive form of governance. Listening becomes a regulated activity – split between public and private modes, enclosed by design, and shaped by cultural expectations of what should be heard and what must be ignored.

In particular, we have seen how the logic of the *gated community* extends into the auditory realm, producing a fantasy of self-containment and control over one's acoustic environment. This fantasy is sustained not only by architecture and technology, but by affective structures: annoyance at unwanted sound, comfort in familiar musical codes, and unease in the presence of silence. The individual subject is trained to seek acoustic sovereignty and to interpret any sonic intrusion as a failure of autonomy.

But as we have also seen, the policing of listening does not depend on loud prohibitions – it works through rhythm, repetition, and banality. From Muzak in liminal spaces to directional speakers in commercial thresholds, the sonic policescape anticipates silence as a threat and neutralizes it in advance. The subject is enveloped in sound, but alienated from listening. Hearing becomes passive, patterned, and depoliticized.

Yet precisely in the mapping of these mechanisms lies the potential for rethinking auditory life. To understand the disciplining of listening is to open space for its reactivation. If the ear has been trained to filter, ignore, and obey, it can also be retrained – to linger, to attend, to disobey. But that is the subject of another text.

In the second part of this project, titled "Listening Against: Sonic Commons and Radical Amateurism as Practices of Resistance," I will turn to the practices, gestures, and strategies through which listening can be reclaimed – not as a return to purity or authenticity, but as a collective, situated, and open-ended political practice. There, the focus will shift from critique to proposition, from analysis of discipline to exploration of possibility. For now, this text has traced the contours of the sonic policescape. It has shown that to listen today is to

inhabit a field of forces – not simply acoustic, but social, spatial, and affective. Recognizing that field is the first step in transforming it.

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SLUŠANJE POD NADZOROM: KAPITALIZAM, SENZORNO UPRAVLJANJE I AUDITIVNA DISCIPLINA

(rezime)

U ovom radu istražujem politike slušanja u uslovima poznog kapitalizma, sa fokusom na načine na koje se auditivna percepcija oblikuje, reguliše i disciplinuje kroz prostorne, tehnološke i afektivne režime. U središtu analize nalazi se koncept „zvučni pejzaž upravljanja" (*policescape*) – prostorno utemeljenog sistema zvučnog upravljanja koji kroz svakodnevne slušne prakse proizvodi subjekte podesne za reprodukciju kapitalističkog poretka. U metodološkom pogledu, rad razvija postmuzikološki pristup koji, umesto da se bavi muzičkim objektima u užem smislu, stavlja slušanje samo po sebi u središte analize. Ovaj pristup se zasniva na kasnoj misli Anrija Lefevra i njegovom konceptu analize ritma, koji omogućava razumevanje ritma kao materijalne i društvene sile koja povezuje telo, prostor i svakodnevni život. U tekstu se razmatraju dva ključna mehanizma auditivne discipline. Prvi je zvučna podela između javnog i privatnog, koja ne samo da strukturira prostorne odnose već i propisuje različite režime slušanja – ignorisanje u javnom prostoru, i potpuna kontrola u privatnom. Drugi je fenomen koji nazivam „horror silentii" – strah od tišine koji prožima savremene urbane prostore, naročito prelazne i potrošačke zone, i koji se rešava neprekidnim ozvučavanjem ambijenta kroz unapred programirane sadržaje. Središnji aspekt ove auditivne normalizacije je fantazija „zvučne ograđene zajednice" (auditory gated community) – neoliberalni ideal po kojem je subjekt uspešan onoliko koliko uspeva da uspostavi apsolutnu kontrolu nad sopstvenim zvučnim okruženjem. U tom okviru, svaki zvuk koji prodre u privatni prostor ne doživljava se samo kao smetnja, već kao znak neuspeha da se održi lična suverenost. Rad pokazuje da slušanje nije pasivna čulna aktivnost, već politički čin utemeljen u strukturama moći, ideologije i prostorne kontrole. Uspostavljanjem pojma zvučni pejzaž upravljanja i auditivne discipline, otvara se prostor za kritičko promišljanje svakodnevnih zvučnih režima i njihovog uticaja na subjektivitet, telo i društvenu imaginaciju.

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AI-SUPPORTED ANALYSIS OF FORMAL AND STYLISTIC TRANSFORMATIONS IN OTTOMAN-TURKISH MUSIC (16TH–19TH CENTURIES)

Abstract: This study investigates the formal and stylistic transformations in Ottoman-Turkish music between the 16th and 19th centuries through artificial intelligence (AI)-assisted methodologies. While traditional musicology has often approached Ottoman music through qualitative and performance-centered analyses, this research offers a data-driven and computationally grounded alternative that leverages machine learning and digital humanities techniques to trace musical evolution across centuries. The corpus consists of 45 digitized compositions, including *peşrevs* and *saz semais* by three canonical composers, Buhurizâde Mustafa Itrî, Hammamizade İsmail Dede Efendi, and Hacı Arif Bey, representing different stylistic periods. These works were digitized, encoded in MusicXML format, and analyzed using symbolic music processing tools and unsupervised learning algorithms such as k-means clustering and hierarchical agglomerative clustering. Dimensionality reduction techniques like PCA and t-SNE enabled the visualization of stylistic proximities and divergences across periods. The study also addresses the epistemological challenges of applying AI to a non-Western, orally transmitted musical tradition. This research ultimately offers an empirical framework for analyzing stylistic transformation in Ottoman-Turkish

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music and opens new methodological pathways for studying modal, improvisational, and orally grounded musical traditions.

Keywords: Ottoman-Turkish music, artificial Intelligence, form analysis, stylistic transformation, musicology, machine learning, clustering algorithms.

1. Introduction

The historiography of Ottoman-Turkish music, while rich in traditional narratives and performance-based interpretations, remains underexplored in terms of systematic, data-driven analysis. The formal and stylistic evolution of this musical tradition from the 16th to the 19th century, marked by shifts in compositional structure, modal preference, rhythmic articulation, and aesthetic sensibilities, presents a complex yet illuminating field for computational inquiry. Recent developments in artificial intelligence (AI), particularly in machine learning and computational musicology, offer unprecedented tools for decoding such intricate patterns embedded in historical musical corpora.

Ottoman-Turkish music is fundamentally shaped by orally transmitted conventions, modal systems (*makam*), cyclical rhythmic patterns (*usul*), and improvisational aesthetics (*taksim*), rendering its analytical study both challenging and intriguing. The lack of systematic notation and the fluid nature of performance practices have historically hindered comprehensive diachronic analyses. However, the digitization of historical notational sources combined with AI-assisted pattern recognition and clustering techniques now allows for an empirical investigation into the evolving formal logic and stylistic configurations of this tradition.

This study introduces an interdisciplinary methodology that integrates musicological expertise with AI-driven data analysis to explore the transformation of musical forms and stylistic idioms in Ottoman-Turkish compositions spanning four centuries. By applying unsupervised learning algorithms to encoded notational data, we aim to identify temporal clusters, recurrent structures, and composer-specific stylistic markers that may illuminate larger cultural, social, and epistemological shifts within the tradition.

In doing so, this research not only contributes to the field of historical musicology but also exemplifies the potential of artificial intelligence in enhancing our understanding of intangible cultural heritage. It challenges prevailing assumptions rooted in subjective interpretation by offering an objective, reproducible, and scalable framework for analyzing the musical past.

1.1 Epistemological Boundaries and Methodological Positioning

Applying artificial intelligence (AI) methods to non-Western, pre-modern, and predominantly oral musical traditions such as Ottoman-Turkish music necessarily entails epistemological limitations. Unlike the Western canon, where standardized notational systems and stylistic conventions are well-documented and relatively stable, the Ottoman musical tradition has long relied on oral transmission, context-specific performance, and non-standardized notation systems such as Hampartsum or ABCD transcription formats. As Feldman (1996) and Signell (1977) emphasize, any attempt to analytically formalize this tradition must account for its fundamentally oral and fluid nature.

Acknowledging this challenge, the present study does not claim to offer a definitive or exhaustive analytical framework. Rather, it proposes an exploratory model, a heuristic mapping of stylistic and formal transitions as partially reflected in written scores. These scores, while not fully representative of performative reality, are treated as symbolic approximations that can support pattern recognition through machine learning. In this way, the study embraces an epistemic humility, aiming to reveal tendencies and transitions rather than to prescribe definitive categorizations.

This positioning echoes recent scholarship advocating "computationally assisted interpretation" rather than "computational objectivity" in musicological analysis (Cook 2014; Burdick et al. 2012). It accepts that the knowledge generated is conditional, provisional, and mediated by both human curatorship and algorithmic parameters.

1.2 Positioning Within Computational Research on Ottoman-Turkish Music

In addressing the computational study of Ottoman-Turkish music, it is essential to acknowledge prior influential research that has explored symbolic and audio-based analysis of makam structures and stylistic elements. The studies by Barış Bozkurt (2012), Can Akkoc (2010), and Ozan Yarman et al. (2022) have laid the groundwork for algorithmic modeling of Turkish music, especially in the domain of individual makam characteristics, intonation systems, and seyir analysis.

Bozkurt's work focused on extracting features relevant to pitch and tonal organization using audio signal processing techniques. Akkoc (2010) explored scale variability and non-deterministic tuning in traditional Turkish music, providing insights into alternative modal representations. Yarman et al. (2022) conducted a detailed analysis of seyir patterns and diatonic tendencies within a specific makam family (*Hicaz*), employing both symbolic and signal-based data.

Unlike these studies, the present research does not aim to refine makam theory or tuning systems, but rather shifts the analytical lens to macro-formal and stylistic transitions across multiple centuries. It moves beyond isolated makam study by analyzing entire compositions and their structural signatures, allowing for a broader historical-musicological interpretation.

Thus, while this research builds on the technical and analytical rigor of prior studies, it contributes a novel perspective by focusing on style formation and periodization, opening new possibilities for historiographic understanding in Ottoman music studies.

2. Theoretical Framework

This study is situated at the intersection of musicology, artificial intelligence, and digital epistemology, necessitating a robust theoretical foundation that integrates historical music analysis with computational modeling. The fusion of these fields demands not only methodological adaptation but also a reconceptualization of how knowledge in the arts is generated, validated, and transmitted.

In traditional musicological discourse, style and form have been approached primarily through hermeneutic, historical, or structuralist lenses. However, such methods often rely on qualitative interpretations that are context-dependent and difficult to verify across large corpora. As Nicholas Cook (1998) has emphasized, the postmodern turn in musicology requires a departure from singular readings toward a "plurality of perspectives," where music is treated as a multi-layered phenomenon shaped by performance, text, context, and listener reception. Yet even this pluralism, Cook notes, struggles with empirical validation in the absence of scalable analytical tools.

Artificial intelligence, particularly machine learning, offers a new paradigm for addressing these limitations. David Cope (2005), in his seminal work on algorithmic composition, argued that music is fundamentally pattern-based and that computers can detect, emulate, and even generate stylistic idioms if trained on appropriate datasets. His theory of "experiential pattern recognition" suggests that style is not a fixed attribute but an emergent property that can be algorithmically learned, a notion that aligns well with Leonardo da Vinci's assertion that "art is the daughter of nature and imitation," reimagined through the lens of statistical modeling.

Moreover, style in music is increasingly viewed as a product of both intentional design and socio-cultural conditioning. Meyer (1989) asserts that musical style reflects a network of cognitive expectations and probabilistic regularities internalized by both composers and listeners. In the context of Ottoman-Turkish music, where oral transmission and improvisational variation dominate, these regularities are embedded but rarely made explicit. By digitizing historical notation and analyzing it with unsupervised learning algorithms, we uncover latent structures that reveal not only formal tendencies but also epistemic shifts in musical thinking.

The use of clustering, principal component analysis, and dimensionality reduction methods builds on the framework laid out by Sturm et al. (2014), who demonstrated that computational models can reliably differentiate between musical styles, even across culturally diverse datasets. Their work in Music Information Retrieval (MIR) shows that machine learning can serve not merely as a classification tool but as a lens for cultural and stylistic inquiry.

The theoretical underpinning of this study also draws from Benoît Godin's (2006) discourse on epistemic shifts in the history of ideas. Godin argues that

methodologies transform disciplines not just through new techniques but by reorienting the questions that scholars are able to ask. By applying AI to music history, we are not simply increasing the precision of existing methodologies, we are redefining the boundaries of inquiry itself. This aligns with the concept of "digital hermeneutics" advanced by Johanna Drucker (2013), where interpretation is augmented, rather than supplanted, by computational tools.

Furthermore, this research is informed by the epistemological implications of Kuhn's (1962) paradigm shifts, wherein periods of scientific crisis and innovation lead to the reconstitution of disciplinary norms. The application of artificial intelligence to the analysis of non-Western, pre-modern musical traditions, particularly one as orally grounded and non-notational as Ottoman-Turkish music, represents such a moment of epistemic rupture. We are not merely reinterpreting existing data but generating new forms of knowledge through technologies that are themselves culturally and ideologically situated.

In this light, the study stands as both a contribution to computational musicology and a methodological provocation. It calls for a reconceptualization of how we understand musical change not as a linear narrative of stylistic evolution but as a complex interplay of tradition, innovation, data, and interpretative frameworks.

3. Research Design

3.1 Research Problem

Despite the extensive corpus of Ottoman-Turkish musical compositions spanning several centuries, there exists no systematic, data-driven study that quantitatively traces the evolution of musical form and stylistic idioms across historical periods. Most existing scholarship relies on anecdotal interpretation, limited textual analyses, or biographical readings of composers, which do not scale to larger comparative datasets.

Moreover, the oral nature of transmission, combined with the improvisatory aesthetics of the tradition, renders formal boundaries fluid and often resistant to conventional analytical tools. The absence of standardized notation until the late 19th century further complicates efforts to categorize and compare musical structures in a reproducible manner.

This study addresses the gap by proposing an artificial intelligence-supported model capable of extracting latent patterns in form and style from digitized notational data. Through unsupervised learning techniques, the research seeks to answer the following central question:

How did the formal and stylistic structures of Ottoman-Turkish music evolve between the 16th and 19th centuries, and can these transformations be algorithmically identified and clustered using computational methods?

3.2 Methodological Design

To address this question, a corpus of digitized musical compositions dated from the 16th to the 19th centuries was assembled, normalized, and encoded into machine-readable formats (MusicXML and MIDI). The dataset includes instrumental pieces such as peşrevs and saz semais, selected for their relatively stable formal conventions and historical continuity.

The analytical process was conducted in three stages:

1. Feature Extraction: Melodic contours, rhythmic cycles (usul), phrase lengths, and modulation patterns were quantified using symbolic music processing libraries such as music21 and Humdrum. These features were selected based on their relevance to traditional Ottoman-Turkish compositional grammar.
2. Dimensionality Reduction & Clustering: Principal Component Analysis (PCA) and t-Distributed Stochastic Neighbor Embedding (t-SNE) were applied to reduce feature complexity. Unsupervised clustering algorithms, particularly k-means and hierarchical agglomerative clustering, were used to classify pieces into distinct stylistic periods.
3. Stylistic Mapping & Interpretation: Clusters were visualized to observe stylistic transitions over time. Additionally, stylometric comparison between prominent composers (e.g., Itri, Dede Efendi, Hacı Arif Bey) was conducted to identify signature patterns and individual contributions to broader stylistic evolution.

All code was implemented in Python using libraries such as scikit-learn, pandas, and matplotlib, ensuring replicability and scalability.

3.3 Score Selection Criteria and Source Description

The dataset employed in this study comprises a curated selection of 45 notated compositions spanning three centuries of Ottoman-Turkish classical music (17th–19th centuries). The selection was deliberately structured to include representative works from three prominent composers: Buhurizâde Mustafa Itrî (17th century), Hammamizade İsmail Dede Efendi (18th–19th centuries), and Hacı Arif Bey (19th century). This tripartite segmentation allows the study to observe stylistic tendencies and transitions across temporal axes.

The notated versions were sourced from archival and digitized score collections, including transcriptions in both Hampartsum and Western staff notation. Specific works were selected based on criteria such as modal diversity (*makam*), rhythmic variety (*usûl*), and availability of authentic manuscript or published versions. Each work was cross-verified with existing critical editions to ensure authenticity.

In total, 15 compositions were selected per composer, totaling 45 works. All scores were digitized and encoded into MusicXML format to facilitate symbolic computation. No pre-grouping was made based on composer or stylistic attributes; the unsupervised learning model was allowed to cluster the works based solely on extracted features. However, metadata such as composer name, period, and genre were retained for post-analysis interpretation.

The aim of this data strategy is not to claim statistical representativeness but to enable a manageable, meaningful sample for machine-assisted exploration of stylistic formations and formal continuities.

3.4 Computational Workflow and Feature Extraction

To analyze the stylistic and formal structures embedded in the selected scores, a multi-step computational workflow was implemented, combining symbolic encoding, feature extraction, and unsupervised machine learning. The process was carried out using the Python-based music21 and jSymbolic libraries, in addition to custom scripts for data normalization and vector assembly.

All scores were first encoded in MusicXML format and preprocessed to eliminate inconsistencies in notation. Following this, a symbolic feature extraction phase was conducted, focusing on structural dimensions such as

phrase length, intervallic motion, cadential patterns, rhythmic density, melodic contours, and makam transitions.

A total of 27 musical features were extracted and normalized to z-scores. These features were then fed into an unsupervised clustering algorithm specifically, k-means clustering and hierarchical agglomerative clustering were applied in parallel to evaluate the consistency of cluster formation.

The unsupervised approach was chosen to avoid confirmation bias and to allow the algorithm to independently identify stylistic groupings and transitional patterns across the dataset. Post-clustering analysis involved labeling clusters with contextual metadata (composer, century, mode), enabling historical interpretation of the emergent patterns.

Visualization tools such as PCA (Principal Component Analysis) and t-SNE were employed to map the stylistic proximities in two-dimensional space, revealing zones of stylistic convergence and divergence across composers and time periods.

4. Findings

The application of unsupervised machine learning techniques to the digitized corpus of Ottoman-Turkish compositions yielded distinct stylistic clusters corresponding to historical periods and compositional schools. As visualized in Figure 1, the PCA-reduced representation reveals four dominant clusters, each broadly associated with a specific century and stylistic orientation. Notably, the 16th-century pieces form a relatively compact cluster, suggesting formal conservatism, while 18th- and 19th-century clusters demonstrate greater internal dispersion, indicating increasing stylistic diversity.

This finding aligns with Trehub et al. (2015), who argued that stylistic complexity in oral musical traditions tends to increase with cultural contact and socio-political diversification. The broader stylistic distribution in the 19th century may reflect the Westernization trends and increased musical individualism during the late Ottoman period, as observed in the shift toward modulating structures and less rigid rhythmic cycles.

The stylometric comparison in the accompanying table further supports this evolution. Itri, representing the 17th century, shows longer phrase structures

and a relatively stable modulation pattern, consistent with a compositional philosophy rooted in liturgical balance and modal clarity. In contrast, Dede Efendi exhibits a higher modulation frequency and rhythmic complexity, aligning with the increased ornamentation and melodic fluidity that define late classical Ottoman music. Hacı Arif Bey, emblematic of the 19th century, displays the shortest phrase lengths and the simplest rhythmic structures – features that correspond with the rise of sentimentalism and lyricism in the Tanzimat-era urban music culture (cf. Nooshin 2003).

The clustering patterns and stylometric data jointly suggest a historical progression from structural regularity to expressive flexibility. This trajectory is consistent with Cross (2001), who observed that musical systems under reduced institutional constraints tend to evolve toward greater expressive autonomy.

Thus, the findings not only confirm stylistic transitions across centuries but also reflect deeper epistemological shifts in how music was conceived, composed, and experienced during the Ottoman period.

5. Discussion

The findings of this study articulate a compelling narrative of stylistic evolution in Ottoman-Turkish music, not merely as a historical phenomenon but as an epistemological transformation rooted in broader cultural and technological dynamics. At its core, this research challenges the long-standing notion that Ottoman music evolved in a primarily linear or teleological fashion. Instead, it suggests that stylistic change was non-linear, clustered, and shaped by interactions between formal constraints and expressive agency.

The emergence of stylistic clusters across centuries, as revealed through unsupervised learning algorithms, underscores a key insight: musical form and style are not static constructs but dynamic systems subject to internal reorganization and external influence. This resonates with Theodor Adorno's assertion that musical works are both aesthetic objects and socio-historical documents (Adorno 1976). In the Ottoman context, where notation lagged behind performance and oral tradition prevailed, these documents were previously inaccessible to formal analysis. AI-enabled modeling allows us, for the first time, to decode the latent structures embedded within the music itself.

Moreover, the stylistic fragmentation observed in the 19th century does not merely reflect compositional individualism; it also signifies the erosion of centralized musical authority and the emergence of urbanized, emotionally driven forms of expression. Simon Frith (1996) emphasizes that musical styles often shift when cultural hierarchies destabilize, precisely the condition of late Ottoman society under the pressures of Westernization, nationalism, and urban modernity.

This study also reconfigures the role of the composer within historical analysis. Traditional musicology often reifies the "great composer" model, emphasizing individual genius over systemic patterns. Here, we observe that while figures like Itri and Dede Efendi exerted stylistic gravity, they operated within larger systems of formal possibility. Their contributions were less about invention ex nihilo and more about navigating and subtly reshaping the musical grammar of their time.

From a methodological perspective, the success of clustering and stylometric modeling affirms Johanna Drucker's vision of "interpretative analytics," wherein computation does not replace humanistic reading but amplifies it. The visualizations and algorithms employed here do not dictate meaning; they reveal previously invisible patterns that invite interpretive reflection. This approach positions AI not as an oracle but as a partner in hermeneutics.

Ultimately, this study foregrounds a new paradigm for engaging with historical musical traditions, one that is empirical yet reflective, technological yet deeply humanistic. It suggests that the future of musicology may lie not in choosing between analysis and aesthetics, but in weaving them together through the computational imagination.

5.1 Comparative Insights and Scholarly Contribution

The present study offers a complementary perspective to existing research on Ottoman-Turkish music, particularly in relation to computational approaches to makam and stylistic evolution. While prior studies (e.g., Bozkurt 2012; Yarman et al. 2022) have focused primarily on the structural components of individual makams examining seyir patterns, tuning systems, or pitch-class distributions, this research shifts the focus to a macro-level formal and stylistic analysis across entire compositions and centuries.

Unlike makam-specific studies, which emphasize theoretical classification, the current approach seeks emergent patterns through unsupervised clustering, identifying stylistic proximities between composers, time periods, and compositional idioms. This enables a different kind of historical interpretation, one based not on pre-set analytical categories, but on algorithmically derived relationships among musical features.

Moreover, this study supports the notion that stylistic transitions in Ottoman-Turkish music were gradual and non-linear, often manifesting overlapping characteristics between so-called "periods." The observed cluster groupings challenge rigid historiographical classifications and invite a more dynamic understanding of musical continuity and change.

The study's contribution thus lies in bridging computational musicology and Ottoman musical historiography, offering a data-driven framework that complements ethnomusicological and archival approaches. It neither replaces traditional analysis nor denies the oral-based character of the repertoire, but rather proposes a third lens symbolic-computational inference for stylistic exploration.

5.2 Stylistic Change and Cultural Context

The stylistic transformations observed across the Ottoman-Turkish musical tradition cannot be fully understood without reference to the broader socio-cultural environment in which they unfolded. Music, as Raymond Williams (1977) famously argued, is not merely a reflection of culture but an active constituent of cultural formation. In this light, changes in musical form and style are both aesthetic developments and semiotic expressions of shifting values, institutions, and identities.

The increasing modulation frequency and phrase fragmentation seen in 19th-century compositions, for example, parallel the growing influence of Western musical models and the breakdown of traditional hierarchical aesthetics. The Tanzimat reforms (1839–1876) not only restructured legal and educational institutions but also redefined urban musical patronage. The rise of printing, music schools, and salon concerts signaled a transition from court-centered performance to a more public, bourgeois musical culture.

This stylistic decentralization echoes Habermas's (1989) notion of the "public sphere," wherein cultural production becomes a space for negotiation, dissent, and identity construction. Ottoman-Turkish music, particularly in its later periods, increasingly became a medium through which tensions between modernity and tradition, individuality and collectivity, were musically encoded.

Furthermore, the appearance of sentimental forms such as the *şarkı* and the shift toward shorter, more emotive phrases align with broader transformations in Ottoman literature and visual arts – fields similarly affected by European romanticism and Orientalist gaze. Thus, musical style functioned not only as an internal system but as a cultural signifier – a site where the empire's evolving self-understanding was audibly rendered.

6. Conclusion

This study demonstrates that artificial intelligence, when integrated thoughtfully into musicological inquiry, can unveil latent formal and stylistic architectures in historical traditions that have long resisted systematic analysis. Through the algorithmic modeling of Ottoman-Turkish compositions, we have revealed structural patterns, diachronic stylistic trajectories, and composer-specific idioms that challenge prevailing assumptions about the linearity and homogeneity of musical evolution in the pre-modern Islamic world.

Importantly, the findings show that the stylistic shifts in Ottoman music between the 16th and 19th centuries were not merely reflections of aesthetic trends, but were deeply entangled with broader sociopolitical currents, technological limitations, and epistemic frameworks. The dissolution of centralized court patronage, the emergence of urban musical publics, and the gradual codification of notation all contributed to the increasingly individualized and expressive musical forms of the 19th century.

The methodological framework employed – combining symbolic music processing with unsupervised learning – opens new avenues for computational musicology, particularly in non-Western and orally transmitted traditions where formal music theory often lacks codification. This model is scalable and adaptable to other repertoires, from Persian dastgah to Arabic maqam and Indian raga systems, provided that symbolic encoding is possible.

Recommendations for Future Research

1. Expansion of the Corpus: Future studies should expand the dataset to include vocal genres (e.g., *şarkı*, *gazel*), and explore gendered, regional, or religious sub-styles within Ottoman-Turkish music.
2. Integration with Audio Signal Processing: Symbolic data should be supplemented with audio-based machine learning to analyze timbral, expressive, and microtonal features not captured in notation.
3. Development of AI Tools Specific to Modal Traditions: The field would benefit from AI models trained specifically on modal music systems, incorporating non-Western intonation, pitch hierarchies, and rhythmic asymmetry.
4. Cross-cultural Comparative Studies: Comparative computational analysis between Ottoman, Persian, and Byzantine repertoires could reveal shared structural logics or divergent stylistic pathways across civilizations.

In closing, this research not only redefines the analytical possibilities for Ottoman-Turkish music, but also calls for a broader reevaluation of how we engage with musical heritage in the age of algorithmic interpretation. The future of musicology may well depend on such interdisciplinary dialogues between history and computation, culture and code.

More broadly, this study contributes to the ongoing redefinition of music theory in the age of computational intelligence. It moves beyond prescriptive theoretical models rooted in Western tonal traditions and proposes a new analytical grammar that is data-driven, cross-cultural, and empirically testable. For scholars of modal systems, the methodology offers a replicable framework for mapping non-linear, improvisation-rich traditions such as makam, raga, or maqam traditions often marginalized in canonical theory.

In the realm of artificial intelligence, this research pushes the boundaries of what music-related AI can achieve. Rather than focusing solely on generation or classification tasks, it embraces interpretation, stylistic mapping, and historical inference as valid domains for machine learning. This expansion not only humanizes AI applications but also repositions them as tools for critical cultural inquiry.

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AI-SUPPORTED ANALYSIS OF FORMAL AND STYLISTIC TRANSFORMATIONS IN OTTOMAN-TURKISH MUSIC (16TH–19TH CENTURIES) (summary)

This study investigates the formal and stylistic transformations in Ottoman-Turkish music between the 16th and 19th centuries through artificial intelligence (AI)-assisted methodologies. While traditional musicology has often approached Ottoman music through qualitative and performance-centered analyses, this research offers a data-driven and computationally grounded alternative that leverages machine learning and digital humanities techniques to trace musical evolution across centuries

The corpus consists of 45 digitized compositions, including peşrevs and saz semais by three canonical composers Buhurizâde Mustafa Itrî, Hammamizade İsmail Dede Efendi, and Hacı Arif Bey representing different stylistic periods. These works were digitized, encoded in MusicXML format, and analyzed using symbolic music processing tools and unsupervised learning algorithms such as k-means clustering and hierarchical agglomerative clustering.

Dimensionality reduction techniques like PCA and t-SNE enabled the visualization of stylistic proximities and divergences across periods. The resulting clusters revealed clear patterns of stylistic evolution aligned with broader socio-cultural transitions during the Ottoman Empire.

In addition to identifying stylistic clusters, the study conducted stylometric comparisons among the three composers. These comparisons support the hypothesis that stylistic change in Ottoman music was not linear, but rather shaped by a dynamic interplay of tradition, innovation, and cultural context.

The study also addresses the epistemological challenges of applying AI to a non-Western, orally transmitted musical tradition. The research acknowledges these limitations and treats notated sources as symbolic approximations, using them to model broader stylistic tendencies rather than definitive truths.

This research ultimately offers an empirical framework for analyzing stylistic transformation in Ottoman-Turkish music and opens new methodological pathways for studying modal, improvisational, and orally grounded musical traditions.

Appendix: Supplementary Figures

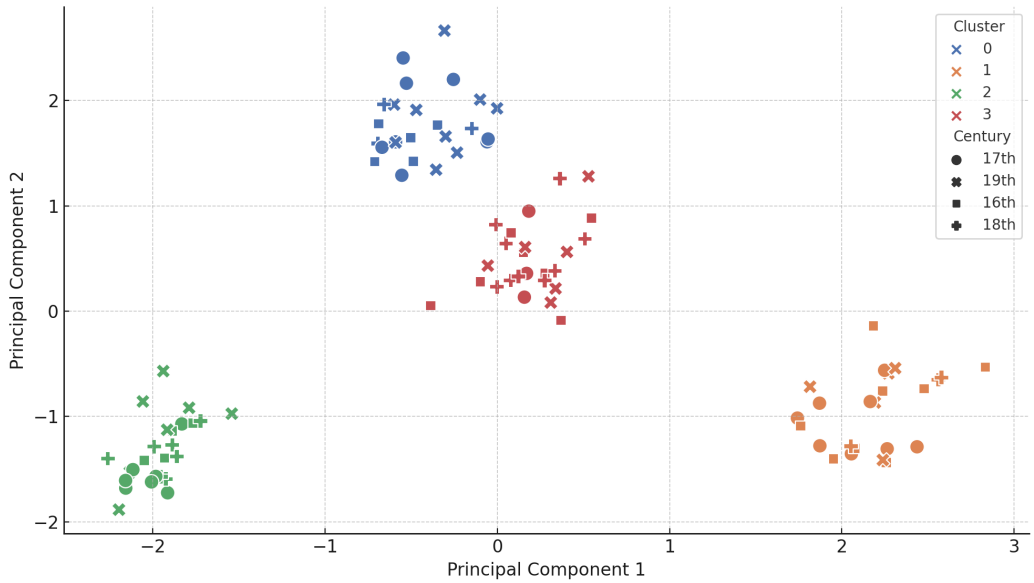

Figure 1. Stylistic Clusters of Ottoman-Turkish Music (16th–19th Centuries).

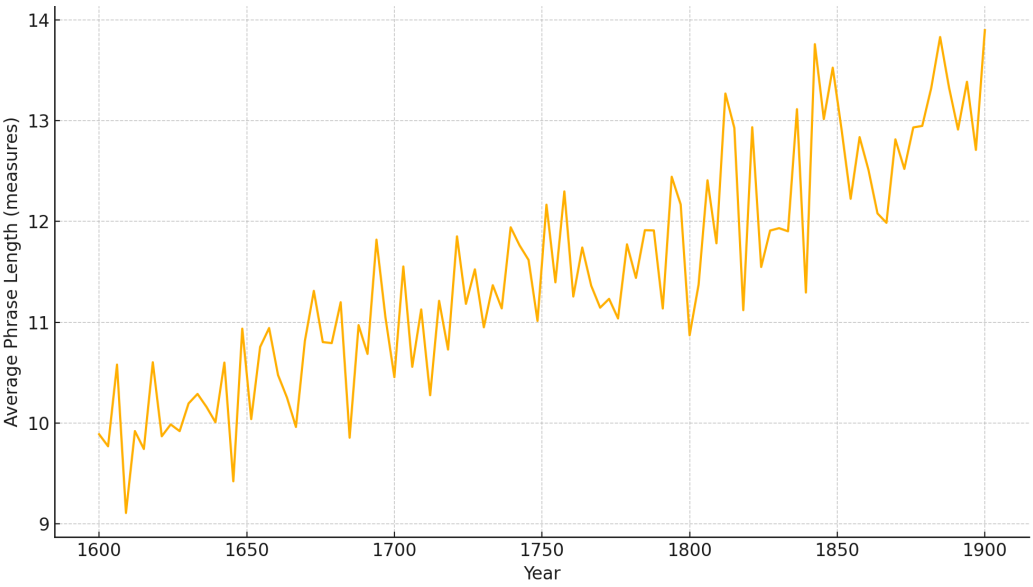

Figure 2. Evolution of Average Phrase Length in Ottoman-Turkish Music (1600–1900).

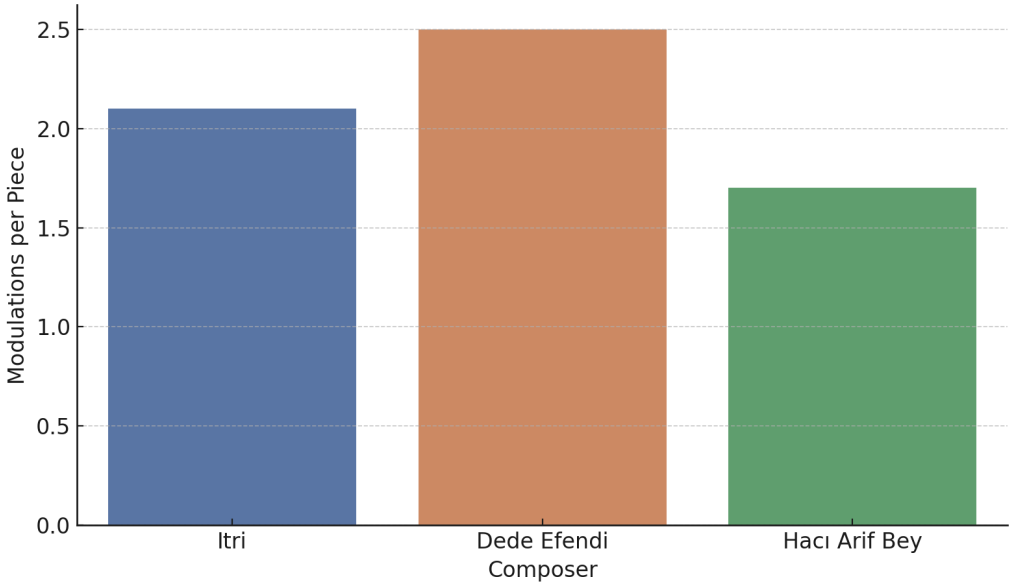

Figure 3. Modulation Frequency by Composer.

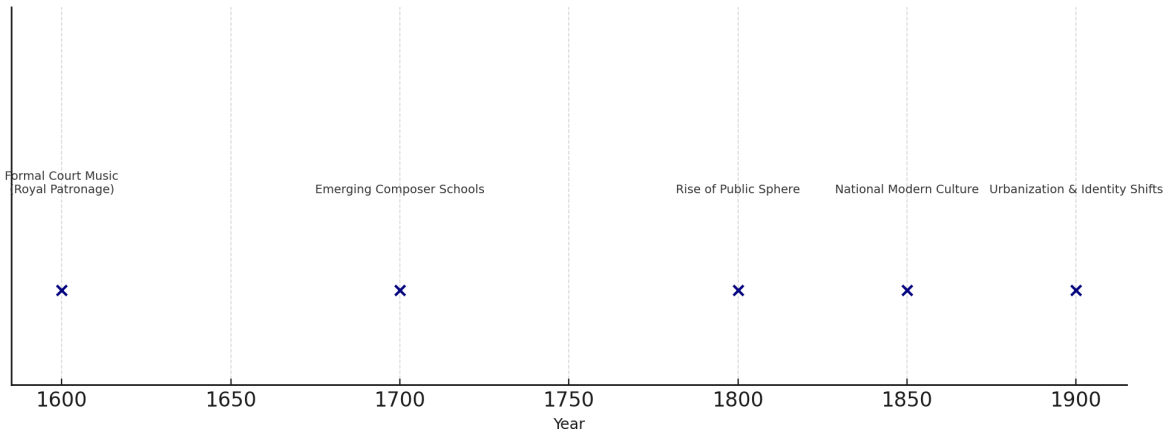

Figure 4. Cultural-Music Stylistic Convergences in the Ottoman Empire (1600–1900).

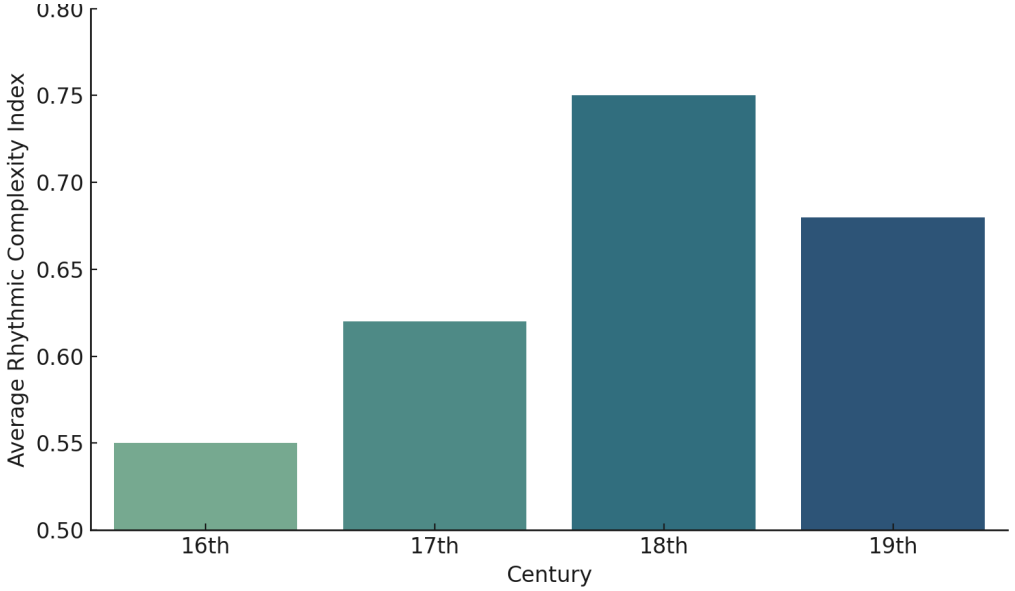

Figure 5. Rhythmic Complexity in Ottoman-Turkish Music by Century.

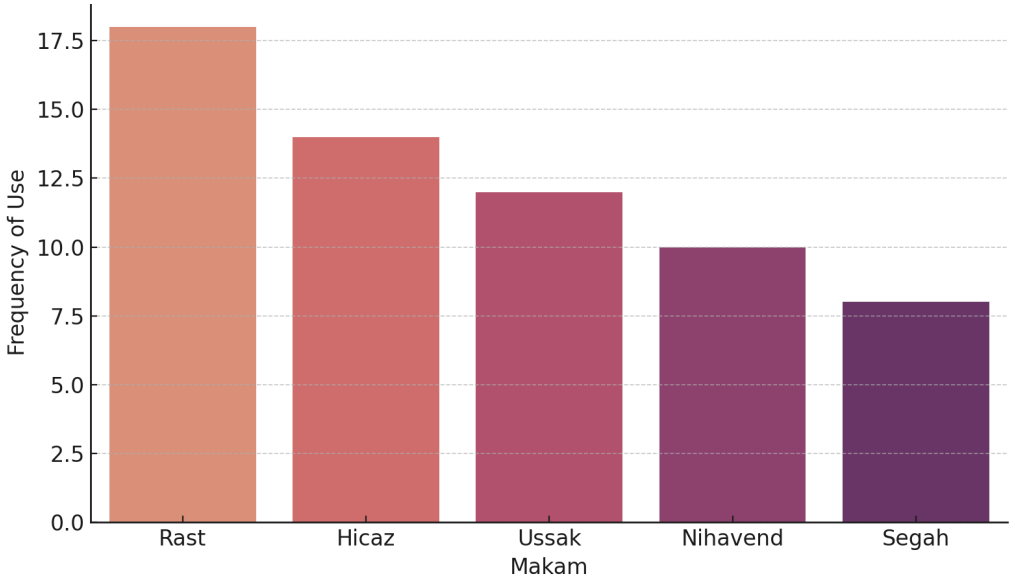

Figure 6. Most Frequently Used Makams (16th–19th Centuries).

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THE DEVELOPMENT OF ZHENG IN THE DIGITAL AGE: AN INTERPLAY OF TRADITION AND MODERNITY

Abstract: The Zheng, a traditional Chinese musical instrument with a history spanning over 2,500 years, has gained widespread popularity and recognition in contemporary China. Its most celebrated pieces are not only familiar to the public but have also contributed to the Zheng's elevated status within the official cultural system, making it an important symbol of Chinese cultural identity in both name and reality. This prominence has naturally drawn the attention of musicologists and educators, who frequently highlight the Zheng's enduring vitality and cultural significance.

Despite its long history as a musical instrument, the Zheng has only recently been recognised as "traditional" by musicologists. Nor should it be overlooked that the emergence of this "tradition" as a concept is inextricably linked to the development of modern audiovisual, communicative and interactive technologies – using the full potential of digital capacities. It joins a series of "traditions" – I will consider modern inventions, whose emergence and development depend on modern technological conditions. At the same time, the "tradition" of Chinese music, to which the Zheng belongs, is not static: as socio-economic and technological conditions change, so do the forms of expression and social functions of the Zheng, becoming a "living tradition" with a rich meaning.

Keywords: Zheng, living tradition, cultural vitality, technological influence, digital age.

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Introduction

The Zheng (箏) is a prominent instrument within the realm of Chinese instrumental music, holding deep cultural significance and representing a rich treasure of musical heritage in China. Historical evidence suggests that the Zheng has been present in the area of modern China since antiquity, particularly during the *Chunqiu* (春秋, Spring and Autumn) and *Zhanguo* (战国, Warring States) periods. Its long lineage has established the Zheng as a pivotal ancestor to various Asian zither instruments, including the Mongolian *Yatga*, the Japanese *Koto*, the Vietnamese *Đàn tranh*, and the Korean *Gayageum* (Cao 1981).

As early as 1951, the sinologist R. H. Van Gulik highlighted the significance of the Zheng in his article, noting its dual purpose in the realm of music. He stated that the Zheng may serve a double purpose. Firstly, it plays a crucial role in both preserving and popularising ancient Chinese music, particularly those lighter genres that are often more accessible to general audiences. This function is vital for maintaining cultural heritage and ensuring that these musical traditions continue to resonate with contemporary listeners. Secondly, Van Gulik pointed out that the Zheng can be utilised to develop a modern, distinctly Chinese music that is approachable for broader circles (Van Gulik 1951, 25). This aspect emphasises the Zheng's potential to innovate and adapt within the context of national life, making it an indispensable factor in the cultural landscape of China.

Traditionally, Zheng music was disseminated through oral tradition, reflecting the instrument's roots in a predominantly agrarian society characterised by relative geographical seclusion and specific socio-cultural atmospheres. This environment fostered a unique musical language that developed in intimate connection with the daily lives and narratives of local communities. The Zheng has been intricately linked to regional life, particularly through its association with ensemble traditions, where it often serves as an accompaniment to local narrative singing. Through this role, the Zheng makes it an integral part of the social and artistic fabric of local life (Ye 2025).

Recognised for its extensive history, which spans more than 2500 years, the Zheng profoundly symbolises Chinese culture (Cao and Knobloch 1985). Its

evolution mirrors the various philosophical, artistic, and social currents. Recent musicological studies and educational textbooks have placed significant emphasis on the vitality of the Zheng, attributing its enduring popularity to its storied past and adaptability. The Zheng's repertoire reflects a rich tapestry of historical contexts, from Confucian ideals in ancient court music to its integration into modern contexts, including collaborations across genres and media. These recent developments demonstrate the instrument's continuing relevance and resonance in contemporary society, making it a subject of ongoing scholarly interest and a focal point for cultural revitalisation initiatives.

It is important to note that the classification of the Zheng as a "traditional" instrument is a relatively recent phenomenon in musicology. Although the Zheng has a long historical lineage, its designation as a "traditional" instrument is largely a product of twentieth-century cultural and academic developments. This status emerged alongside nation-building efforts, the institutionalisation of music education, and the construction of a modern Chinese cultural identity. Thus, the Zheng's "traditional" identity reflects not only recent digital transformations, but also earlier processes of cultural selection, standardisation, and scholarly discourse (Ye 2025). In recent decades, advancements in modern audiovisual, communicative, and interactive technologies have further accelerated and made visible these processes. Such developments align the Zheng with a series of modern traditions, whose emergence hinges on contemporary technological conditions. Importantly, the tradition of Chinese music, to which the Zheng belongs, is not a static entity; as socio-economic and technological contexts evolve, so too do the expressive forms and social functions associated with the Zheng, thereby establishing it as a "living tradition" rich in meaning.

Tradition and identity

Tradition and identity is one of the central themes in the study of culture (Honko 1995). Tradition not only affects individual identity, but also plays a key role in the broader social and cultural context. Tradition plays a vital role in constructing ethnic identity. Anderson posits in his book *Imagined Communities* that ethnic identity is an "imagined community," where traditional culture and customs form the basis for its construction and sustainability. Through fes-

tivals, rituals, and languages, individuals create a sense of belonging and identify themselves in relation to their group (Anderson 1983). Understanding tradition in this way reframes it as a manifestation of cultural identity, one that is intrinsically linked to the social context in which it exists.

In the Chinese language, the term *chuan tong* (传统) encompasses a broad spectrum of concepts, including ideas, cultural practices, moral values, fashions, arts, systems, and behaviours that have been transmitted across generations (Cihai-Redaktionsausschuss 2009, 321). Instead of perceiving tradition as a static entity defined by absolute "authenticity" and an unbroken continuity of musical culture, it is more productive to approach it as a dynamic, socio-cultural construct (Koch 2020, 14). Tradition is continually shaped and reshaped by the conscious and collective actions of individuals and communities. As such, tradition is not merely a relic of the past but a living entity that engages with contemporary issues and perspectives.

A critical examination of the term "tradition" reveals important nuances that are essential for understanding the cultural trajectory of specific art forms, such as the Zheng, a traditional Chinese instrument. Historian Eric Hobsbawm offers a valuable framework for this analysis by distinguishing between "tradition" and "custom" (Hobsbawm 1983, 1–14). Hobsbawm contends that while customs evolve organically through everyday practices and social interactions, traditions often embody constructed, ritualistic meanings that emphasise continuity with the past. This construction of tradition serves to reinforce specific historical narratives and collective identities, thereby solidifying the role of tradition within a cultural context. Applying Hobsbawm's conceptual framework to the study of the Zheng reveals how its fluctuating status over time has been influenced by socio-political changes, artistic innovations, and cultural exchanges. As the Zheng has undergone transformations in its musical style, performance contexts, and societal relevance, it has simultaneously maintained certain traditional elements that connect it to its historical roots. This duality of change and continuity highlights the Zheng's role not only as a musical instrument but also as a cultural symbol. In conclusion, tradition should be viewed as a complex interplay of continuity and change, constructed through collective action and social negotiation. This understanding is vital for appreciating the cultural significance of the Zheng and similar art forms, allowing for a deeper engagement with the ways in which traditions inform and shape cultural identities in the modern world.

Discovering the tradition of Zheng music: Sociocultural dimensions

In the context of research within China, traditional Chinese music refers to music created before the Qing Dynasty (1644 to 1911). There are four main categories of traditional Chinese music in Chinese research discourse: *minjian yinyue* (folk music), *wenren yinyue* (literary music), *gongting yinyue* (court music) and *zongjiao yinyue* (religious music). Folk music is the largest and most popular branch of traditional Chinese music. It can be further divided into five categories: *minjian gequ* (folk songs), *gewu yinyue* (song and dance music), *shuochang yinyue* (narrative song), *xiqu yinyue* (opera) and minzu qiyue (instrumental music) (Yang 2008). The Zheng is fundamentally a folk instrument. Up until the 20th century, its music was primarily transmitted orally rather than through written scores. Its notational forms, such as *gongche* and *ersi*, primarily record basic pitch and rhythm, granting significant improvisational latitude (Ye 2025). In essence, as a traditional instrument, the Zheng embodies both fluidity and instability.

The wars and turmoil of the late Qing dynasty led to a decline in the Zheng music of previous generations. The Zheng is lucky to be utilised in regional traditions, serving as an ensemble instrument or as accompaniment for narrative singing. This ensured that its transmission was not entirely interrupted (Wang 2007). In 1911, the last emperor was forced to abdicate, resulting in significant political and social upheaval that profoundly impacted Chinese musical life (Zeng 2003, 330). Following the establishment of the Republic of China in 1912, intellectuals united in their efforts to forge a "national tradition," which included the preservation and promotion of traditional music (Feng 2005). With the rise of modern national consciousness in China, the Zheng began to receive renewed attention as a symbol of Chinese culture. The traditional Zheng solo pieces known today are largely newly composed, emerging from the research, refinement, and adaptation of regional folk music throughout the 20th century, and gradually evolving into the Zheng solo repertoire we recognise today.

Transformation under digital media

The impact of digitisation in the cultural sphere has increased in recent years. Research emphasises that the internet serves as a vital platform for both accessing digitised music from traditional albums and for engaging with music produced exclusively in digital formats (see Shen 2019; Shirk 2011). This duality signifies a transformative shift, where Zheng music becomes not only more accessible but also flexible in terms of storage and dissemination. Notably, the highly differentiated performance of various Zheng schools and performers has moved towards a highly aesthetic and individual style that is extremely popular compared to other instruments. Zheng music is generally program music that serves to tell a story. Sometimes this is with a philosophical background, or to express an emotional state: for example, the piece *High Mountains Flowing Waters* tells of friendship and the difficulty of finding a soul mate. The notation used, which is not very detailed, gives a great deal of freedom here and allows extremely individual and thus different interpretations. To illustrate, on YouTube three distinct versions of *Lotus Rising from the Water* are played for different lengths of time, namely between almost four to just under eight minutes (Luo 2013; Xiang 2022; Rao 2012). Without modern technologies to archive these performances, they would remain untransmittable temporal fragments. By facilitating the mass production and dissemination of these audiovisual materials, digital technologies have not only reinforced but also broadened the influence and accessibility of national music narratives.

With the burgeoning popular interest in traditional music in contemporary China, the traditional Zheng has found itself at the crossroads of cultural preservation and commercial viability. Two primary modes of capital involvement with national music have emerged, each playing a vital role in the evolution of traditional musical genres within the digital landscape.

The first mode directly drives transformation by reimagining traditional forms to appeal to contemporary audiences. This has given rise to the concept of "New Folk Music" (*xin minyue*), a commercial initiative aimed at revitalising traditional music through modern sensibilities. This approach focuses on aesthetic appeal and marketability, encouraging artists to introduce contemporary compositional techniques and diverse musical styles. The fusion of traditional

elements with modern elements, including dance and multimedia visuals, has resulted in a pop-oriented musical genre that, while distinctly modern, maintains a connection to its cultural roots. However, the journey of reinvention has not been without challenges. Early attempts, such as those made by the "The Twelve Girls Band" (Yang and Michael 2010), faced significant hurdles primarily due to their reliance on traditional media platforms for dissemination. Although their efforts showcased the potential for blending traditional and modern musical expressions, the limitations of traditional media in reaching wider audiences hampered their impact.

The second mode of capital engagement in the transformation of traditional music is emblematic of the characteristics of the digital age, particularly through the phenomenon of platform-generated music. In the Web-2.0-era, digital platforms transcend mere showcases of content; they foster interaction and communication, aligning seamlessly with the participatory and communal essence of music. The strategic utilisation of these network platforms has significantly enhanced the efficiency of communication between music providers and listeners, thus reshaping the landscape of traditional music dissemination.

Case study 1: Mo Yun in BiliBili

A pertinent example of this is BiliBili, a Chinese video-sharing platform comparable to YouTube, which boasts over 170 million monthly active users, with a remarkable 78% of its audience aged between 18 and 35. This demographic trend highlights the platform's pivotal role in connecting traditional music with younger audiences. Zheng bloggers use this online platform – as well as others – to adapt very well-known pieces of music from animation, film and television, as well as popular music. The two most popular Zheng videos on BiliBili – measured by the number of hits with almost 100 million – are both from the same blogger: Mo Yun, an amateur Zheng player.

As Figure 1 shows, Mo Yun uploads self-performed Zheng music to the platform. By April 2025, Mo Yun achieved first place among all Zheng videos with a Zheng cover of the track "Qian Ben Ying" (2014) by virtual singer Hatsune Miku, with more than 63 million views (Moyun 2014).

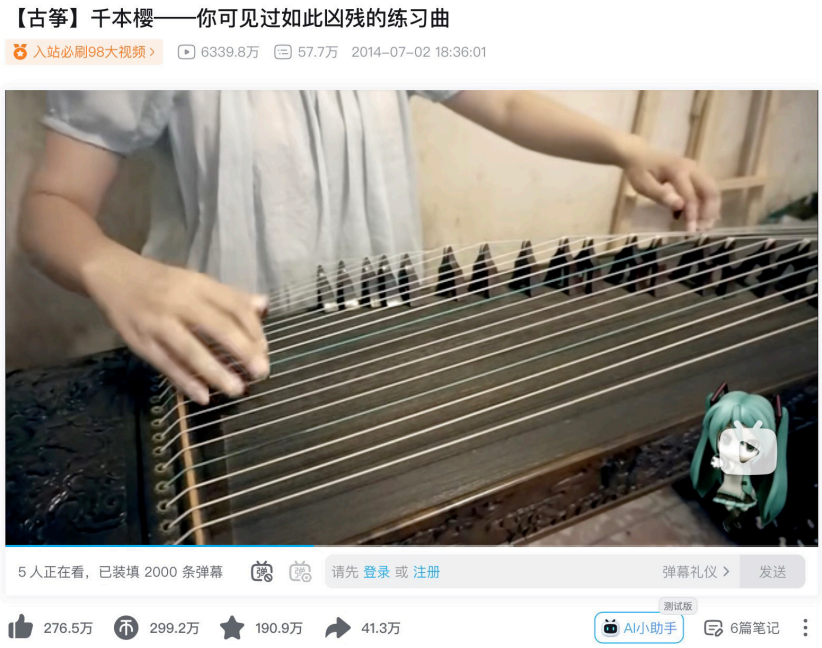

Figure 1. Mo Yun performing Qian Ben Ying on the Zheng. Screenshot from a video uploaded by Mo Yun on BiliBili

The song "Yu Quan Tian Xia" is an original song sung by the virtual singer Luo Tianyi. Mo Yun used it as an adaptation prototype and released a cover version on Zheng in 2015. However, the most-viewed video on BiliBili is not the original, but the cover version by Mo Yun (Zheng accompanied by a drum), which has been viewed almost 1.6 million times (Moyun 2015). In addition to these videos, Mo Yun has also covered other works on Zheng and captured a broad spectrum of young fans with her adaptations.

A key feature of Mo Yun's videos, which may explain their increasing popularity among young BiliBili users compared to similar content, is that most of the songs performed align with the popular ACG (animation, comics, and games) music on BiliBili, closely matching the interests and structure of its user base.

On the other hand, the creativity of the music is also subject to the conditions of digitalisation: in addition to solo playing, there are also opportunities to perform alone as an ensemble – namely, using technical means. In this respect, everyone is able to produce themselves and upload their own videos. This increases the chance of discovering talent and being discovered.

The enthusiasm for animé-music played on the Zheng leads to a multi-layered situation: the Zheng as a traditional musical instrument attracts the attention and love of the younger generation, the performers become idols and benefit from the development of a new area of music and the website gains enormous commercial value. For example, Mo Yun received more than two million coins on BiliBili for the video titled "Qian Ben Ying." Ten percent of the amount viewers invest in the video is paid out to the blogger. The licensing and operation of online music platforms can therefore generate considerable income (see Yu and Schroeder 2018).

Case study 2: 碰碰彭碰彭Jingxuan in YouTube

These performances not only capture significant attention in China but have also garnered a global audience, demonstrating the universal appeal of the Zheng when fused with contemporary cultural references. An excellent example of this is that of blogger 碰碰彭碰彭Jingxuan, a Chinese student in France, who makes uploads not only to BiliBili but also to YouTube. Due to the cross-platform nature of digital platforms, 碰碰彭碰彭Jingxuan also has a video account on YouTube with around 1.03 million subscribers. The forms of communication in these spaces are visually dominated, allowing media users to see much more of past and present music life around the globe than would be possible without this level. Based on the ranking of the number of views as of April 2025 (Jingxuan 2025), it is evident that the five most popular Zheng music videos are adaptations of globally recognised pop songs (see Table 1).

Popular videos	**Number of views (04. 2025)**	**Publication date**
See You Again	15 million	12.11.2021
Mei Li De Shen Hua	13 million	13.11.2020
Smooth Criminal	12 million	03.06.2022
Yi Jian Mei	8 million	11.07.2020
Hua Xin	6 million	07.02.2020

Table 1. Statistics of views of the most popular Zheng music videos on YouTube.

Musically, 碰碰彭碰彭Jingxuan plays the Zheng in the style of popular music, including pieces such as *Qinghuaci* (Celadon)[2] and *See You Again*. Playing popular music seems to be the best way to fit into this online environment. The combination of Zheng and pop music is undoubtedly an important factor in the popularity of Zheng, and there is no traditional Zheng piece in this ranking. Zheng players perform the music that matches the popular aesthetics on social media. The most popular video is the one for *See You Again*, a pop song originally recorded by American rapper Wiz Kalifa and featuring a guest appearance by Charlie Puth. The song was a worldwide commercial success and has become the most successful single to date. On July 10, 2017, the video for the song became the most viewed YouTube video with around 2.8 billion views (see Figure 2). The popularity of the video itself has led to the creation of cover versions using various instruments. Different interpretations of the same piece of music also reflect the diversity of cultures around the world (France 2017). The Zheng cover version, as one of the components, has also attracted a relatively large amount of attention.

In a global village made up of networks, in an environment of cultural diversity, the audience no longer sees the videos as mere objects, but as symbols with symbolic meaning. Zheng is attributed national qualities on a global level. The exchange between different cultures provides access to an audience that might previously have approached the instrument and its music with a slight distance, thus promoting the spread of Zheng and opening up a wide space for developments in Zheng music.

Maria Neri West wrote in a comment on Jingxuan's video on YouTube (Jingxuan 2022):

> This is how it tells you that music is a universal language we share with no boundaries. A Chinese music instrument, a song from a modern era American singer and a French city. The beauty of humanity all in one.

2 Among them, the video with the most likes – over 1.5 million – is the adaptation of the Chinese pop song Qinghuaci, a 2007 creation by pop star Jay Chou. Jay Chou's songs are the ones that the post-1990s generation grew up with. Qinghuaci is one of Jay Chou's hits, which uses pentatonic tone material to paint a smoky, rainy ink painting of Jiangnan (a concept for a geographical area in China) and also describes the elegance of Celadon. The combination of Zheng and pop culture corresponds to the musical aesthetics of the general public and appeals to a broader audience for Zheng.

Figure 2. "See You Again" performed by 碰碰彭碰彭 Jingxuan.

There is a clear trend in today's digital media. Commenting on videos builds bridges and facilitates the exchange of information, the expression of feelings and the coordination of actions. Building a bridge between people through globally received pop music, feeling each other's emotions, no matter how different ethnic, linguistic or cultural backgrounds they may be: everyone shares the same human emotions and is able to communicate through music.

On the international platform YouTube, the players perform pop music in order to communicate with the pop-cultural environment, while the instruments themselves and the costumes of the players become their cultural identity. Individuals imagine "the global" (Mukuma 2010). and at the same time negotiate their "locality" (Darling-Wolf 2014). The individual's interaction with music may be seen as entertainment at the level of the individual, but more as a symbol at the level of the nation and a group affiliation, and more metaphorically as a social act in different regions of the world. The player plays the Zheng as a cultural symbol to demonstrate her own identification with the nation and her understanding of the national culture. In doing so, she expresses her identity and identifies with what she sees as China. In this context, the Zheng not only plays

a role in ensuring the continuity of tradition, but also in defining Chinese nationality, partly shaping the identity of traditional Chinese culture. At the same time, the use of these same elements in terms of commercial profit-making must be taken into account.

This trend fosters a mutually beneficial scenario for all stakeholders involved in the musical ecosystem. For the Zheng as a traditional Chinese instrument, the exposure through popular content serves to heighten its visibility among youth, nurturing a new generation of listeners and potential musicians. For performers, this intersection with popular culture allows them to expand their repertoire into accessible Zheng music, while achieving personal and professional success. Meanwhile, platforms like BiliBili unlock substantial commercial value by drawing in diverse audiences, amplifying user engagement, and enhancing advertising revenue through increased viewership. In essence, the rise of platform-generated music within the digital landscape exemplifies how traditional instruments like the Zheng can find new life and relevance in an increasingly interconnected world. By leveraging the interactive capabilities of these modern platforms, traditional music not only endures but also flourishes, fostering a rich dialogue between the past and the present.

As a result of these two modes – direct transformation and platform-driven communal innovation – traditional Zheng music is experiencing a renaissance in the digital age. The accessibility of digital tools and platforms means that musicians can experiment, collaborate, and share their interpretations with an audience that transcends geographical boundaries. This vibrant exchange not only enriches the musical landscape but also ensures that the Zheng, along with other traditional forms, remains relevant and resonates with new generations.

Discussion and conclusion: Living Tradition in the Digital Age

In the thought-provoking framework of historian Eric Hobsbawm, the term "tradition" is particularly nuanced. He posits that traditions are not fixed or spontaneously emerging but are instead "invented" and subject to continuous change. This perspective suggests that traditions may be shaped by the elite or can represent a process of reinterpretation and rediscovery aimed at fostering community unity. The Zheng, a traditional Chinese musical instrument, exemplifies such a "living tradition." It has been redefined in modern China, celebrat-

ed as "Chinese cultural heritage," and further developed through new media while simultaneously serving as an identity-forming tradition that offers cultural cohesiveness.

Firstly, to briefly discuss what it means that Chinese musical instruments, such as the Zheng, represent a "living tradition" in the digital age. The term "living" means first of all that it is contemporary, meaning the tradition is alive in the present and in constant development. For modern people, digital technology has made all kinds of music easily accessible. This means that music of any kind can be part of the modern spirit. Zheng music is also a living part of the spiritual life of today's Chinese, even with classic pieces like *Water Flowing Over High Mountains* or *Evening Song in a Fishing Boat*. But "living" also means *change*. The emergence of popular Zheng music is a typical example of a dynamic cultural phenomenon in which traditional instruments and ancient musical forms are adapted to the needs of the zeitgeist.

Secondly, "tradition" also implies *identity.* A Chinese musical instrument such as the Zheng plays a central and reinforcing role under digital conditions.[3] Music as a means of expressing identity articulates not only a person's self-image, but also their social affiliation. What music these people listen to and play can therefore be seen as an expression of what kind of person they want to be. Frith argues: "music taste, in short, is now intimately tied into personal identity" (Frith 1996, 236). One of the phenomena observed in China in recent years is that China's economic and social development, the rise of national self-confidence, the popularity of Chinese music, and the development of internet technology and new media have occurred almost simultaneously. Digitalisation has fuelled the so-called *national music fever*, and this has led to a strengthening of national identity and an increase in national pride. More importantly, this national pride no longer concentrates only on the material and economic spheres, as in previous decades, but is moving towards a higher level of aesthetic and spiritual aspiration.

3 Digital media are effectively transforming intangible cultural heritage from niche chamber music pieces into pop songs with broad appeal, posing questions about authenticity and cultural ownership. This phenomenon ties into a pressing research inquiry regarding the cultural significance of intangible heritage across the globe. In the context of globalisation, which has frequently resulted in considerable cultural homogenisation, a counter-movement is emerging in many regions that seeks to rediscover and define regional identities. For more on the relationship between the local and the global, see Baumann (2000).

Thirdly, digitisation has effectively dismantled cultural boundaries, placing a nation's traditions within broader contexts that promote cross-cultural exchange and dialogue. This transformation challenges conventional notions of cultural essentialism and fosters a more interconnected understanding of cultural practices. Allen Ewe's comment on this phenomenon can be considered quite representative of the views from different cultural circles: "*This combination of western music with Chinese traditional music instruments is amazing!*" (Allen Ewe, comment on Jingxuan 2022).

The scene in which an *American* melody is played on a *Chinese* instrument in *Chinese costume,* on a street in France, in front of a *French* audience, and uploaded to an *international* online platform to be sampled by listeners from all over the world, is in itself a microcosm of the cultural landscape of our digital age. It is precisely in this constant interaction between ethnicity and nationality, nationality and internationality, that living traditions are constantly reborn and reinterpreted.

In conclusion, the digital transformation of the Zheng exemplifies the evolving relationship between tradition and modernity, demonstrating how cultural practices are continually redefined through new technological and social contexts. This process can also be understood within the broader framework of *World Music*, which, as Connell and Gibson (2004) and Aubert (2007) argue, is less a fixed genre than a cultural phenomenon characterised by the deterritorialisation and recontextualisation of local traditions in global settings. The Zheng's visibility on platforms such as BiliBili and YouTube illustrates how traditional music can transcend national boundaries, fostering new forms of cultural identity and transcultural exchange. Thus, the Zheng serves not only as a symbol of Chinese culture, but also as an active agent in the global circulation and reinterpretation of musical traditions. While this paper has focused on the Zheng's digital transformation, its broader implications for World Music merit further investigation in future research.

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THE DEVELOPMENT OF ZHENG IN THE DIGITAL AGE: AN INTERPLAY OF TRADITION AND MODERNITY (summary)

This article critically examines the transformation of the Zheng in the digital age, positioning it as a paradigmatic example of the dynamic interplay between cultural preservation and innovation. As a living tradition, the Zheng illustrates how local identity is continually negotiated within the broader currents of global cultural exchange. Digital technologies have not only preserved the Zheng as a symbol of cultural heritage but have also enabled its ongoing reinterpretation, adaptation, and creative renewal. The instrument's evolution from an emblem of elite cultural capital to a widely accessible and participatory art form underscores the resilience and adaptability of tradition amid modernity and globalization.

Through this case study, the article addresses key theoretical questions about the nature of tradition in the digital era. It demonstrates that traditional arts are not static relics but active sites of cultural negotiation, memory, and innovation. The Zheng's contemporary development reveals how digital media democratise cultural production, foster new forms of collective identity, and facilitate transnational dialogue. Ultimately, the Zheng's sustained vitality exemplifies the capacity of living traditions to bridge past and present, local specificity and global connectivity, thus contributing to the ongoing reconfiguration of cultural landscapes in the twenty-first century.

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ARSENIJE JOVANOVIĆ: PORTRAIT OF A RADIO ARTIST[1]

Abstract: Arsenije Jovanović (1932–2025) was one of the pioneers of Serbian and Yugoslav modern, experimental radiophony, as well as one of its the most prolific and most awarded practitioners. Yet, the writings on his radiophonic works are scarce. There is no overview of his radiophonic output, as there is no thoughtful insight into his overall poetics. This paper is thus conceived with the idea of offering such insight into radiophonic worlds of Jovanović. This seems appropriate in the context of the 40th anniversary of *Radionica zvuka* (*Sound Workshop*), established in 1985. Jovanović influenced the conception of this serial and was its frequent collaborator, although his career spread internationally. In this paper, Jovanović's short biography will be presented, with more context about his work in radio. Then, Jovanović's poetic and autopoetic statements will be discussed, with short comment on his reception. The final part of the paper is dedicated to the mapping of Jovanović's radiophonic opus.

Keywords: Arsenije Arsa Jovanović, radio art, acoustic art, sound art, Radio Belgrade.

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LIFE AND CAREER PATH

Arsenije Arsa Jovanović was born in Belgrade in 1932. By his primary vocation he was a theatre director, having finished Theatre Academy (today Faculty of Dramatic Arts, University of Arts) in Belgrade in 1956. In the following year he studied history of arts and literature at the University of Zadar (Croatia), and in 1964 he finished a television production course in London (UK) (Enciklopedija Srpskog narodnog pozorišta, n.d.). Jovanović's career as theatre director encompassed full-time engagements at the National Theatre, with guest-directions in other theatres across the former Yugoslavia, Bulgaria, USA and UK. Although he started in theater, Jovanović was a multimedia artist, extensively creating as a radio, television and film director, a writer and adaptor of plays for theatre, radio and television, photographer and visual artist, poet, travel essayist and journalist, and author of four books (Jovanović 2025, 493–503). In the last decades of his career, he turned more and more to radio art, which was eventually his main creative outlet. At the same time, it is perhaps the field of work he is mostly known for, and which will be in the focus in this paper.

Since 1958, Jovanović worked as an assistant, and then (since 1962) as a lecturer at the Faculty of Dramatic Arts in Belgrade (Enciklopedija Srpskog narodnog pozorišta, n.d.), at the Department for Acting. Jovanović was an inspiring and somewhat unconventional drama teacher, according to his student Anastasija-Vesna Ilić (née Lončarević). She remembers that Jovanović paid particular attention to studies of Serbian ethnographers, such as Sima Trojanović and Tihomir Đorđević, with a focus on psycho-physical expressions without words, which she found incredibly important. Students also worked closely with their colleagues from the Academy of Music, in the class of ethnomusicologist Dragoslav Dević. Thus, the focus was on folk literature and songs, the works of Petar Petrović Njegoš, the hagiographies of Serbian saints, and field trips to Serbian monasteries. Students were part of Jovanović's projects, as Ilić recounts many visits to Radio Television Belgrade's studio in Košutnjak and Studio 10 in Makedonska Street (Anastasija-Vesna Ilić, pers. comm. March 28, 2025). Ilić was the main vocalist in his radio art work *Ostrvo umirućih magaraca* (*Island of the Dying Donkeys*, 1988), and part of the group for ethnological-musicological and

ethnotheatrological research,[2] that participated in *Vila zida grad* (*Fairy Builds the City*, 1986), dedicated to the celebration of two centuries since the birth of Vuk Stefanović Karadžić.

Jovanović's pedagogical career ended in 1992/3, when he was fired because of his anti-war and anti-nationalistic political views and statements during the break-up of the Socialist Federative Republic of Yugoslavia. On one hand, his interest in the religious and spiritual traditions of the Serbian church, as evident in the example of his work with students, was in collision with the official socialist politics of the former Yugoslavia. Although he worked consistently in significant state institutions such as the National Theatre, the University of Arts and Radio Television Belgrade, since the 1960s, Jovanović considered himself removed from socialist ideology, and even as a "dissident" and "anti-communist" (Jovanović 2019, unpublished interview).[3] During the 1980s, the burgeoning nationalistic sentiment, among other complex social and political changes, made religious topics more welcomed, as they were not so strictly looked upon as in previous decades. Jovanović supported the church policies of the time, for example by participating in the series of events in Canada in celebration of Saint Sava and promotion of Memorial Temple project (Vesić and Peno 2020, 269). On the other hand, Jovanović expressed his distance from the Serbian Orthodox church, stating that he lost respect for it because "when the clash with communism started, even the church lost its dignity" (Ćuruvija 1992). Being strongly opposed to the war and nationalism and dedicated to maintaining both his Belgrade and Rovinj (Croatia) addresses, Jovanović did not easily find his place in the growingly divided, and eventually war-torn, society.

Jovanović's contemporary work was mostly done in his own production studio, the Adriatic Sea Factory, based in Rovinj. The address in Rovinj had strong significance for Jovanović because of his unbreakable relation to the sea. The

2 Grupa za etnološko-muzikološka i etnoteatrološka istraživanja. As listed on the cover of the tape stored in Radio Belgrade's Phonoarhive (RZ 32). In 1985, Jovanović mentions forming "Ethnotheater" in cooperation with Ethnographic museum in Belgrade, and in the same text (following his notes on the work he was directing at the time) Dragoslav Dević as counselor for the ethnomusicological questions (Jovanović 1985, 63, 66).

3 This was stated in the context of his work in Television Belgrade. Jovanović explained that the editor and his superior was Zora Korać, wife of the socialist functionary and hero of the World War 2 partisan movement Dušan Korać. Still, Jovanović recalls Zora Korać being open to work with young people, directors such as Goran Paskaljević, Lordan Zafranović and himself, who he considered opposed to the regime (Jovanović 2019, unpublished interview).

house in Rovinj – the topic of *Ma maison* (Radio France, 1993) – is one of the core points in Jovanović's spiritual topography. The other could be Resava Cave in Central Serbia. An accomplished sailor, he traveled through the Adriatic, the Mediterranean, the Black Sea, and spent significant time on the water and aboard boats. His connection to the natural world, to animals but especially to the open sea, seems to be the core of Jovanović's worldview, oriented towards freedom of movement, expression and being. Symbolically, his first radio art composition – *Igra za jednu Galiolu* (*Prayer for one Galiola*)[4] – created in 1967 as a Radio Belgrade production, is dedicated to both eponymous islands and the ship, christened with the same name by Jovanović. In further decades, Galiola became a recurring topic of his radio work. Other recurring themes include traveling, either by sea or land, encounters with animals, the acoustics of different spaces and places, war topics, and folk and religious themes. His radiophonic output is not bounded to these topic groups only, but those strike us as dominant.

RADIO WORK

Jovanović directed plays for various Radio Belgrade series since 1961.[5] Outside of the regular production, research in sound was conducted (although not on a regular basis) on the platform known inside Radio Belgrade as the Drama workshop, recognized and named as such by Neda Depolo, Radio Belgrade's dramaturgist and editor. As the *spiritus movens* of Radio Belgrade's drama and experimental radio production, she considered Jovanović a "progenitor of sonic searches and compositions in our country", with "the line of distinguished works, awarded at international festivals and, also important, presented at international symposia, where new possibilities of radio art were demonstrated" (Depolo 1999, 135). She also valued him as an intuitive author who was "open-

4 While the Serbian title is *igra* (in translation: *play*, or *dance*) (RZ 45), the English translation is *molitva* (*prayer*). The German version also refers to *igra* (*dance*): *Tanz für ein Galiola* (Kunstradio 1988).

5 These are the series *Drama*, *Drama 3*, *Dramski program za decu* (*Drama program for children*), *Mala scena – Komedija* (*Small scene – Comedy*), *Radionica zvuka* (*Sound Workshop*), *Radioteka – Sa pozorišne scene* (*Radiotheque – From a Theatre Stage*), *Eksperimenti* (*Experiments*), *Radioteka – Dramska klasika* (*Radiotheque – Drama Classics*), *Zvezdani časovi* (*Star hours*), *Dokumentarna – Svedočanstva* (*Documentary – Testimonies*), *Pozorišta Srbije* (*Theaters of Serbia*), *Radio igra* (*Radio Play*) (cf. Donić and Rajić 2004, 98–102).

ing the spaces of irrational" (ibid., 64). As an editor, she was listed on numerous Jovanović works.[6] Among the creators she worked with, he was the one she had most intense collaboration with (Malavrazić 1999, 26). Since Jovanović was an outside collaborator (and not regularly employed with Radio Belgrade), Depolo's influence within the institution was crucial in commissioning or accepting Jovanović's work. Jovanović himself considered his collaboration with Neda Depolo to be a rare and happy occasion, given her devotion to art.[7] Together, they realized the work *Duž duge, duge ulice* (*Along the long, long street*) in 1979, awarded with Premio Ondas.

The first major recognition for Jovanović was Prix Italia for *Krajputaši* (*Tombstones along the road/Roadside Tombstones*) in 1971. Jovanović did the piece with sound designer Marjan Radojčić. It was awarded in the category of stereophonic work, the last piece to do so before the category was abolished when stereophony became standard (Antonucci 1998, 95). Jovanović received the RAI Prize at Prix Italia again in 1977, with *Resavska pećina* (*Resava cave*) (ibid., 111). In the following years, Jovanović received many other recognitions for his works.[8]

The creation of *Resava Cave* was the first instance of experimental radiophonic[9] collaboration between Jovanović and Zoran Jerković. Jerković went on to become one of the most sought-after sound designers and one of the initiators and first two lecturers (with Rihard Merc) of the Department for Sound Design at the Faculty of Dramatic Arts in Belgrade. Jerković was certainly Jovanović's favorite collaborator, as he explains: "As far as sound designers go, I have only one: it is Zoran Jerković. The others used to vex me a bit, they were very stiff" while Jerković had "the absolute understanding" (Jovanović 2019, unpublished interview). This collaboration spanned years and only decreased when Jovano-

6 Those are *Krajputaši, Resavska pećina, Najezde, I optekoše me vode do duše, Vila zida grad, Razumevanje zvuka, Kremansko proročanstvo, Uspenje, Ostrvo umirućih magaraca, Zaboravljeni anđeo iz Matere* (Malavrazić 1999, 26).

7 He illustrates this by recounting that she was in the habit of leaving written comments and thoughts on the works she heard earlier in the day in the postbox at the author's home address, so the author could read them in the morning (Jovanović 2019, unpublished interview).

8 Among those are Premio Ondas for *Resava Cave*, Grand Prix Radio France International for *La parata* (with Ilinka Čolić Jovanović), Prix Acustica International for *Faunophonia Balcanica* and others (Jovanović 2025, 503–504).

9 Their overall first collaboration was for a classical radio play and happened in 1974. Incidentally, this was Jerković's first sole credit as a sound engineer (not as an assistant to Marjan Radojčić, which he was still formally at the time).

vić started working digitally in the 1990s.[10] Jovanović valued Jerković's contribution as highly as that of Neda Depolo. When working abroad, Jovanović found that he missed his frequent partners. In addition, he appreciated the more generous approach in the studio time slots allotted to authors in Radio Belgrade,[11] as opposed to various studios abroad where time slots were limited to only few hours a day and a few days in total. This meant that he had to prepare the work a few months in advance to finish it in the studio (Jovanović 2019, unpublished interview). Since the 1980s, Jovanović regularly collaborated with radio art programs of many radio stations across the world. Among those are WDR, ORF, Radio France, YLEIS, ABC, IRNA etc.

Since 1985, Jovanović's works for Radio Belgrade were primarily produced for *Radionica zvuka* (*Sound Workshop*). The initiation of the serial by Đorđe Malavrazić (then the chief editor of Radio Belgrade Drama program) was strongly influenced by Jovanović and other pioneers of research radio art in Radio Belgrade in previous decades, as well as their international successes. Ivana Stefanović, composer, one of those pioneers of Radio Belgrade's experimental radio art herself and the first editor of *Radionica zvuka*, stated that the series was "consequence of something that was well under way at Drama program and at Radio Belgrade in general. The authors were dedicated to sonic explorations" (Stefanović 2019, unpublished interview). Stefanović underlines the international successes of Jovanović, along those of innovative directors such as Darko Tatić, Boda Marković, composer Vladan Radovanović and others, "were valid arguments for the establishment of *Radionica zvuka.* It gave us the sense of self-confidence. We believed that we are valuable in the field of radio creation and that we already have our own place" (ibid.).[12]

However, not all those authors had the same ideas on sound experimentation, especially if the result was an "abstract" form of radio art, in the liminal

10 Jovanović remembers being gifted computer with ProTools program (the program he continued to use later) from Robert Adrian, who was, along with Heidi Grundmann, Jovanović's close friend (Jovanović 2025, 409–410).

11 As Đorđe Malavrazić explained, time slots were "material value" that Radio Belgrade could afford to offer to its authors and to invest in. Experimental radio production did not require budget for writers and actors and thus was overall financially more achievable (Malavrazić 2019, unpublished interview; cf. Maglov 2022, 270–272).

12 For the full list of winners up to 2005 see Ćirić 2005. In 2017, Ivana Stefanović was awarded *Prix Italia* for *Veliki kamen*.

space with electronic and concrete music.[13] For example, esteemed radio director and professor of Faculty of Dramatic Arts, Darko Tatić, was himself prone to the experimental form but "strived to art in which semantic dimension was more developed" (Malavrazić 2019, unpublished interview). Tatić referred to the art that *Radionica zvuka* set to institutionally nurture as "jovanićevština" – art in the line of Arsenije Jovanović's style (ibid.).[14]

POETICS OF ARSENIJE JOVANOVIĆ

Jovanović's art corresponded to what Klaus Schöning defined as acoustic art or Ars Acustica:

> a new and important art form, which often branches out within and without the medium of radio, roaming among the other arts in search of its own identity play fully trying out combinations with nontextual language, nonverbal articulations, quotation, original sound, environmental noises, acoustic objects trouvé, musical tones, electronic technology, and with the art of montage and collage right up to the structuring of multiple-day acoustic events known as "composing the radio" – as well as with the conversion of radio so to speak in to an intercontinental AudioSpace Lab, ArsAcustica International (Schöning 1991, 312).

The experiment practiced by Tatić, for example, started from the "traditional", semantically oriented radio drama, while Jovanović's work was conceptually and aesthetically coming from the sphere closer to Schöning's ideas – those focused on the acoustic art.[15] In this sense, the reference to "experiments"[16] in the context of the productions that are closer to acoustic art is, in Schöning's mind, wrong,

13 In Radio Belgrade, radio works were generally divided into (traditional) radio drama, documentary drama and "abstract" radio art.

14 More on of *Radionica zvuka* in Maglov 2022, 265–271.

15 Schöning used the term Ars Acustica rather than radio art. As shown in the quotation above, he insisted that what started as acoustic art within the bounds of radio did not necessarily stay in those bounds, and had the history that was not always limited to research in radio sound. I am still using the term "radio art" as I see it as more broadly oriented (i.e. not limited to Schöning's conceptualization) to different concepts of art in radio, such as that of Heidi Grundman (*Kunstradio-Radiokunst*) with whom Jovanović often collaborated. More on the differences between those concepts in Rataj 2010.

16 As for Jovanović's attitude towards experimenting, he states confusion at something being called the experiment, since he considered as such every encounter with a creative problem (Lazić 2008, 73).

as it indicates it as the experimenting "on the periphery of radio drama proper" instead as art with its own, separate history (1991, 308).[17]

Jovanović's artistic statement clearly puts sonic qualities in equal line with semantic ones:

> I argue for the music, art of sonic shaping as a medial discipline, the sound whose origin would be in the medium itself, joined together with the agency of words in creation of mental images as equal, and not accompanying actor, no matter whether it represents or not the value separated from artistic whole (Jovanović 1985, 63).[18]

This equal role of word and sound comes as a belief that radio should not be and is not "service" to literary and music works (cf. ibid., 71), but an independent medium in which the author thinks through music and sound – i.e. through acoustic qualities of the medium – rather than through words (cf. ibid., 61). Thinking and expression in acoustic means have priority for the artist and are expressed when he is asked to explain his works. The mere idea of communicating through words, when the composition exists in another medium and already communicates, is puzzling for Jovanović, as he asks: "Why I must use the words reinterpreting something what is supposed to be interpreted and explained by itself in principle, where from the words deliberately were banned? Can't I communicate with my audience merely through the language of sound?" (Kunstradio 2007). A similar sentiment is brought forward in notes on *Les Vents de Camargue*, imagined as a part of acoustic impressions of a traveler to Provence. Jovanović explains: "I prefer writing with sounds instead of words, in acoustic territories the imagination has more space, it is easier for me to get rid of those realistic details every passenger inevitably keeps with him as worthless cargo. An acoustic road sign is an open invitation for more free roaming […] I was thinking: would it be possible – instead of writing a script, a verbal diary – to write by sound?" (Kunstradio 2000).

In his recounting of the influences on the formation of acoustic art, Schöning mentions "extraordinary roles" played by Pierre Schaeffer[19] and Pierre Henry, as

17 For the genealogy of acoustic art in Schöning's sense, see Schöning 1991.

18 This attitude makes Jovanović the kind of author that Schöning had in mind when writing about those writers-composers-directors who "expanded the inventory of artistic tools available and put them to new tests" (1991, 321).

19 Gerald Fiebig notices that roots of Schaeffer's exploration of sound served as an impetus in the recontextualization of Hörspiel during the 1960s and 1970s (2015, 204).

well as John Cage (1991, 318). Jovanović does not recognize the direct influence of John Cage on his poetics. He explains this with the example from his practice: when he knocks on different objects, or makes sound in other ways using everyday objects, trees, walls, rocks etc., he doesn't consider this to be the music (cf. Maglov 2022, 257). This process for him means gathering of the material "in order to make music of the concrete elements from the living ambient" (ibid.; Jovanović 2019, unpublished interview).[20]

Jovanović was closer to the poetics of Pierre Shaeffer. He recalls being gifted Schaeffer's record, and credits it as changing the way he thought about music and sound (ibid.).[21] For example, Schaeffer's ideas on "pure listening" and decontextualization of sounds (Schaeffer 2017, 64–69) were close to Jovanović, and his preference to hide the sources of sound are sometimes explicitly stated.

For Schaeffer, the production of the sound is not separated from its reception (cf. 2017, 14, 16, 69). In line with this, Schöning's idea of the listener is that of the co-author, co-player, correspondent (cf. 1969, 7). For Jovanović, the music – or any sonic art for that matter – is "created as much by the one who listens, as much as the one who composes" (Jovanović 2019, unpublished interview). Similarly, the story is created "only insofar as the listener's own experiences and associations are triggered" (Schöning 1991, 322). Jovanović calls this process a creation of "mental images" in the mind of the listener.

20 Jovanović met Cage during the latter's visit to Belgrade and appearance at the BITEF festival. Jovanović recorded Cage playing with museum objects at the Museum of Contemporary Arts. The several-hour footage was edited to the TV report and broadcast that evening, while the next morning the tapes were used for another recording, according to established practice (Jovanović 2019, unpublished interview).

21 Jovanović's work was also perceived in line of musique concrète. For example, upon seeing his TV movie *Vrtovi predgrađa* (*Gardens of suburbs*), music writer Pavle Stefanović noticed that "the whole sonic repository in it was actually from the domain of *concrete music* [italic P.S.]" ([1980]1982, 306). See the movie sample at Kunstradio 2013. Another example is Jovanović's inclusion at the festival Music in Serbia, whose edition in 1991 was dedicated to electroacoustic music. Jovanović presented *Island of the Dying Donkeys*, which selector Vladan Radovanović counted among the compositions "close to concrete music, with prominent programmatic intentions" (as noted in the program booklet). Jovanović was not a formally trained composer, which was evident in the situation when, for example, composer Enriko Josif was called upon to write down the score for *Krajputaši*. In this context, Jovanović's identification as a composer could be questioned. However, his inclusion by the contemporaries (such as Radovanović) and later authors (see Medić 2020, 248–249) among composers clearly show that the musical education and avoidance of more traditional compositional techniques was not considered an impediment.

Starting from the custom to name the recipients in theatre and in front of television sets – viewers, and those beside radio receivers – listeners, Jovanović states that they are all actually "viewers-listeners" (1985, 62). As he further explains, the moment radio enjoyers receive sonic information, they become "viewers", as their imagination creates mental images, blurring the lines between sound and image (ibid.). "The art of radio is all in those mental images", and the uniqueness of the medium is "building those images with words, music, sound and totality of sonic language" (ibid.). Even the smallest sound effects, when not just delivering information, "can play the significant role of poetic reagent in creating mental images" (ibid., 68). Jovanović compares the radio directing with the communication with a blind person, where everything is sound, but everything points to the image that should "resurrect" in the mind of a listener (Lazić 2008, 73).

The possibility of radio makes it, in Jovanović's opinion, the "most poetic or most deep medium. The image is the closure of a process, surface of things. […] Things begin much earlier, much deeper, in some far, maybe only slightly indicated springs governed by sound. The life could be represented through breath, heartbeat. […] And breathing, circulation, sonic images of some basic things and contents have much wider, deeper and more provoking meaning and, of course, depending on the imaginary power of the one who listens, they can be seen in thousands different ways" (Lazić 2008, 73). The director, as a co-author, collaborates with a listener in a way he would collaborate with a writer in a different setting of roles (cf. Jovanović 1985, 67). In practical ways, this means that Jovanović has a listener in mind during the process of creating a montage. He illustrates this with an example of a montage, when there are several "lines" of material, each on its own channel. Their movement and overall correlation depend on the perceptive abilities of the listener, and the director's role is to design that correlation as to be receivable in a way that will not tire the listener, but that will please them and provoke their curiosity (ibid.).

Having in mind this concern for the listener, and the crucial role they are given, one of the most consistent lines of thought that Jovanović expresses is a reluctance to offer a preferred interpretation of his works. Sometimes he even goes as far to refuse disclosure of a synopsis or an initial idea, although this is not something he practices in every one of his compositions, given that sometimes he will share the inspiration, the idea or the material used. The origins of this

distaste for explanation might come from the practices of socialist culture, as Jovanović says that it reminds him of "the time when I was a theater director and inevitably had to explain my concept to the cast, or – even worse – to the authorities, the dreaded apparatchiks. […] Our apparatchiks were milder than their Soviet colleagues. Nevertheless, the apparatchik syndrome remains embedded in my memory as a chronic, incurable frustration. It triggers in me a kind of will for revolution and an aversion to having to explain the concept of my work" (Kunstradio 2012). Another layer of association when explaining the work in words is the feeling of being "a market dealer" (ibid., 2012). Jovanović has called his work "anti-librettistic", even stating that he believes "that a libretto is not written for intelligent people, but for those who either lack imagination or are intellectually sluggish" (Kunstradio 2015). In general, Jovanović thinks that composers of radio art in its more abstract form "should be forbidden to speak about their works" (Kunstradio 2019). He goes on to give an example of Becket, as one of those who refused an explanation of his own works.[22]

However, it seems that the most consistent motivation, in line with his attitude on the formation of mental images, is that: "I don't want to influence your imagination, I want you to have your own imagination as a listener, even if you take the road I don't want" (Jovanović 2019, unpublished interview). This attitude is present in many liner notes. For example, in notes for *Approaching*, Jovanović states that "the content is too abstract to be explained by words", as he thinks that "the only right way is to let the listener to 'discover the content'" and hopes "that any sensitive listener will have mental pictures and personal thoughts while listening the piece. Nothing else is more important than this" (Bandcamp 2021a). The explanation of composition itself is sometimes considered as dangerously close to the destruction of "precious rich and unlimited listeners' imagination" (Bandcamp 2021b). This is the case in the comment on *Kremansko proročanstvo* (*Prophecy of the Village Kremna*), which should be recreated in the listener's imagination and "reborn in a new way with each individual listener separately" (ibid.). In other instances (notes on *AquAgonia*), Jovanović even contemplates the title as a sort of brutality:

> I used a single word though, a neologism I put as the title of the work

22 Perhaps coincidentally, Becket's play was the first Jovanović production for the Radio Belgrade Drama program (see Donić and Rajić 2004, 98).

> not missing to admit that even this sole word-no-word did some… brutality to what I want to achieve. Maybe brutality is no right word – you see how a single word could provoke confusion! – to say instead, how even an innocent title, unless it is totally abstract, trigger the listener's imagination to start working, before the very art piece start working itself - what I find not so good since I don't want to make any influence to my audience beforehand, not even with the title, being abstract or not (Kunstradio 2007).

His belief is that withholding information from the listener is like a gift: "when a listener discovers the secret of my work, its foundation, then I'm giving the listener a gift by not disturbing their free perception with explanations" (Kunstradio 2016). In the case of *Rorschach Test RP 4*,[23] title ("or rather, the non-title") directly references the inkblot Rorschach Test and indicates the possibility of composition evoking "very personal reactions in the listener, based on their own history, imagination, and personality" (Kunstradio 1990).

RECEPTION

Jovanović does not remember that radio art received much attention in terms of written reviews, just the impression about compositions he heard during conversations (Jovanović 2019, unpublished interview). In addition to the views offered by Neda Depolo on his overall importance in the field of radio art and comments on few works (Depolo 1999), there is Pavle Stefanović's essay upon viewing *Vrtovi predgrađa*, with an appreciation of Jovanović's audio-visual achievement (Stefanović [1980]1982, 303–307). Radio critic Raško V. Jovanović wrote on Jovanović on several occasions (since 1995 to 1997), predominantly on Jovanović's work as a director on various poetry and radio drama projects noticing Arsenije Jovanović's "almost unbounded sonic space of poetry and building of special sonic dramaturgy on a wide (and deep!) stereophonic level, which works very stimulating on listener's perception" (2010, 167). The exception

23 "RP 4" in the title indicates the ORF digital studio where Jovanović realized the composition in 1990 (Kunstradio 1990). In the following year, Jovanović led the workshop in a then new digital studio, together with ORF sound engineer Gerhard Wieser. Participants were visual artists, composers and writers, who were invited to produce their pieces in the studio. As Daniel Gilfillan notices, the organizing principle of the workshop was artist-centered, with artist expertise at the center and horizontal approach to the production of radio art which he further understands in the genealogy of Hörspiel (2021, 172).

in terms of writing about radio art works Jovanović was best known for came with two reviews of *Resava cave* and one of *Uspenje* (*Ascension*) (ibid., 72, 87–88, 296). In addition to praising the thematic and technical achievements of *Resava cave*, Raško V. Jovanović stressed the importance of bringing forward the notion of nature and preservation of its beauty (ibid., 87–88). Musicological comments on Arsenije Jovanović are few (Kara Pešić 1995, Kotevska 2015, Pardo Salgado 2017, 2018, Maglov 2022), especially those that are entirely or predominantly dedicated to the analysis of his work. Ana Kara Pešić's review of Jovanović's compositions included in CD editions from 1993 and 1994 (see Discography) and Carmen Pardo Delgado's analysis of *Concerto Grosso Balcanico* (2017, 2018) are rare in that sense.

Jovanović is often mentioned, in the context of soundtrack of Terrence Malick's movies (Pippin 2013, Sterritt 2011, Ashvo-Muňoz 2015, Wierzbicki 2019, Fijo 2020). Malick first used *Prophecy of Kremna* in his 1998 movie *Thin Red Line*. This collaboration came as a surprise to Jovanović, as he was contacted by Malick's producer for permission to use his work. He learned that Malick heard *Prophecy of Kremna* when it was broadcast on American Public Radio (Jovanović 2025, 454). In the following years, Malick used Jovanović's works in all his movies, with one exception.[24] Commenting on the composers of various pieces of music Malick selects for his music (ranging from Bach and Handel, to Pärt and Schnittke), Alberto Fijo notices that they "share a dimension of religious transcendence or at least are intensely transcendent in the pieces Malick selects" (2020, 204). On Jovanović specifically, the same author notices that his music is "penetrated by the sensibility of orthodox Christianity that lives the mystery in a very peculiar way, different from the Christianity of the Latin rite" (ibid., 205). James Wierzbicki sees Jovanović's works used as "dark markers" in Mallick's movies, the sounds that are "more indicative of disturbance, and thus at least potentially more disturbing", although they are "so quiet, and so neatly woven

24 Malick used *Prophecy of Kremna* again in *To the Wonder* (2012), *The Tree of Life* (2011) and *Knight of Cups* (2015). Other Jovanović's works in Malick's movies are: *Faunophonia Balcanica*, *Sound Testament of Mount Athos, Ma Maison* (in *Tree of Life*), *Sogno di un Automobile*, *In Search of Galiola*, *Farewell Mix from an Old Fridge before It Sank into the Sea* (in *Knight of Cups*), *Tombstones along the Roadside* (in *Voyage of Time: Life's Journey*, 2016), *Cave of My Ancestors* (in *Voyage of Time*, 2016), *Tamni Damari, Magma Psalm* (in *Song to Song*, 2017), *Concerto Grosso Balcanico*, *The Little Faust* (in *A Hidden* Life, 2019), *Approaching* (in *Tree of Life*, *Knight of Cups*, *Song to Song*, *A Hidden Life*), *Searching for a Serene Sphere* (in *Knight of Cups* and *Song to Song*) (IMDb, n.d.).

into the soundtracks, that audience members are not likely even to notice them" (2019, 90).

In a sense, we could understand Terrence Malick as a very specific "viewer-listener" of Jovanović's works. Jovanović once called an actor an above average reader, which offers a new interpretation of the text (1985, 65). Perhaps we can call Malick an above average listener of Jovanović's works, one that shares contemplative pace and fondness for complexity of nature and man's relationship to nature with Jovanović's own thematic preoccupations[25] and the one whose mental images embody the poetic world of their own.

MAPPING JOVANOVIĆ'S RADIOPHONIC WORLDS

Perhaps we could begin our journey through the radiophonic worlds created by Arsenije Jovanović by exploring those compositions that are preoccupied with nature and animals. Atmospheric sounds of birds, crickets, frogs, winds blowing, waters flowing, and leaves rustling are found in many of his works, positioning the listener in the soundscape. There are, however, several compositions whose titles and contents indicate topics related to nature (*Okeanide*, *Four winds*, *Petrified Rivers*, *Spirit of Water*) or to animals (*Island of the Dying Donkeys, Faunofonia Balcanica, Svetilište kitova*, *The Trace of the Fish*). In works on the natural world, and especially on animals, Jovanović demonstrated the position of empathy. He used the sonic means as a storytelling device which would, in a sense, give voice to animals, or at least try to imagine the world from their perspective. This seems to be the case with several compositions seemingly inspired by the same event. Jovanović recounted how the little bird landed on his ship in the Adriatic, and he felt it ran away from the Balkan boiling unrests that would lead to war

25 Fijo writes on Malick: "Related to the music in this film, the sound of the human voice is blended with the sound of nature (the famous four elements, so present in Malick's films: water, earth, wind and fire) and with the sound of things created by man (a bell, the engine of a vehicle, the noise made by a sickle when cutting barley)." (2020, 205). This is of significance when thinking about points of resonance between Jovanović and Malick – as we will see, nature is the core element of Jovanović's poetics. However, we can also notice the same "blend" of human voice, sound of nature and man-made objects that Fijo points out in Malick's choice of music, when we listen to Jovanović's sound collages. In addition, the first point of encounter (in art) of the two authors was motivated by the war epic *Thin Red Line*, with a strong anti-war message. As Jovanović noticed, it seemed as his and Malick's worldviews had something in common (Kozlovaćki Damjanov, Wierzbicki 2019, 91).

(*The Fear of the Birds*, *The Souvenirs from Marchés aux Puces*, *Liturgy for a little bird*, *Birds in Rifle Barrels*).

Beside this comment from the bird's perspective, war topics and anti-war sentiment were expressed in several radio art works by Jovanović: *Krajputaši*, *Homo politicus vulgaris, Concerto Grosso Balcanico*, *The White City*, *La Parata*, *Schutt Parade*, *Cathedral's Fall War Opera*, *Balcan Chirps – Balkangezwitscher*. Jovanović was drawn to the topics of war since his earliest works. *Krajputaši*, his first Prix Italia winning piece, was described as "a requiem for the victims of war based on the search for a new relationship between the human voice, noise and music" (Antonucci 1998, 95). *Concerto Grosso Balcanico*, perhaps Jovanović's work discussed in the most detail (see Pardo Salgado 2017, 2018), referenced the baroque music form in its three clearly marked movements, and its play between two "orchestral" groups. In a completely different way, Jovanović used musical development in *The White City* by referencing the music-rhythmic motive. While we cannot identify overt musical analogies or distinct "melodic" qualities in every work, this particular piece demonstrates how rhythmic patterns and melodic repetitions form the foundation of its sonic narrative. Affective qualities of the political speeches and treatment of voices and speeches as sound samples were at the center of the exploration in *La Parata*. *Schutt Parade* deals with women as a constructive force as opposed to the male destroying impulses obvious in wars. This was addressed through sonic stories of women who collected rubbish after the Second World War in Germany and Austria.

Jovanović created *Metropolis Belgrade*, a sound portrait of the Yugoslav capital at the time, for the famous *Metropolis* series, edited by Schöning. This creation is a collage of excerpts from different sound walks: from the city's parks and nature, local markets and streets with conversations from random passersby, "overhearing" of an orchestra rehearsal, and the Belgrade nightlife in Skardalija Street, to the stadium where football games are played. *Metropolis Arl* was another one of Jovanović's contributions to Schöning's series, demonstrating the versatility he had in painting different cities' portraits, and his sensibility towards the acoustic environment. This could also be heard in works such as *Soundbook of a Traveller II* (another sonic visit to Belgrade) and *Laguna Venezia*. Jovanović preferred creating "acoustic travel diaries", in lieu of written ones, as he stated with the creation of *Vents e Voix de Provence* (Kunstradio 2020) and similarly of *Les Vents de Camargue* (Kunstradio 2000). Caves and tunnels were

places of continuous acoustic fascination for Jovanović. *Resava Cave* certainly holds a special place in that regard, being an early work in which Jovanović pioneered his sonic experiments in the acoustic space of the cave. *Cave under the Sea* and *Cave of my Ancestors* continue this exploration. Jovanović saw a similar capacity for interesting acoustic results with tunnels, exploring it in works such as *Tunnels inside of a tunnel*, *Broken stalactites* from the *Triptychon "Caves & Tunnels"* and *Midsummer night's dream in Tunnel Dubovica on Island of Hvar*.

Sound Testament of Mount Athos is created of the recordings made in and around monasteries in Eastern Orthodox religious center, both ambient sounds and the music of the monks. It is another example of making an "acoustic travel diary", but this time more connected to another topic that seems close to Jovanović – that of religious and folk songs, prayers, customs and imagery. *Opera Balcanica* deals with variety of songs around Balcan, similarly to *Balcan Chirps – Balkangezwitscher*. *Vila zida grad* is dedicated, as mentioned earlier, to the work of Vuk Stefanović Karadžić on collecting folk poetry and stories. *Uspenje* thematizes the eponymous religious motif. In *East West Dialogue*, Jovanović juxtaposes Persian and German music and poetry.

There are many other topics dealt with in Jovanović's opus that counts to more than 70 works (see Appendix). It is interesting to note how many different occasions, environments or situations sparked Jovanović's imagination and served as an impetus for creation. *Archipelago Prospero* draws an interesting illustration of the differences between Jovanović's primary profession as a theatre director and the vocation of radio artist, while drawing on the experience of directing for the stage. Mainly, the work is based on William Shakespeare's play *The Tempest*, but not on its driving narrative. Instead, it draws on references to sound in dialogue, descriptions of the scenes and technical instructions, thus creating the sonic world implicitly present in Shakespeare's text. Everyday objects and their sounds were used in *Zhuangzi's cup of tea* and *The Souvenirs from Marchés aux Puces*. The refrigerator became almost an object of a poem, and a testimony of the artist's ability to find beauty and poetry in at the first glance banal situations, such as the "death" of a refrigerator that served his family through three generations (*Farewell Lament for an Old Family Fridge before it sank into the Sea*). *Ma Maison* is the dreamlike ode to the artist's house in Rovinj, which does not deal with its real sounds, but the sonic explorations of the memory and feeling that one's home evokes.

Finally, in this tracing of Jovanović's radiophonic worlds, we can go back to the beginning: to Galiola. *Igra za jednu Galiolu*, created in 1967, which is Jovanović's first radiophonic piece. Galiola is a name of an island in the Adriatic on which the author landed on a stormy and dangerous day. Thus, he named many of his ships in the decades afterwards Galiola. As there are many ships, there are several radio art works bearing this name: *Farewell Prayer for one Galiola*, *The Unfinished Diary of the Sailing Ship Galiola Nuria, Sound logbook of the s/s Galiola*, *Auf Kurs nach Galiola*. At the same time another acoustic travel diary and exploration of a natural environment, works on Galiola are Jovanović's attempt to get closer to the unreachable, something that is for him beyond words. At the same time extremely detailed in subtleties of sonically building an inner experience, and elusive when it comes to explaining and stating the meaning of his works, Jovanović seems to be the author whose listeners are yet to come, together with the more nuanced interpretation of his radiophonic works.

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Arsenije Jovanović. 2020. *The Art Of Speech (For Ana)*. Pentiments PEN007, $33^{1/3}$ rpm.

Arsenije Jovanović. 2023. *Sailboat Galiola Nuria's Unfinished Logbook*. Pentiments PEN015, $33^{1/3}$ rpm.

Arsenije Jovanović. 2024. *Farewell Prayer For One Galiola / Faunophonia Balkanica*. Astres d'Or d'or 74, lathe cut, $33^{1/3}$ rpm.

ARSENIJE JOVANOVIĆ: PORTRET RADIOFONSKOG UMETNIKA (rezime)

Arsenije Arsa Jovanović (1932–2025) jedan je od najznačajnijih srpskih i jugoslovenskih radiofonskih umetnika međunarodne reputacije. Svojim pionirskim delovanjem na polju eksperimentalne radiofonije („apstraktne" radiofonije, Ars Akustike), zajedno sa drugim stvaraocima ove umetničke forme, utabao je temelje radiofonskom eksperimentu u okviru Radio Beograda i njegovoj institucionalizaciji u vidu serijala *Radionica zvuka* (1985). Aktivan i zapažen kao pozorišni i televizijski reditelj, pisac putopisa, novinskih eseja i knjiga, autor fotografija i video instalacija, svojevremeno i profesor na Fakultetu dramskih umetnosti u

Beogradu, Jovanović je izazivao pažnju svojim beskompromisnim umetničkim delovanjem i političkim stavovima, te su njegove aktivnosti redovno praćene u medijima. Ipak, naučni članci, posebno oni posvećeni radiofonskoj umetnosti kojoj je pretežno bio posvećen u kasnijim decenijama svog stvaranja, retki su, a obuhvatan pregled njegove karijere, ostvarenja, autopoetičkih stavova i recepcije, do sada je izostao. U svojim autopoetičkim napisima, Jovanović se zalagao za „umetnost zvučnog oblikovanja", za zvuk koji nastaje u samom mediju i zajedno sa rečima potiče stvaranje „mentalnih slika". Zbog ovog fenomena, Jovanović slušaoce naziva „gledaocima-slušaocima". Poput Pjera Šefera, čija je konkretna muzika i umetnost zvučnog kolaža bila presudna za njegovo sazrevanje kao zvučnog umetnika, Jovanović je potencirao dekontekstualizaciju zvuka koji se sluša, kao i ulogu recipijenata. Prema njegovom mišljenju, muziku i bilo koju zvučnu umetnost podjednako kreiraju oni koji slušaju, kao i oni koji komponuju. Zbog čega nije želeo da opširnim pojašnjenjima inicijalnih ideja kompozicija, ili sopstvenog stvaralačkog postupka, utiče na imaginaciju slušalaca, smatrajući da im time oduzima kreativan aspekt doživljaja dela. Pisana reč muzikologa i kritičara o Jovanovićevim kompozicijama, kako je to već naznačeno, bila je retka. Značajan broj studija u kojima se pominju Jovanovićeva radiofonska dela, primarno se bave filmovima američkog režisera Terensa Malika. Malika, zapravo, možemo smatrati izuzetno senzibilnim „gledaocem-slušaocem" Jovanovićevih ostvarenja, a između njihovih poetika možemo uočiti snažnu rezonancu. Ona, između ostalog, počiva i na sličnom senzibilitetu za određene teme, poput odnosa između čoveka i prirode, te anti-ratnog senzibiliteta. U svom opusu (koji čini preko 70 kompozicija), Jovanović je ispoljio posebno interesovanje za životinjski svet (*Ostrvo umirućih magaraca*, *Faunofonija Balkanika*, *Okeanide*), za pećine (*Resavska pećina*, *Midsummer night's dream in Tunnel Dubovica on Island of Hvar*), ratna zbivanja i njihovu kritiku (*Concerto Grosso Balcanico*, *Schutt Parade*), zvučne pejzaže i akustičke putopise (*Metropola Beograd*, *Metropola Arl*, *Les Vents de Camargue*), folklornu i religioznu tematiku (*Zvučni testament planine Atos*, *Vila zida grad*, *Uspenje*), ali i brojne druge teme istraživane u pojedinačnim ostvarenjima (*Archipelago Prospero, Farewell Lament for an Old Family Fridge before it sank into the Sea, Ma Maison*). Ipak, uvek se vraćao temi Galiole – jadranskog ostrva i brodova kojima je dodelio ovo ime – a koja je srž njegove prve radiofonske kompozicije (*Igra za jednu Galiolu*). Mapiranjem Jovanovićevog životnog i stvaralačkog puta, autopoetičkih stavova, te radiofonskog opusa,

u ovom tekstu se daje portret umetnika čiji bogat i kompleksan opus zaslužuje pažljiva slušanja i interpretacije.

APPENDIX: LIST OF WORKS BY ARSENIJE JOVANOVIĆ

Year	Title	Sources[26]
1967	Igra za jednu galiolu / Prayer for one Galiola	RB; CD: FO A RM Projects – FO A RM / and/OAR / Alluvial Recordings
1971	Krajputaši / Roadside Tombstones / Tombstones along the Roadside	RB; BC; CD: FO A RM Projects – FO A RM / and/OAR / Alluvial Recordings
1977	Resavska pećina / Resava Cave	RB; BC; CD La Légende Des Voix – LDV008
1978	Najezde / Invasions	RB; BC; CD La Légende Des Voix – LDV008
1985	Razumevanje zvuka	RB
1986	Halejeva kometa	RB
1986	Vila zida grad	RB
1987	Metropola Beograd – Grad gradila b'jela vila	WDR / RB
1988	Ostrvo umirućih magaraca / The Island of the Dying Donkeys	RB; BC; CD La Légende Des Voix – LDV008
1989	Zvučni testament planine Atos / Sound Testament of Mount Athos	WDR / RB; BC
1990	Kremansko proročanstvo / Prophecy of the Village of Kremna	New American Radio, NYC; BC; CD: FO A RM Projects – FO A RM / and/OAR / Alluvial Recordings
1990	Uspenje	RB / ORF
1990	Faunophonia Balkanica	WDR; LP Astres d'Or – d'or 74

26 By sources, author has in mind the websites or physical carriers. Where known, production is stated. German radio stations which produced Jovanović's work are stated per Deutches Rundfunkarchiv, 2025. The abbreviations are as following: RB – Radio Belgrade; ORF - Österreichischer Rundfunk, WDR - Westdeutscher Rundfunk Köln, BC – bandcamp, RTS – Radio Television of Serbia. The archive is listed by the information author found in books (Donić and Rajić 2004), or on websites (Kunstradio, n.d.; Deutches Rundfunkarchiv, 2025; Bandcamp, n.d.; IMDb, n.d.). CD and LP editions are stated per author's Discogs page (Discogs, 2025a), except for the edition Riverrun, listed separately (Discogs, 2025b). Editions are listed in the table per their catalogue numbers, while complete information is given in the Discography. When composition could be found both on websites and physical carriers, both are stated in the column. Bandcamp editions are all released in 2021, regardless of the date of actual production (which is discerned per other sources, where available). In three cases, titles of bandcamp compilation editions are stated in the table, while the compositions included are given in footnotes. Composer's last finished work, *Orison*, is stated per Radio Belgrade's announcement (RTS, 2008–2025).

1990	Zaboravljeni anđeo iz Matere / L'Angelo Dimenticato di Matera	RAI
1990	Klavierabtasten	RB / ORF; BC
1991	Homo politicus vulgaris	ORF
1992	Svetilište kitova	RB
1992	Hautnah	ORF
1992	Metropolis Arles	WDR; CD WER 6307-2
1993	Le Sacre du Mal	RAI – RADIOUNO RB
1993	Pariska etida i hidrofonija – diptih	RB
1993	Ma Maison	Radio France; BC; CD La Légende Des Voix – LDV008
1993	Concerto Grosso Balcanico	ORF; BC; CD ORF – 14782131274
1993	Laguna Venezia	WDR
1994	Formula 1 – The Art of Noise	ORF
1996	Ohne Titel	WDR
1996	Balcan Chirps - Balkangezwitscher	Sender Freies Berlin / Radio Belgrad
1997	The White City	ORF; BC
1997	La Parata (co-authored with Ilinka Čolić Jovanović)	Deutschlandradio
1999	The Trace of the Fish	Sender Freies Berlin / Ostdeutscher Rundfunk Brandenburg
2000	Les Vents de Camargue	ORF; CD: FO A RM Projects – FO A RM / and/OAR / Alluvial Recordings
2001	The Fear of the Birds	ORF
2001	Opera Balcanica	ABC radio
2001	Soundbook of a Traveller I	WDR
2003	Farewell Lament for an Old Family Fridge before it sank into the Sea	ORF; BC
2003	Four winds	BC
2003	Soundbook of a Traveller II	Deutschlandradio
2005	Schutt Parade	ORF; BC
2005	Birds in Rifle Barrels	Deutschlandradio; BC
2006	Archipelago Prospero	Radio Educación Mexiko / Deutschlandradio / Radio Belgrad; BC
2007	"Toast to Radio" – Live from Belgrade	RB; BC
2007	AquAgonia	ORF
2008	Forever Young - Gypsy party in a Turkish bath	ORF; BC
2009	Approaching	RB
2009	Auf Kurs nach Galiola	Südwestrundfunk
2011	East West Wind Dialogues	ORF; BC
2011	Little Faust	ORF
2012	Okeanide	ORF
2013	The Souvenirs from Marchés aux Puces	ORF
2013	Tunnels inside of a tunnel	ORF

2014	„Broken stalactites“ from the Triptychon „Caves & Tunnels”	ORF; BC
2014	Midsummer night's dream in Tunnel Dubovica on Island of Hvar	ORF; BC
2015	Cathedral’s Fall War Opera	ORF; BC
2016	Coreografie dell’invisible	ORF; BC
2017	Farewell Prayer for one Galiola	ORF; BC; LP Astres d'Or – d'or 74
2017	Zhuangzi’s cup of tea	Deutschland Radio; BC
2018	From C to A	ORF
2019	Smog	ORF
2020	Vents e Voix de Provence	ORF
2020	The Art of Speech (For Ana)	LP Pentiments – PEN007
2021	Prolepsis, tuning instruments	ORF
2021	Sound logbook of the s/s Galiola	BC
2021	Five electro-acoustic miniatures - Diamond, dedicated to Terrence Malick[27]	BC
2021	Present from Arsenije for Arts Birthday	BC
2021	Liturgy for a little bird	BC
2021	Trans DADA Belgrade Express	BC
2021	Prolepsis 440	Deutschland Radio; BC
2022	The Unfinished Diary of the Sailing Ship Galiola Nuria	ORF / Český rozhlas
2023	Avis vestigia in Mare Tranquillitatis	ORF
2023	Sailboat Galiola Nuria’s Unfinished Logbook	LP Pentiments – PEN015
2024	Orison	RTS
	H.P.V.	Ylesradio
	Les Vents de Camargue	ORF; BC
	Petrified Rivers	BC
	Spirit of Water	BC
	Steps under the Cathedral	BC
	Lullaby for the Little birds	Adriatic Sound Factory
	Tamni damari – Dark pulses	BC
	Sound Book of a Traveler, 1st book[28]	BC
	A lost necklace with five small pearls[29]	BC
	Magma Psalm	IMDb, n.d.
	Searching for a Serene Sphere	IMDb, n.d.

27 Includes: *A little Lullaby for a bird and some other little Creatures*, *AquAgonia or Death of the Water*, *Faunophonia*, *Hydrophonia*, *Une lettre electro-acouistique de Provence*.

28 Includes: *Cave under the Sea*, *Athos Zauberber*, *Cave of my Ancestors*, *Cricket under the Cathedral*.

29 Includes: *AquAgonia*, *Faunophonia Balcanica*, *Hydrophonia*, *Les Vents du Camargue*, *Lullaby for the Little Birds*.

Reviews

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ZVUČNI PEJZAŽI NOVOG SADA [NOVI SAD SOUNDSCAPES]

Novi Sad: Akademija umetnosti, 2024.
ISBN 978-86-6214-000-5

The interactive book *Novi Sad Soundscapes* (*Zvučni pejzaži Novog Sada*), published by Academy of Arts (Akademija umetnosti) in Novi Sad as an electronic edition in Serbian language, is divided into five sections – an introduction, two chapters, and two additional sections with the notes on the material collected from the fieldwork – the *Novi Sad Sound Catalogue* (*Zvučni katalog Novog Sada*), a list of 72 sound recordings (with descriptions) the authors made in the city of Novi Sad and its surroundings from July to October 2024; and *Sound Map of Novi Sad* (*Zvučna mapa Novog Sada*), a link to Google Maps with marked locations of the previously listed sound recordings. The book closes with a bibliography (Literatura) and short authors' biographical notes (Biografije autora).

The *Introduction* serves as an authors' note on this edition, in which the authors present the stages in the development of the book, give a short description of their findings at the start of their research and outline how their research took an unexpected turn as the soundscape changed after the tragic accident in Novi Sad Train station that took 16 lives and shook the community. The Novi Sad Train Station accident, (which happened on November 1st 2024) is a pivotal moment in this book as the book shows how the atmosphere in town, and sub-

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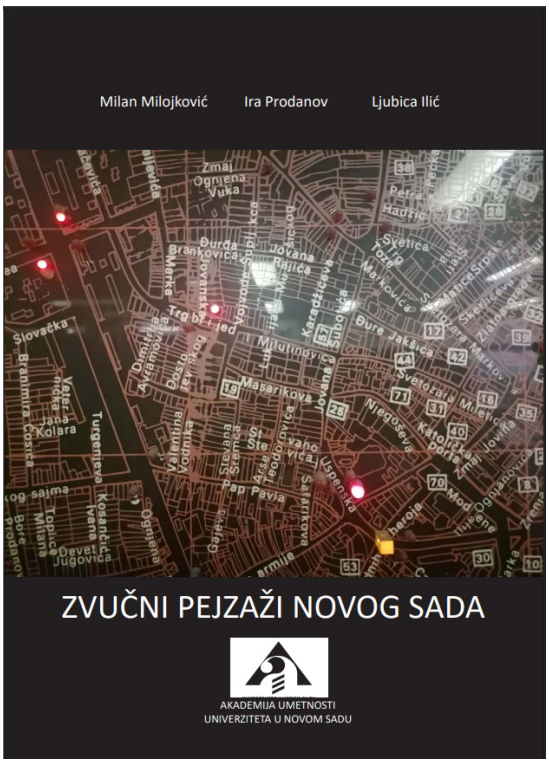

sequentially in the book, changes and ends up centering around it. The book inadvertently became a legacy of that period.

The second chapter is titled *Methodology, Terminology and Literature Review* (*Osvrt na metodologiju, terminologiju i literaturu*), and is an introductory chapter written by one of the authors, Milan Milojković. The chapter is sectioned into several subsections that contain plenty of information as the subject matter is introduced with clarity and in a manner that is easy to read. In the first three subchapters, Milojković gives a brief outline of the history of the research on soundscapes and soundscape ecology and introduces the soundscape terminology used in the rest of the book. In the following subchapters, he also addresses the importance of musicological input within the soundscape studies on an international level, while also noting the soundscape studies within Serbian/Yugoslav musicological scientific output. Milojković finishes the chapter with a description of the research methods used in the book that position this research and its findings within the wider musicological context.

The third chapter, *Novi Sad Soundscapes* (*Zvučni pejzaži Novog Sada*), is the main chapter, where the research material and research findings are presented. The chapter is divided into four subchapters penned by all three authors. These four subchapters are methodologically and conceptually different. In the first subchapter, Milan Milojković writes about *Descriptions of sounds in Novi Sad history* (*Opisi zvukova iz istorije Novog Sada*), analyzing old newspaper clippings that mention sound in public spaces dating back to the 18th century through the rich history of Novi Sad. This section is like a step back in time with many long and interesting quotes describing the city and its inhabitants and their re-

lationship with music in public spaces (public sphere) through different moments in history, from imperial processions, through military marches, foreign occupations, until the most recent tragic accident in Novi Sad's Train Station in November 2024.

The second subchapter is written by Ljubica Ilić and is about *Novi Sad Sound Flâneurism* (*Novosadski zvučni flanerizam*). Here Ilić notes about different aspects of *flâneurism* from a philosophical and historical perspective, finishing the chapter with local and contemporary views on what it is like to be sound flaneur in the 21st century Novi Sad. In the section *Flâneur in Novi Sad* she takes us on a walk through Novi Sad and its sounds through the links in the Sound Catalogue.

The third subchapter is compiled by Ira Prodanov and is titled *Pages from a Sound Journal* (*Stranice iz zvučnog dnevnika*). She opens with an introductory entry titled "The Right to One's Own Urban Soundscape" ("Pravo na sopstveni urbani zvučni pejzaž") where she writes about Jacques Attali and John Cage, comparing their views on noise in urban areas. After this she continues by describing her local urban soundscapes in her sound journal. Prodanov's sound journal contains 16 entries dating from end of July until the end of November 2024, although this is not set in chronological order. All entries have a sound file linked to them and a short description, while eight also contain visual illustrations (such as drawings, photographs, painting reproductions). The entries are titled either by locations in Novi Sad (such as "Liman market", "Morning in Grbavica", "Coffee shop *Hogar*"), or the actions heard in the recordings (such as "Kid's Noise in the School's Hallway During Short Break", "Demonstrations", "Dogs Fighting in the Streets"). Apart from the visual additions, Prodanov's commentary often includes quotations, song lyrics, and plenty of musical and cultural references where we see her vast musicological knowledge. Her comments are also touchingly personal as she describes her views both on her private and public surroundings and recordings capturing sounds before and after the Novi Sad Train Station accident.

The last subchapter in the third chapter is *Big City Noise Symphony* (*Simfonija velikovaroške larme*) written by Milan Milojković. This subchapter has four sections that are intended to mimic the four movements of a symphony. Each section is followed by a linked sound recording, titled according to the recording locations with a complementary text describing the recording and the author's views and feelings.

I Largo – Allegro risoluto – Moderato: An Evening at an intersection of Milana Rakića St and Save Vukovića St (Veče na raskrsnici ulica Milana Rakića i Save Vukovića),

II Scherzo: Belgrade Gate (Beogradska kapija),

III Con Moto: Novi Sad Train Station (Železnička stanica Novi Sad),

IV Lento funebre: Commemoration for the deceased at the Train Station November, the 2nd, 2024 (Komemorativni skup za nastradale na stanici 2.11.2024).

This section is also heavily influenced by the Train Station accident as Milojković sets the last two movement of his "symphony" as the sounds before and after the accident. This section also serves as a conclusion to the book, as there isn't an official one, which is another testament of the development of the work on this book that changed as the circumstances in the city changed.

The book *Novi Sad Soundscapes* is important for a few reasons. It is a good introduction to city soundscapes research on sight in Serbian musicology as it combines theoretical and field work. Theoretical parts are a balanced combination of periodicals and scientific articles that trace the writings about music in the public sphere in the city of Novi Sad. In that way, this book becomes part of that knowledge, an important next step that uses new interactive technology. Because of its interactive electronic form, the book could be "read" as one is walking around the city and be a sound guide for all the flaneurs out there.

Due to the inclusion of the societal tragedy that happened while researching this book, this book is, in a way, a witness to the aftermath of the tragedy. It is also a document to the time of societal mourning and the anger and demonstrations that followed in the days after (and are still ongoing, months after the publication of this book), which is why it holds historical importance for soundscape studies, trauma studies, for the history of Novi Sad, as well as musicological research in Serbia and the wider region.

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6TH SOUND EXHIBITION AND LIVE ELECTRONIC MUSIC CONCERT IN SARAJEVO

Starting in 2018, Sarajevo has played host to a highly distinctive event shaped by the concept of the "sound exhibition." This is, in essence, a (quasi-)gallery model where "visitors move through the exhibition space," but instead of engaging with visual experiences, they encounter primarily with auditory ones.

Rather than adhering to the traditional, static dynamic correlation between composer or performer and listener, this concept encourages movement and fosters direct auditory engagement with the sound through headphones and a laptop (on which, in fact, the exhibit

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Figure 1. Sound exhibition. Photo by Aida Adžović.

is located), and the exploration of meaning (the existence of which is neither guaranteed nor is there necessarily any initiation by the author in that direction). In this way, each exhibition visitor is tacitly encouraged to independently map their own listening trajectory through the exhibition space, based on their personal catalogue of sonic experiences, and to develop their own meaning around the exhibited items. Thus, there is no "correct" way to visit this type of exhibition.

This year, on July 7th, 2025, the sixth edition of the sound exhibition took place as an extended public event, following the tradition of participation by students and teaching staff from the University of Sarajevo – Academy of Music. For the sixth edition, students have had the opportunity to gain practical experience whose outcome is not confined to the closed environment of classrooms, but is instead made fully accessible to the public. This practice is linked to the course named "Electronic Music," under the mentorship of composer Prof. Dr. Dino Rešidbegović, who is also the originator of the idea for such an exhibition. It engages students, primarily from instrumental departments but also alumni of

the institution, with the diversity of sound synthesis, as well as with both simple and more complex design ventures in the electronic and electroacoustic sense.

The sound exhibits presented at the most recent edition of the exhibition, each bearing the signature of student authors, included works by Kanita Mujačić (*[κ.ηηα_11]*), Damir Vreva (*$0UND//V01D*), Kerim Rahmanović (*L_0ß/07>UM1#.EXE*), Mirnes Dedić (𝕄◎ⅆμℓΔя €яя◎я^{404}), and Esad Bešlija (*Ś¥NŦH€SØ2k25*). These pieces took the form of brief auditory phenomena that interrogate various aspects of sound synthesis, predominantly utilizing soft synths. In addition to those, works by alumni of the Academy of Music were also presented – specifically, the audio showpiece *SqperS* by Mirza Gološ, and an audiovisual piece by Rijad Kaniža entitled *Apeiron E-Fx* (Hommage à Josip Magdić), which serves as a digital re-composition of an existing Magdić's piece *Apeiron E* from 1976.[2]

Figure 2. Sound exhibition. Photo by Aida Adžović.

A special place in the sound exhibition program, as in several previous years, is occupied by the live electronic music concert as a specific act of closing the exhibition. The concert featured two student trios performing original electronic music works: Mujačić–Vreva–Rahmanović (*Г℗0Мч3 Л0ЬК0г0 $Шμм@)* and

2 The work *Apeiron E* (1976) by Josip Magdić (1937–2020) was composed using the EMS Synthi 100 synthesizer at the Electronic Studio of Radio Belgrade, with the technical assistance of composer, instrumentalist, and engineer Paul Pignon. It stands as one of the earliest examples of electronic composition in Bosnia and Herzegovina.

Figure 3. Sound exhibition. Photo by Aida Adžović.

Vreva–Dedić–Bešlija (*TЯ!И!TY ₡!ЯÇU!T*). In both cases, analog types of synthesizers were used – KORG "Minilogue" and KORG "MS-20 Mini" – chained into a mixer with active effects operated by one of the performers. Additionally, Mirza Golоš, using Arturia's "Synthi V," an emulator of the famous EMS semi-modular synthesizer "Synthi AKS," performed the composition *LiquidBeep*, after which Zlatan Božuta on piano, with the cooperation with Dino Rešidbegović on the mixer, performed his electroacoustic piece.[3] Guided by the process of granulation and live manipulation of sound granules, Rijad Kaniža explored the perception of density through the saturation of sonic textures and thus created a piece titled *Crackling crunch*, using Arturia's granulator "Efx FRAGMENTS." The concert, and thus the sound exhibition, concluded with a performance by Dino Rešidbegović with the piece *ЯEALD*, simultaneously employing extended piano playing techniques with microphones connected to a delay effect on the mixer, and a "MakeNoise" modular synthesizer.

3 For the clarity of the text, we give the name of the piece here: *Space Shuffle*

Taking into account the slow evolution of both institutional and public non-institutional practices relating to electronic and electroacoustic music in Bosnia and Herzegovina, these two events emerge as the core of maintaining and developing a practice of electronic musicianship that steps outside the domain of popular music. The aforementioned idea of a live electronic music concert as part of a sound exhibition for the broader public is still an extremely rare opportunity to experience the "living" meaningfulness of what we understand as electronic/electroacoustic and computer music. All of this contributes to a unique atmosphere, where the boundaries between gallery or concert experiences, and sound laboratory become fluid, and each iteration of the exhibition brings a certain degree of freshness and innovation (albeit quite modest in the global position) to the musical and broader cultural life of Sarajevo.

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Juan Bermúdez

MUSICKING TIKTOK: A MUSICAL ETHNOGRAPHY FROM A GLOCAL AUSTRIAN CONTEXT

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Ethnomusicologist Juan Bermúdez's recent monograph *Musicking TikTok: A Musical Ethnography from a Glocal Austrian Context* (Bloomsbury Academic, 2025) is an attempt at a comprehensive scientific take on the global phenomenon of TikTok from the perspective of musical sciences. Curiously enough from today's perspective – having in mind heaps of research on TikTok that abounds – Bermúdez's research proposal to deal with Musical.ly (TikTok's predecessor) was met with several specific obstacles at its very beginning: from the resistance and rejection from his colleagues and potential mentors, a lack of existing methodological tools and paths, the nature and potential instability of digital platforms and its content in the planned research timeframe, and to his very identity.[1]

Over the five chapters (preceded by the Introduction and closed with Conclusions), the author unveils the research results, which were also shaped by all the challenges he encountered and strategically addressed. This book is

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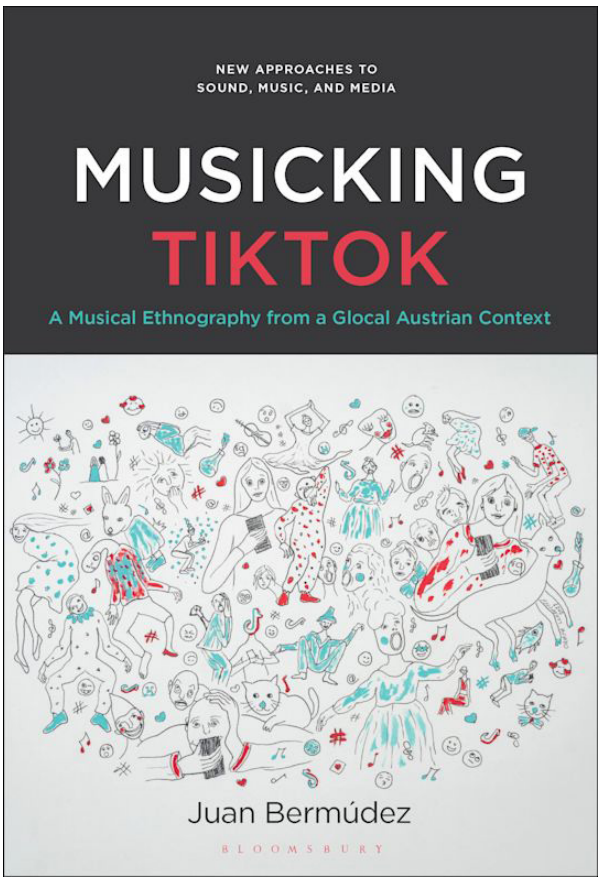

a product of Bermúdez's PhD research, conducted at the University of Vienna; even before officially starting his doctoral studies, however, the sentiment that he received from his professional surroundings was that exploring musical practices online cannot be situated in the field of ethnomusicology. As is the case with musicology, his discipline is likewise rooted in quite traditional theoretical and methodological frameworks, which are often too rigid and conservative for topics that go beyond their original postulates (musicology even more so than ethnomusicology). The issue required a careful reconsideration of some of the ethnomusicological key concepts, such as *musicking*, *field work*, *performance/performer*, *physicality*, *locality*, and more. This specific re-invention of the disciplinary boundaries seems as necessary as ever in the era of the internet and virtuality.

As Bermúdez points out in the Introduction, the doubts over the stability of his research subject (an application that was created for smartphones) were somewhat confirmed on the same day his proposal was finally accepted, since that was the day the company ByteDance acquired Musical.ly. However, the issue was soon after remedied with the rise of TikTok, especially and notably during the Covid-19 pandemic. From this situation arose one of the first confirmations of the validity of his research: "the musicking of Musical.ly did not entirely depend on the application to exist" (p. 7), but continued to be reshaped and reinvented within the new app. Finally, the research process and the fieldwork

that was supposed to be done with TikTok users via interviews, workshops and meetups was shaped by his own position as an immigrant cis-gender male scholar of color, who is in his 30s and explores music practices on an application that, at the time, was primarily intended for teenage girls.

The methodological bases are comprised of qualitative ethnographic research combined with several other approaches: participant observation on Musical.ly/TikTok, analysis of TikTok-related materials, analysis of TikTok videos, numerous informal conversations with different TikTokers, two research stays during the TikTok Opera production in Hamburg, fieldwork during meetups, one hundred semi-structured interviews with TikTokers, and reflections during four roundtable discussions between TikTokers and researchers. The timeframe for all of these was from fall 2017 to summer 2022.

The broad question that initiated the research was "how and why is the musicking on TikTok historically constructed, socially maintained, and individually created and experienced by diverse actors from a glocal context?" (p. 5). The author attempts to answer in the five following chapters that reveal the five main topics of his endeavor: 1) creating a suitable ethnographic research model; 2) different ways in which participation is possible in TikTok musicking and the types of performances on the application; 3) performers of TikTok musicking; 4) musical geography of TikTok from an Austrian context, and 5) performances held within TikTok musicking.

In the first chapter, titled "Ethnographing TikTok", Bermúdez presents his research model, built on the bases of work of ethnomusicologists and other music scholars that strived to broaden the field, starting from Alan P. Meerriam's (1964) structure of three analytic levels that serve as a basis for ethnomusicological work (*conceptualization about music*, *behavior in relation to music*, and *music sound itself*). This is enriched with Timothy Rice's (1987) and Julio Mendini's (2016) expansion of Merriam's model (*historical construction*, *social maintenance*, and *individual creation and experience*). The final piece in this puzzle is Christine Hine's concept of E3 Internet (2015). The E3 Internet is an embedded, embodied and everyday experience. With these in mind, the author introduces *e³thnography*, "research of concepts, behaviours, and sounds that different actors of specific musicking (musicians/dancers, audiences, producers and other actors musicking) historically construct, socially maintain, and individually create and experience in everyday synchronous and asynchrounous multimedia situations"

(p. 19). Musicking on TikTok could thus be viewed as: 1) *multimedia practice* that has no clear location of production or reception, nor does it require physical contact between actors. It builds asynchronous multimedia and multilocal music practices, and rethinks reality and virtuality in a dialectical relation; 2) *individual experience* that possibly encourages transformation of a musical persona (as posed by Philip Auslander in 2006) to TikTok persona; and as 3) *musical geography through practice*, which does not depend on physicality to function.

The second chapter, "Performing TikTok", brings a detailed overview of TikTok's interface, the main elements (the profile page, the for-you and following page, the discover page, the live page, the inbox) and modes of functioning, as well as its performative possibilities (recording mode, time, and speed; effects, tags, filters…). Under the performative possibilities, the author addresses distinctive functions that make TikTok particularly interesting for musicians and music fans – duets, stitch, and live function. In the second half on the chapter, Bermúdez categorizes performances on TikTok into lip-sync ones, non-lip-sync ones, challenges and trends. Non-lip-sync performances is the category that is especially prominent on TikTok, and which distinguishes it from Musical.ly.

The chapter "Becoming a TikToker" delves into several strains of encountering and using TikTok in musicking. The transition from Musical.ly and its avid users – Musers – to TikTok was not smooth; many users decided to delete the app or never to install it to begin with. However, the author demonstrates how, with the COVID-19 outbreak in late 2019 and early 2020, the worldwide lockdowns brought millions of users and a new type of social life to TikTok – for musicians with no opportunity to play live, TikTok offered possibilities to reconnect and present their art and skills to a whole new market. To become a TikToker, Bermúdez writes, there is no school you can attend. TikTok users would learn through trial and error processes, learn by doing, and try to find their niche which could be accepted by the broader audience. In this process, TikTok personae would employ what researchers such as Kevin Brown would call *performances of authenticity*. According to Bermúdez, to become a TikToker one would have to employ a musical front (which consists of the "setting" – physical context of the performance, and the "personal front" – physical appearance and behavior of the performer), a personal front (as a "point where the body and voice of the performer meets the intersectional mandates of genre, sexuality, race, age, class,

ability…", p. 86), and the audience, who may or may not accept and acknowledge the identity of a TikTok persona. What is especially important here is that Bermúdez acknowledges the three aspects of the "settings" that are dependent on the locality of the TikToker – device and infrastructure context (having in mind technological and internet disparities worldwide), performative possibilities of the platform (seeing that users have access to different functions depending on their geographical location and national laws and regulations), and physical context of the performance (private or public space of the performance).

In the fourth chapter, dubbed "Localizing TikTok", Bermúdez answers the doubts from the very beginning of his journey – what if there is no classic *field* to do the *fieldwork*? He suggests going "beyond the tangible" (p. 101) and poses that:

> in a multimedia ethnographic research (E³thnography), "being there" cannot be seen from the point of view of how our physical body is positioned anymore, but from our embodied consciousness that forms part of these practices. Therefore, this embodied consciousness is the one that inhabits our environments, virtual or physical. This also applies to all actors in the musicking of TikTok, not just to us researchers (p. 102).

Having that in mind, he proposes the four basic forms of relations between actors on TikTok: 1) *presence* (conscious participation in a physical and synchronous sense); 2) *co-presence* (conscious participation in multimedia and asynchronous interaction); 3) *emphatic co-presence* ("affective and highly embodied association created after the conscious re-embedding in a synchronous and physical space, of participation and interaction previously experienced as multimedia and asynchronous by the actors in a particular musicking", p. 103); and 4) *unconscious presence* (actors who are not aware that they are included, or the case of *digital death*). In that way, the author considers performances and actors beyond their tangible bodies and tangible spaces (physical spaces transform into social spaces).

TikTok in relation to other platforms is also examined here. The author emphasizes that the live function TikTok holds does not differ much more than other social media platforms, even when compared to more traditional media such as television. However, the question of virality of sounds and choreographies is touched upon here, although this is not stressed much. Returning to the

three aspects of the "settings" from the previous chapter, Bermúdez analyses performances, algorithms, interactions and meetups, that are all particularly closely related to the local reality of the performer on TikTok.

The final chapter, "TikToking Musics", deals more closely with the live function, the types of songs and music pieces characteristic of the TikTok platform and its performative functions (primarily, the length of the songs/excepts), and duets. Alongside of shortness of songs and pieces, duets – asynchronous and multimedia type of content, with no specific type and place, previous organization or arrangement with the other performer – are one of the key functions of TikTok musicking. Bermúdez also considers several examples of adapting classical music form to TikTok, primarily opera. Opernloft, a theatre and opera house from Hamburg, worked on two contemporary productions of Mozart's *Die Entführung aus dem Serai* (1782) and Bizet's *Carmen* (1875), adapted to the shorter timeframe and with the intention of contributing to topics of inclusion and diversity, specifically for TikTok. The author discusses the particularities of the production that needed to be overcome in combining the two worlds and reaching the target audience. On the other hand, *Tiger King 2: The TikTopera*, is a series on TikTok specifically intended for the platform, with the goal of promoting the new season of the popular series *Tiger King*. Finally, Bermúdez introduces several local artists via the debate on TikTok musicals, as well as TikTok songs – songs that are almost exclusively performed on and for this platform.

Musicking TikTok, A Musical Ethnography from a Glocal Austrian Context appears in a timely manner, at a moment when TikTok is a global informational, cultural, educational, and musical force, and while research on the platform is on the rise. Juan Bermúdez's insights into the very beginnings of the platform and his position as a researcher throughout its rise is substantial and useful for music science and for an overall understanding of the phenomena. For, even though we are talking about a relatively short timeframe of several years, as avid TikTok users we know that the speeding up of the trends and topics discussed is another subject to be explored not only by music scholars, but by many others.

Given the comprehensiveness and the wide range of this research project, what could have been more emphasized is the influence the TikTok revolution with the short-form vertical video in 9:16 format has had on the other social media giants such as Meta (Instagram and Facebook) and YouTube.

However, Bermúdez's research is particularly important given its emphasis on the *glocal* feature; the study is enriched throughout all the chapters with excerpts from his informal conversations and interviews with local TikTokers. As observed, the examples of *TikToking Musics* are also rooted in the Austrian and German contexts. This gives a reader a touch of the local context, while introducing the concept of creating musical geographies through multimedia and asynchronous practice independent of the physical element, unlike any other form of musicking before. Since TikTok is as glocal as it gets – with its local specificities – everyone is participating in one of the world's largest social spaces in history.

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Contributors' Biographies

Srđan Atanasovski is a Senior Research Associate at the Institute of Musicology SASA, where he has worked since 2011. He received his Ph.D. in musicology at the Faculty of Music of the University of Belgrade in 2015, with the dissertation "Musical practices and the production of national territory". From 2016 to 2023, he worked as a lecturer in the program SIT Western Balkans: Peace and Conflict Studies. He was also involved in several international scientific projects, including Figuring Out the Enemy (Institute for Philosophy and Social Theory, Belgrade) and City Sonic Ecology – Urban Soundscapes of Bern, Ljubljana and Belgrade (University of Bern). He has held a scholarship from the Austrian Agency for International Cooperation in Education and Science for doctoral and postdoctoral research. His first book, *Mapping Old Serbia: In the Footsteps of Travelers, Following the Traces of Folk Songs* was published in 2017 by the Library 20th Century, and his second book, *Schubert and Rivalry as a Creative Principle*, was published in 2023 by the Academic Book and the Institute of Musicology SASA. Since 2008, he has worked as the author of shows on the Third Program of Radio Belgrade about the music of the Age of Enlightenment.

Pedro Pablo Cámara Toldos (1986) is a musician and artistic researcher focused on sound experimentation. His areas of study are concert stage formats, as well as new sound and gestural possibilities with the saxophone. With the goal of making the saxophone his own voice, in his continuous search, he aims to equip the saxophone with a technique that adapts to each particular language, preventing the over-conditioning of the style by the instrument. His deep knowledge of the evolution of the repertoire and the possibilities of the saxophone are crucial for preserving the essence of every piece he plays.

His training has been always as comprehensive and broad as possible. This perspective took him to work closely with great musicians in different fields and places: he did his saxophone training with Marcus Weiss and Vicente Toldos; he developed his chamber music skills with F. Rados, C. Martínez-Mehner, R. Schmidt, E. Feltz and S. Azzolini in the Hochschule für Musik of Basel (Switzerland); he obtained his PhD by the Universidad de Valladolid, his bachelor degree in Musicology by the Universidad de La Rioja (Spain), and he also holds a diploma in Music Pedagogy by the Universidad Complutense de Madrid (Spain). His continuous development of the musical language has produced an extensive corpus of new works; they have been born from a close collaboration with composers such as Eötvös, Paul, Sánchez-Verdú, Escudero, Méndez, Frank, Torá or Alonso.

His commitment to scenic and interdisciplinary formats is noteworthy, participating in the premiere of productions of the Berlin Staatsoper, Madrid Teatro Real or Musiktheatertage Wien. Pedro is professor at the Centro Superior Kata-

rina Gurska in Madrid. As guest he was invited for masterclasses in Musikhochschule Munich, UdK Berlin, KUG Graz, UNAM CDMX, Escuela Reina Sofía, Hochschule for Musik Basel, HKBU Hong Kong, among others.

İsmail Eraslan is a lecturer at the Fatih Faculty of Education, Trabzon University, Türkiye. His academic interests include Ottoman-Turkish music, music education, and the use of artificial intelligence in musicological research.

Marija Maglov is a Research Associate at the Institute of Musicology, Serbian Academy of Sciences and Arts. Her main research interests are interdisciplinary musicological studies of music and media, radio art, music practices of the 20th and 21st centuries, discography, and theories of media and mediation. She received her PhD at the Faculty of Music, University of Arts in Belgrade in 2022. She is currently working on a monograph on radio art in former Yugoslavia and Serbia and preparing a collection of writings on music and radio by the Serbian composer and multimedia artist Vladan Radovanović.

Inés María Monreal Guerrero is Lecturer in Musical and didactic expression at the University of Valladolid (Spain) and member of a research group: Education and TIC (University of Valladolid). She has a BA degree in Musicology from the University of Valladolid and a Ph.D in Pedagogy from the University of Valladolid.
She is the coordinator of the Early Childhood Education Degree at the University of Valladolid since May 2022. She is the coordinator of the University of Valladolid's Inter-University Experience Programme since July 2023. She is the academic director of the DART international art research programme by Fundation Katarina Gurska. She is member of the management team of the institute for artistic research Katarina Gurska. Since 2009 she has been a writer for the publishing editorial Anaya, having written 80 books. She is a member of various scientific committees of journals, international reviewer.

Ruirui Ye, an ethnomusicologist and zheng player, is currently a lecturer at the Academy of Music Berlin. She holds a Master's degree in Systematic Musicology from the University of Hamburg and a Ph.D. in Musicology from the University of the Arts Berlin. In addition to her academic achievements, she has taught various courses at the University of the Arts Berlin and the Academy of Music Berlin, covering subjects such as Introduction to Musicology, Introduction to Ethnomusicology, Chinese Music, and Research Colloquium for Bachelor's and Master's students.
As a member of the International Council for Traditional Music and Dance (ICTMD), the Society for Music Research (GfM), Chinese Musicians' Associ-

ation, and the China Society for Anthropology of Arts, Ruirui Ye actively contributes to the academic community. Her research interests span a wide range of topics, including urban music, Chinese music, music and gender studies, music and media, as well as comparative aesthetics of cross-cultural music. Additionally, her expertise as a zheng player adds a practical dimension to her scholarly endeavors.

Guidelines for Authors

Guidelines for authors

Authors must submit original, unpublished articles.

All the manuscripts should be accompanied by author's name, affiliation, e-mail address, and a short biography (up to 150 words per author). Articles can be submitted in English (preferably) and Bosnian.

Manuscripts should be written in .doc or .docx format, in Times New Roman font, font size 12 with 1.5 line-spacing.

Original scholarly paper intended for sections The Main Theme and Beyond the Main Theme should include a short abstract (100–200 words), 5–10 keywords, as well as the summary (500 words). For articles in Bosnian, summary must be written in English. Do not include citations in the abstract. Keywords must be chosen appropriately in order to be relevant to the subject and content of the paper.

Regarding the citations, authors should use the author-date system with the separate bibliography, following the guidelines given in Chicago Manual of Style (The Chicago Manual of Style 18th edition, Chicago: University of Chicago Press, 2024; http://www.chicagomanualofstyle.org/tools_citationguide.html). Please note that the list of references (bibliography) given at the end of the article must only include works that are cited in text.

Book, conference, and festival reviews should bring to attention relevant and valuable contributions or events that are in interest scope of our Journal. Reviews must contain a dose of critical appraisal instead of being written merely as summary. The title of the book review should include necessary information regarding the volume, as in following example:

- Juan Bermúdez, *Musicking TikTok: A Musical Ethnography from a Glocal Austrian Context*, Bloomsbury Academic, 2025. ISBN 979-8-7651-1218-2
- *Margins, Futures and Tasks of Aesthetics*, Conference of the IAA, Helsinki, Finland, July 5–7, 2018.
- Sonemus Fest, Sarajevo, Bosnia and Herzegovina, April 16–21, 2018.

Manuscripts can be equipped with photos, illustrations, drawings, and tables. These should be of good quality (resolution higher than 300 dpi), in .jpg or .tiff formats, and submitted as files separate from the text. All visual materials must have permission for publishing from the author, photographer or the respected owner of the rights.

Word count:

- Original scholarly papers (Main Theme and Beyond the Main Theme sections) – 4000-8000 words
- Book, conference, and festival reviews – 1000-1500 words
- Interviews – 1000-2000 words

Other remarks:

Em dash is used in years, page numbers or as a continuation of sentence: 112–35. 2000–2006. En dash is used in compound nouns: *art-making*.

Double opening (“) and double closing (”) quotation marks and regular font are used in citing. Single opening and closing quotation marks (‘’) are used in citing words, syntagms or sentences of existing citation (cit.cit). If one or more parts of a sentence is under quotation marks order of punctuation marks is: ”1,

If whole sentence is under quotation marks order of punctuation marks is: ”.2

Italic is used in: 1) work title (books, compositions, paintings, sculptures, etchings, installations, photography); when citing translated and original work title in brackets: “The Hand of Fate” (*Die Glückliche Hand*); 2) emphasizing specific word, concept, syntagm, or sentence: *heterotopy*; 3) using words from foreign language; 4) using figures of speech and stylistic devices: *silence* of consciousness. For *releasing* a concept from essentialism or tradition please use single opening and closing quotation marks: ‘being in the world’.