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## Musical Performance as Creation

INTERNATIONAL CONFERENCE PROCEEDINGS

**EDITED BY**

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RICCARDO WANKE

# Musical Performance as Creation (II)

International Conference Proceedings

Edited by Filipa Magalhães, Isabel Pires & Riccardo Wanke

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## **Musical Performance as creation**

International Conference Proceedings

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# Dwelling Xenakis. An augmented reality project on *Evryali* for piano solo

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*Pavlos Antoniadis*<sup>1</sup>, *Aurélien Duval*<sup>2</sup>, *Jean-François Jégo*<sup>3</sup>,  
*Frédéric Bevilacqua*<sup>4</sup> and *Makis Solomos*<sup>5</sup>

**Abstract.** This paper presents an augmented reality project based on Iannis Xenakis' work *Evryali* for piano solo. Drawing on an interdisciplinary framework, we transform the performance space into a hybrid environment consisting of physical, symbolic and virtual elements. The synergy of these elements reveals to the audience affordances of meaning and action that normally remain exclusive to the performer. Importantly, the audience is invited to 'dwell' this environment, meaning to experience the affordances in a fully embodied and multimodal way, often including real-time interaction. This hybrid environment is inextricably linked to the visualization and communication of the performer's learning process, defined here as embodied navigation of notational affordances.

**Keywords.** piano, augmented reality, mixed reality, symbolic music notation, communication, visualisation, motion capture, embodied navigation, affordance.

## Introduction

This paper presents concepts and mediation technologies for the augmentation of a performance of Iannis Xenakis' work *Evryali* for piano solo. They materialize as a mixed reality environment that seeks to enhance the concert experience.

The concepts presented here originate from previous works by Pavlos Antoniadis and Frédéric Bevilacqua (2016) on mediating piano performance, as well as by Jean-François Jégo, Vincent Meyrueis and Dominique Boutet (2019) on real-time movement visualization and mixed reality. We consider music performance through the prism of learning processes, implying all the different actors: performers, composers and listeners. Drawing on different fields and concepts, namely musicology, ecology, performance analysis, ecological psychology, embodied cognition, movement modelling and mixed reality<sup>6</sup>, we propose to approach the learning experience as embodied navigation (Antoniadis and Chemero, 2020).

Applying these concepts on Iannis Xenakis' work *Evryali* for piano solo, we developed a mixed reality environment that immerses a piano performance and a public space with real-time visuals. Hybridizing these environments capitalizes on the isomorphisms and

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<sup>6</sup> The concept of Mixed Reality (MR) was proposed by (Milgram and Kishino, 1994) as a combination of virtual and real-world objects along a "virtuality continuum" that goes from the real environment to complete virtual environment.



decouplings of physical, virtual and symbolic spaces, which merge in static and dynamic relationships.

From the performer's perspective, this concept of learning and performing questions the traditional score reproduction model, whereas from the audience's perspective, a multimodal augmentation of the musical experience is sought.

Although those ideas can be transferred to other repertoire, the focus on Iannis Xenakis' solo piano work *Evryali* is instrumental for this project. This work problematizes traditional notions of virtuosity and performability, bears extra-musical references and is encoded in a unique graphic design. Thus, *Evryali*'s extreme features demand a rethinking of technology-enhanced performance, which combines sensorimotor learning, symbolic interpretation and multimodal feedback in novel ways.

## Concepts and Background

### *Embodied Navigation, Palimpsests and Dwelling*

The conceptual framework for this work derived from the paradigm of embodied interaction with music notation we have been developing through several years, under the rubric "embodied navigation". This paradigm is materialized in mediation tools for real-time performance and learning.

As far as learning is concerned, we conceive music notation not as a text to be interpreted, but as a space to be explored. This space is hybrid: it includes both the material properties of the signifier (music symbols) and the physical properties of the signified (movement and sound). Drawing on ecological psychology, we formulate the relation between the symbols and their physical realization in terms of affordances (Gibson, 1979). Similarly, to an organism acting in an environment, performers navigate the musical score with their bodies, on their instruments and in the performance space, in order to discover, manipulate and realize the symbols' affordances for action and meaning (Antoniadis and Chemero, 2020). This hypothesis of embodied navigation challenges the traditional score reproduction model, which is based on the mental representation, internalization and interpretation of the text prior to acting (Cook, 2013; Leimer and Giesecking, 1972/1931).

The concept of embodied navigation described above can be extended from learning offline to performing in real time: How can the audience experience the performer's navigation of affordances between the symbolic and the real? To this end, we attempt to augment the performance space into a hybrid environment that merges physical, symbolic and virtual sub-spaces: The physical space denotes the concert space, the instrument, the performer's body, the resulting acoustic sound and the physical co-existence of performers and spectators. Virtual space refers to the digitalization and augmentation of these elements, notably motion capture that produces a virtual avatar of the performer and the mapping of virtual spaces on the physical stage. Finally, the notion of symbolic spaces refers to the organic integration of symbolic representations, such as Xenakis' notation and sketches.

As a result, various forms of interaction emerge: The performer's gesture shapes music notation, music notation becomes an integral part of the concert space, the virtual avatar of the performer allows the audience to experience multimodal aspects of the performance, which usually remain private, and so on. Importantly, the notion of symbolic writing is

extended to the body and to the media through the notion of the *palimpsest*<sup>7</sup> a selection and superimposition of scripted information in various forms, symbolic or data.

The ensuing space is inviting the audience to interact with it, or as it is, to ‘dwell’ it. We borrow the notion of ‘dwelling’ from the British anthropologist Tim Ingold, who develops the idea of a ‘dwelling perspective’:

*[b]y this I mean a perspective that treats the immersion of the organism-person in an environment or lifeworld as an inescapable condition of existence. From this perspective, the world continually comes into being around the inhabitant, and its manifold constituents take on significance through their incorporation into a regular pattern of life activity’ (Ingold, 2000: 153).*

This perspective is opposed to the ‘building’ perspective: according to the latter, the world has pre-existent significations and human beings have to construct representations; according to the dwelling perspective, the human being and the world are constructing themselves progressively thanks to their interaction.

### **Mediation Technologies**

In previous work, the embodied navigation paradigm materialized in a dedicated interactive system for learning notated music. The system is called *GesTCom*, acronym standing for *Gesture Cutting through Textual Complexity* (Antoniadis, 2018; Antoniadis and Chemero, 2020: 156-169).<sup>8</sup> It is a modular, sensor-based environment for the analysis, processing and real-time control of complex piano notation through multimodal recordings. The system aims at optimizing the performer’s learning experience through longitudinal multimodal documentation and analysis, as well as through real-time activity monitoring with augmented feedback and adaptation of the notation’s complexity to the user’s developing skills. In terms of hardware, it comprises systems for the capture of multimodal data, that is movement, audio, video, MIDI and, when available, capacitive data from *TouchKeys*<sup>9</sup> sensors on the piano keys. In terms of software, it is equipped with modules for the capture, analysis and control of the multimodal data<sup>10</sup> as well as modules for the augmentation and interactive control of music notation<sup>11</sup> Each of these systems functions both as stand-alone and integrated in the general methodology of embodied navigation.

Currently, the *Evryali* project capitalizes on smaller datasets of full body motion capture through the system *perception neuron*<sup>12</sup> and corresponding methodologies for data visualization and processing. In order to present and express hidden layers of movement quality, several methods exist to represent some spatial, temporal, and qualitative characteristics of movement, which remain invisible. For example, authors Omid Alemi, Philippe Pasquier and Chris Shaw (2014) propose an online tool to extract and to visualize features such as kinematics (speed, acceleration, jerk), Laban effort parameters, contraction/expansion of body, or to detect basic gestures or emotions from posture and

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<sup>7</sup> Palimpsests are ancient documents whereby an earlier inscription has been scraped or washed off by a subsequent one, leaving visible traces of its history.

<sup>8</sup> See also Videos 1 and 2 in Supplementary Materials.

<sup>9</sup> <https://touchkeys.co.uk/> (accessed on 08-09-2021).

<sup>10</sup> <http://ismm.ircam.fr/mubu/> (accessed on 08-09-2021).

<sup>11</sup> <http://inscore.sourceforge.net> (accessed on 08-09-2021).

<sup>12</sup> <https://neuronmocap.com> (accessed on 08-09-2021).

dynamic qualities of movement. Yet, Jean-François Jégo, Vincent Meyrueis and Dominique Boutet (2019) propose a workflow for real-time gesture analysis to visualize gesture kinematics features from heterogeneous data (Video, Motion Capture and Gesture Annotations) at the same time base. The tool allows to embody gesture visualization and descriptors adopting different Frames of Reference using augmented reality. It is thus possible to control the point of view of a 3D character (from the third person to the first person) to understand the different layers of the motion with an embodied navigation.

## On Evryali

*Evryali* is the second solo piano work by Iannis Xenakis, created in 1973 for the French pianist Marie-Françoise Bucquet, to whom it is dedicated. Xenakis (1974) says about the title he chose: “Evryali: another name for Medusa. Means wide sea. [...] This piece contains the birth of ‘arborescences’, which will be used more fully thereafter. The tree is a tangle of lines in pitch-time space. This entanglement like a bush, a tree, undergoes rotations, dilations, deformations, etc.”. The etymology ‘wide’ (or ‘open’) sea and its mythological origins (*Evryali* was one of the fearsome three Gorgons, next to the rather more infamous *Medusa* and *Siheno*) evoke both this main compositional and technical characteristic, the arborescence, and its notorious performance practice history, which accentuates the near impossibility of realization due to its sensorimotor aspects.

As Xenakis says, *Evryali* is the first piece where he used arborescences - but they are prefigured almost since *Synaphai* (Solomos, 2004: chapter 2). They are a kind of expanding polyphonies of lines branching out of other lines, originating in Xenakis’ ‘graphic scores’ (Figure 1) - a way of composing that he generalized very early in his evolution - transcribed then into music notation (normally, the performer has no access to the graphic score, only to the traditionally notated score, which is, in a way, problematic). The basic idea is that there are geometrical figures, and so they can undergo exact rotations, but, curiously, this is not the case in *Evryali*. It is also important to realize that Xenakis draws continuous lines in his graphic score, having in mind (non-linear) *glissandi*; it is probably why the pianist has to perform tremolos, to give the illusion of continuity. As Solomos has shown (see: Solomos, 2020: 172-176), arborescences, as well as some other Xenakis’ innovations, can be interpreted and are certainly listened to as “sonorities”, i.e., as composed sounds. They belong to one of the main three Xenakis’ sonorities, continuous (*glissandi* or not) sounds.

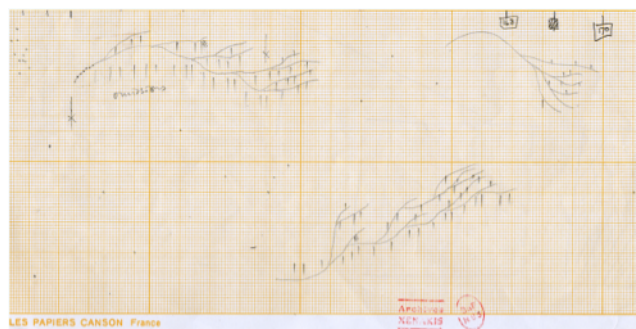


Figure 1. Sketches of arborescences for Iannis Xenakis’ *Evryali*.

In *Evryali*, arborescences are possibly alluding to the ungraspable infinity of the sea or to the uncontrollable energy of flooding. This polyphonic expansion in pitch space is the main determinant of the task’s impossibilities. Very often, the ensuing textures are indeed both mentally and physically impossible to grasp, and often not realizable in the tempo assigned at

the beginning of the piece. Another challenge concerns the infinitesimal and rapid change of pitch in the context of complex chords.

Last but not least, in *Evryali* there are not only arborescences. In fact, the whole piece is composed with the three main types of Xenakis' sonorities: continuous sounds, repeated sounds and clouds of points. Continuous sounds are represented by arborescences, repeated sounds by repeated chords (or notes), and clouds of points are occurring in climactic sections.

### ***Performing Evryali***

Recent analyses have characterized *Evryali* as a notable example of 'anti-virtuosity' (Couroux, 2002) in the sense that it renders redundant the traditional notion of virtuosity as perfect realization. In our own approach, *Evryali* positively invites instead a multiplicity of creative approaches to its notated impossibilities, each of them prioritizing and shedding light on different aspects of the work that remain always incompatible.

The performance featured here set the priority of realizing all notated pitches and textures. This decision functions as a constraint, since it does not allow for maintaining the same tempo throughout the performance, and is incompatible with alternative approaches of note omissions in order to keep a steady tempo (Thomopoulos, 2011). Playing all the notes is achieved through techniques of multidirectional broken chords and rapid arm displacements, which are inspired from the stride technique of ragtime piano, as shown in Figure 2. The physical effort to grasp the ungraspable, so essential to the xenakian spirit of transcendence (Varga, 1996), is thus projected through conscious variations of tempo according to the texture, not necessarily through a frenetic tempo that occasionally allows for thinner textures than the ones written. In the same vein, the plastic projection of Xenakis' arborescent polyphony horizontally is not prioritised against the subtlety of complex sonorities vertically, which require space and time in order to be properly performed and perceived. Thus, beyond an analysis of form and texture as notated in the score, the interactive features presented in the next section attempt also to capture interpretative decisions. In that sense, they allow for a glimpse into the learning process of the performer in a non-symbolic, experiential way.

### ***Palimpsestic score layers***

Following up on the ideas outlined in the first section, we imagined the score for Iannis Xenakis' *Evryali* as a palimpsestic representation of lower-order affordances and higher-order parameters, featuring the following layers:

- Original score, published by *Editions Salabert*
- Annotations of the original score, created in *Adobe Illustrator*
- Graphical sketches by Iannis Xenakis, kindly provided by the Xenakis archive, annotated also in *Adobe Illustrator*
- Multimodal data captured, synchronized and visualized through the *GesTCom*, as shown in Figures 3 and 4.

The main higher-order symbolic parameters that were visualized and interactively projected are form, texture and difficulty or impossibility of realization.

In Figure 5, two layers of the palimpsestic score for *Evryali* are superimposed. Different colours indicate different textural types. Each of the original composer's sketches contains two lines. Each textural frame is indexed through a verbal description, its placement in the edited score by Editions Salabert (page and bar numbers) and the track number, referring to

our recordings of reference at Athens University, Studio LabMAT (June 2020) and Ircam, Studio 5 (September 2020).

Figure 2. Bars 75-82 of *Evryali*. Coloured lines indicate the expanding arborescent polyphony through the bifurcation of individual lines. The yellow filter indicates what is possible as opposed to the orange filter that indicates physically ungraspable passages. Blue and orange arrows indicate stride-like displacements changing direction for the right and left hands respectively. The change of direction aims at the economy of movement. Blue and orange frames indicate notes played simultaneously in the broken chord constellations.



Figure 3. Patch in Max/MSP for recording audio, two Kinect videos, 3D acceleration and 3-axis gyrosopic data and MIDI.

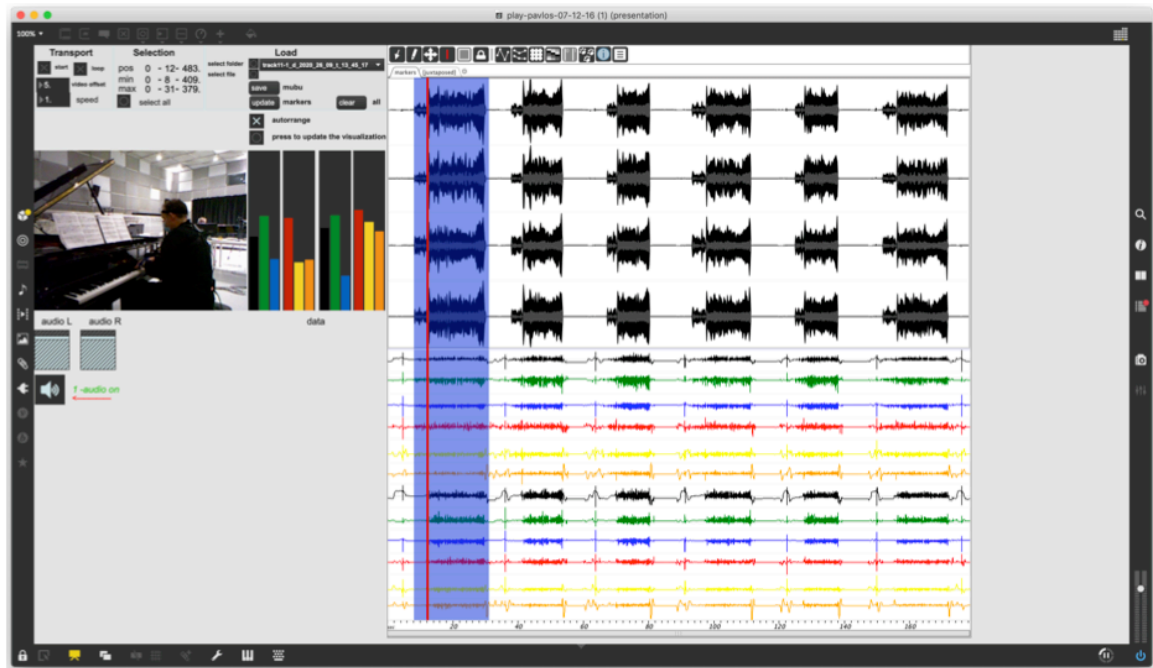


Figure 4. Patch in Max/MSP for reproducing multimodal data as recorded above.

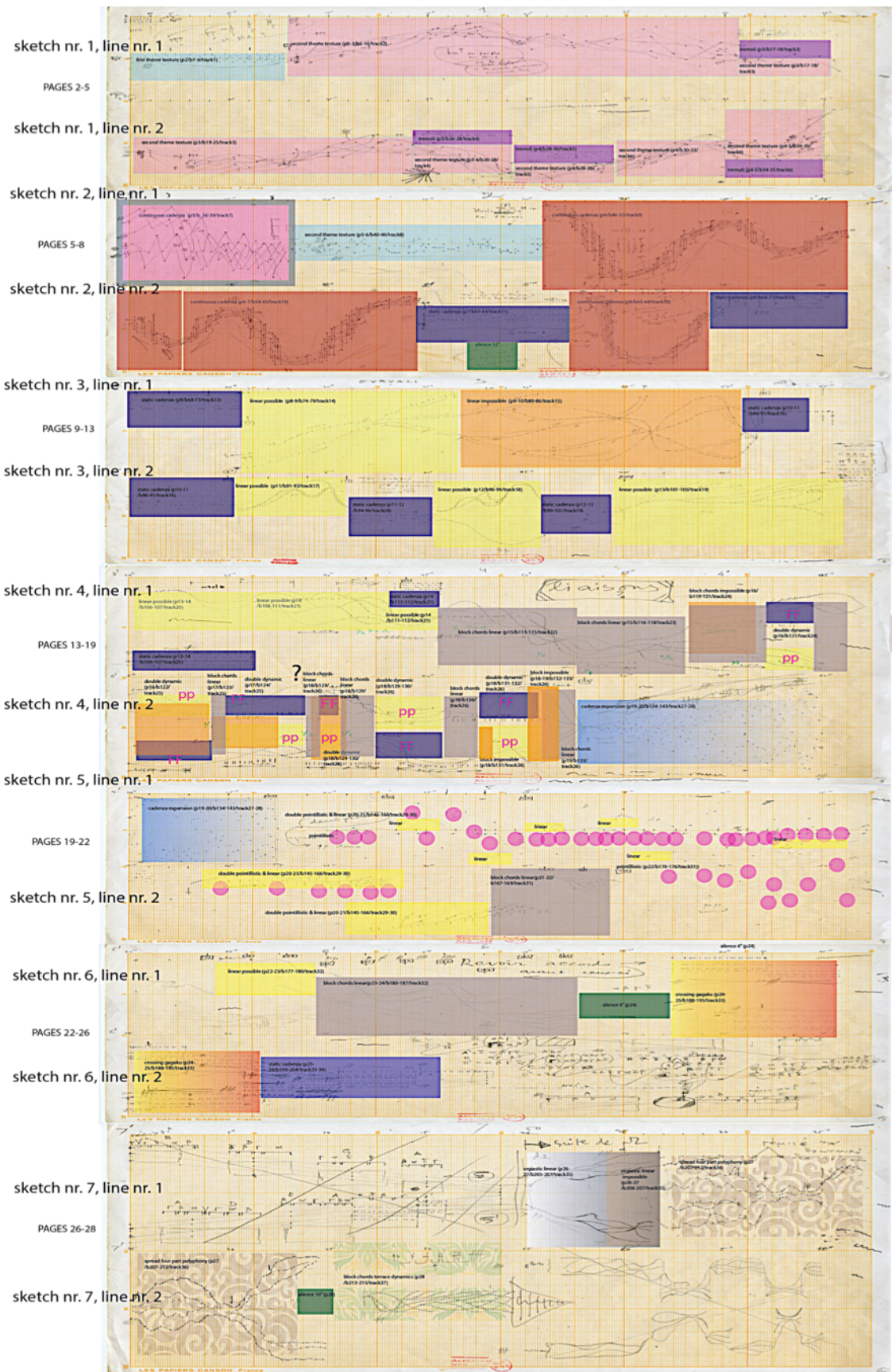


Figure 5. Two superimposed layers, providing a textural analysis of Xenakis' sketches.

Please note the articulation of the piece's form according to the following parameters, shown in Figure 5:

- Alternation between blocks of points and linear arborescences of varying complexity. For example: First theme texture versus Second theme texture (sketch nr. 1, line nr. 1/ light blue versus pink frames). This textural distinction will later be integrated in the virtual 3D spaces, as shown in Figure 7, left part.
- Alternation between possible and impossible passages (as also shown in Figure 2). Impossible passages are indicated with orange colour. For example, sketch 3, line nr. 1 / yellow versus orange frames.
- Alternation between simple and superimposed textures (for superimposed textures, refer indicatively to sketch nr. 4, line nr. 2)
- Silences (green frames, indicatively sketch nr. 2, line nr. 2)

### ***Interactive scenography of the performance***

In a further iteration of the conception of notation as an environment of affordances, we propose to create on stage a virtual environment in order to merge physical and symbolic spaces described above. To do so, we present as a palimpsest of visual effects the physical movement kinematics using a motion capture system. A video record of the final performance is presented below as 'online supplementary materials' (link provided at the end of this paper).

### ***Aesthetic choices regarding *Evryali****

Since *Evryali* evokes "the open sea", we naturally opted for aesthetics related to water and light, aiming to create a synaesthetic experience combining sound, visuals and motion. This objective resonates with the ambitious mixed-media works by Xenakis in archeological sites, known as *Polytopes*. To do so, we designed a virtual stage made of minimalist 3D elements, glowing neon lights and caustic effects and including sketches of the partition (A. Sketches and timelines, Figure 6). We used particle effects and volumetric lights to provide more density to the virtual environment. All these visual effects could be controlled in real time using different input controllers (mouse, MIDI and tactile screen). We also were able to modulate the visual effects according to the current musical texture (Figure 7). Regarding the motion visualization possibilities mentioned in part 2.2, we chose to display a virtual avatar of the performer. Selected body parts' kinematics and physical efforts of the performer were represented using 2D graphs (B. 2D graph and Performer's Avatar, Figure 6) and also 3D curves presented both on the avatar and on graphs projected on stage (C. First person Avatar and 3D trails; D. First person Avatar; and 3D trails; both in Figure 6).

### ***Interactive platform and input Controls***

The interactive scenography was created using the real-time engine Unity. This platform is well-suited for developing dedicated modules for the composition of scenes and effects with interactivity. We designed the system to be flexible to process pre-recorded and real-time data. Regarding the possible inputs, we were able to mix audio source, motion capture or MIDI to modulate the various elements in the virtual world. For instance, the virtual character is able to move according to the captured performer's gestures, the velocity and moving patterns of particles can be controlled as well as the intensity and properties of light, etc (E. Particle floating in space; and F. Sphere and caustic effects; both in Figure 6). The graphical



elements were presented as a palimpsest, stacking layers of information which slowly fade out when a new one appears. The process is similar to the overlaying of symbolic elements, as presented in part 3.2.

### ***Hybrid Performance Spaces***

We designed an Augmented Live performance, whereby the activity of the performer can be visualized through different real time video projections on stage and around the stage (G. Real time palimpsest on stage using video projection, in Figure 6; and Video 3). Since audio and visual elements are presented as virtual objects in the 3D space, their affordances invite the audience to explore and navigate. Regarding interactivity, the audience is able to move around in the virtual space using control interfaces such as a tactile screen or controllers, and thus perceive the spatialized sound of the piece from different perspectives (Figure 8). The platform modularity was designed to explore different use cases, articulating data visualization and visual effects controlled by the selected inputs in real time.

### ***Spectators dwelling in the performance***

The goal of the scenography is to immerse the spectators in this virtual environment modulated in real time, which presents elements that are invisible. We choose to show the technology as an integral part of the performance: the equipment phase of the motion capture suit, usually hidden, is orchestrated as a ritual. The visualization of the pianist's movements magnifies the micro-movements of any part of the body, in this case we focus on the hands. The operators of the interactive controls are not placed in the background but on the side of the stage, since they are also actors of the performance. We also add the opportunity for spectators to participate in the visual controls with the operators (refer to "Performance#2 / 'Online video of the performance at University Paris 8'", see Online Supplementary Materials). The immersive scenography is made of multiple spatial projections on the stage, on the ceiling and on the audience seats. The combination of the piano, the video projections and the kinesthetic elements aims at creating a synesthetic experience of the concert. The augmented concert is an invitation to dwell in a polysensorial world blurring the lines between the stage and the public, the performer and his digital avatar, the visuals operator and the performer, the physical and symbolic spaces. The immersive space, echoing the volume of the wide sea as a space of encounter and hybridization, offers a new form of access to the symbolic elements of Xenakis.

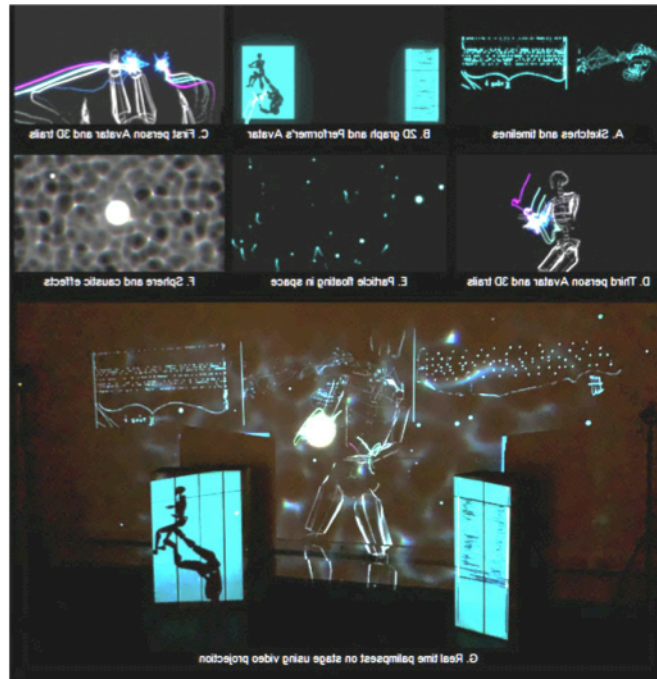


Figure 6. List of six different effects and final rendering combining these effects as an interactive palimpsest in the Unity interface (attached video 3 in 'supplementary materials')

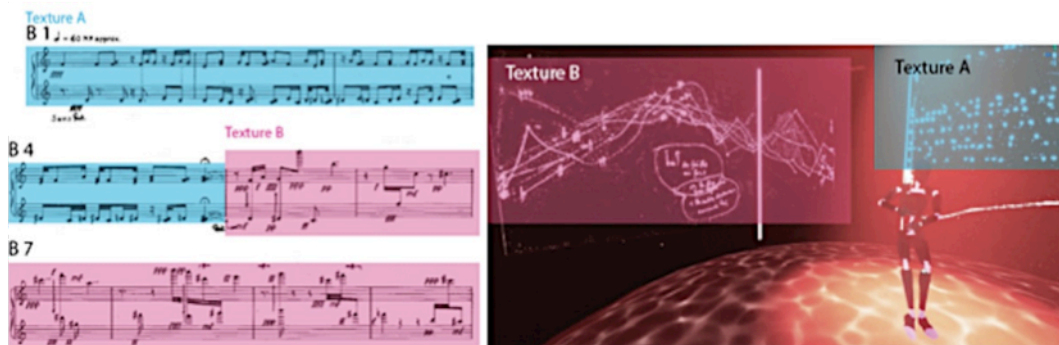


Figure 7. Evryali, bars 1-9. You may see the correspondence between the two distinct textures, blocks and clouds, as 'Texture A' and 'Texture B', in blue and pink filters, both in score form (left part) and through the integration of Xenakis' sketches in a virtual 3D space (right part).

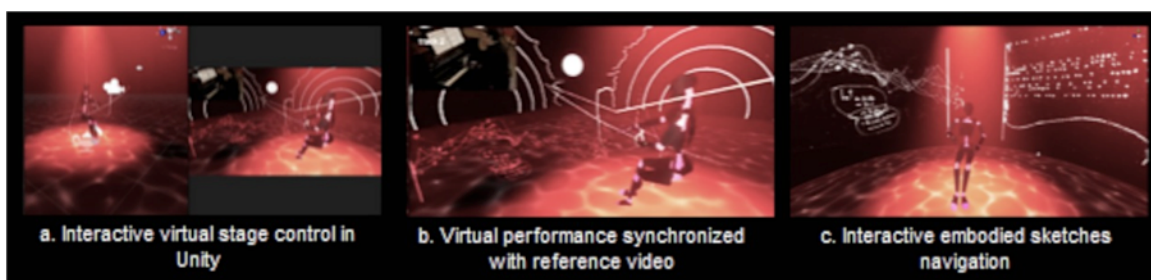


Figure 8. Unity interface and real time embodied navigation in the virtual stage (video 4 in supplementary materials)

## Conclusion and perspectives

Inspired by ecology, ecological psychology<sup>13</sup> and embodied cognition, we have proposed a conceptual approach and a prototype for the merging of physical and symbolic spaces. Technically, we used real-time motion sensing and Mixed Reality technologies. We assume that the visualization of lower-order affordances and higher-order notational parameters, as well as their interactive integration in carefully designed virtual spaces, allows for an improved perception of performative priorities for the pianist and for an augmentation of the concert experience for the listener/participant.

Future work will further evaluate the experimental system with a variety of users, using semi-structured interviews. This should allow for improving the system and provide evidence that the visualization of physical and symbolic features as affordances in a learning participatory environment improves the learning process of the pianist and brings different perspectives from the audience experience.

The notion of improvement is complex and should be carefully examined and discussed. For example, many systems seek to increase efficiency, yet the notion of efficiency is debatable when it comes to an autotelic activity like music-making. James McDermott et al. (2013) have detailed many of the reasons that differentiate music interaction from other forms of interaction, where user efficiency is the ultimate goal, as well as several different dimensions of difficulty. Some of these dimensions are evaluated as desirable, since they foster long-term engagement and expressivity, others are deemed as a 'necessary evil,' and yet others could be redundant and be replaced. How do these considerations transfer to the complexities of music notation and even more so to the interactivity between notation and the other elements of the dynamic system of performance? The proposed work is thus intentionally complementary to controlled experiments performed in the lab that provide us with important findings on skill acquisition (Caramiaux et al., 2018).

In relation to these questions on difficulty, Evryali provides an illuminating example of a work, whereby physical effort is an aesthetic determinant but also a potential obstruction to the work's subtleties. This symbolic but also psychophysical dialectic could be designed as a constraint in the virtual environment, which would be visually communicated to the listener/participant, but also interactively invite his/her active participation. We are currently working on the idea of *visual glitching*, as the first step towards the projection of difficulty as a constraint in the virtual environment. This constraint is to be sensed by the participant as much as by the pianist him/herself.

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<sup>13</sup> See end of section 2.1 in which ecology reference corresponds to Tim Ingold's dwelling perspective, the concept ecological psychology is also approached in section 2.1 on embodied navigation. All subsequent analysis in this paper (merging spaces, palimpsests, and so forth) applies the relevant terminology and concepts.

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### ***Online supplementary materials***

Online video of the performance at University Paris 8: <https://youtu.be/iOrbrHbkqZc>

Online Videos 1-4:

<https://www.dropbox.com/sh/r51rvwyjjbo6utf/AABnfzPMbtHDkHigAxPCmZcqa?dl=0>

### **Acknowledgments**

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# *Blirium* (1965) by Gilberto Mendes: new perspectives

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Teresinha Prada<sup>1</sup>

**Abstract.** This paper examines *Blirium* (1965), describing the revival of this piece with virtual media that brings performers together today. In *Blirium* there are multiple musical representations, such as tonal and atonal sonorities, and the deliberate use of musical quotation; however its strong experimentalism imposes on the performer a series of musical choices rather than a definitive score. Thus, *Blirium* forces the performer to think what kind of musical, technical and interpretive choices they will make in their interpretation, as the musical score consists only of instructions. Through *Blirium* Gilberto Mendes can be seen as a pioneer of collaborative work and, in addition, *Blirium* can reflect the aesthetic-cultural and technical training (nowadays, also the extended technique) of a performer. As an artistic work in times of social isolation, *Blirium* can, after more than half a century since its debut, become an important musical work in dialogue with virtual performance.

**Keywords:** *Blirium*; Gilberto Mendes; performance; virtual media.

## Introduction

*Blirium*, a work by the Brazilian composer Gilberto Mendes (Santos-Brazil, 1922-2016), was created in 1965. Mendes was a pioneer in the Brazilian avant-garde in the 1960s, creating his well-known Festival Música Nova in 1962, inspired by the Darmstadt Summer Courses in Germany. The Festival Música Nova is still active; while Mendes was in charge, during more than four decades, the event brought to Brazil some of the most important contemporary composers from many countries, such as Dieter Schnebel (Germany, 1930-2018), Frederick Rzewsky (U.S.A., 1938-2021), Coriún Aharonián (Uruguay, 1940-2017) and Jorge Peixinho (Portugal, 1940-1995).

Mendes' musical style mixes mass-media, pop art and much modern music. With regard to those connections, the composer intended to get involved with social question, leading some years later to a commitment through Art known as “politically engaged music”, a denomination created from the ideas of Cornelius Cardew (U.K. 1936-1981) and adopted by Mendes in his collaborative circle. This socio-political epithet was presented even in folders on Festival Música Nova, as a label, a means for activism, above all, against the Brazilian and Latin-American governments, from 1979 and during the 1980s. Beyond that, an important Brazilian socio-cultural historian, Carlos Zeron, concluded that the label of avant-garde in Arts or Music constituted a form of anti-establishment attitude, and that Mendes' group had created the link between ethics and aesthetics. This concept has defined language (in the aesthetic sense) as the essential place of power (ZERON, 1991:03).

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Many Brazilian scholars (NEVES, 1981; ZERON, 1991; SANTOS, 1997; VALENTE, 1999; PRADA, 2010, MAGRE, 2017; SANTOS, 2018) have studied the figures that influenced Mendes, and they consider three main phases of his compositional procedures: firstly, in the 1950s, a brief Nationalism, but with some singular less traditional features such as sonorities and harmonies under the impact of his teacher Claudio Santoro (1919-1989); secondly, almost immediately in the 1960s, Mendes launched into the most radical experimentalist period, using anything from pitch elements – atonal, Anton Webern’s serialism, sound design – to John Cage’s theatral and performance means – the famous choral music “Beba Coca-Cola” (1966) is from this time; and finally, in the 1980s, a kind of post-modernism could be seen in his repertoire, in the form of a substantial synthesis of many trends using a language of free choice.

Mendes has been continuously highlighted in academic works for his trend of musical modernism and experimentalism. Aside from that, cinema and literature having touched him since childhood, Mendes can also be studied from this point of view, including his interest and knowledge of many cultures that was already apparent in two autobiographical books, a novel, and dozens of articles. Mendes was also recognized, as a composer-professor at São Paulo University and Austin University, Arizona-Texas, for the artistic education of many young composers of that period.

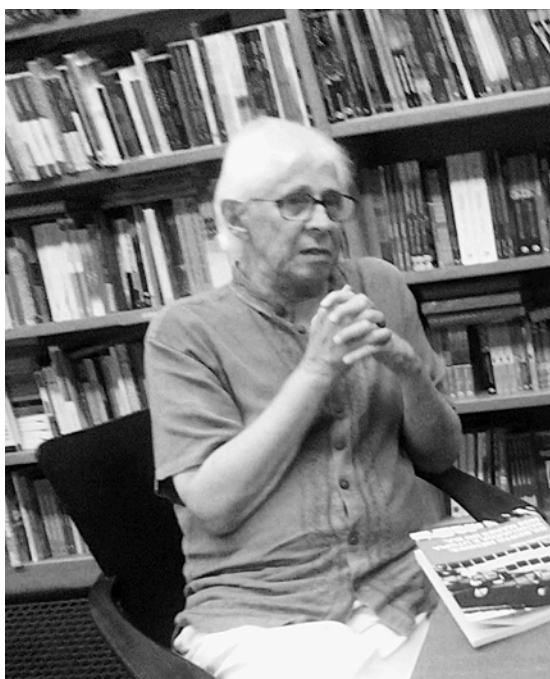


Figura 1. Gilberto Mendes during an event in São Paulo, 2010.

## **Approach to *Blirium***

*Blirium* belongs to a period in Brazilian concert music regarded by musicologists as highly experimental. When one reads the description of *Blirium*, the collaborative aspect immediately stands out, but its relevance to virtual media, that today brings performers together, stands out also. In this paper, the way to perform *Blirium* telematically will be demonstrated through a performative experience with a classical guitar trio.

In *Blirium* there are multiple musical representations, such as the juxtaposition of tonal and atonal sonorities, and the deliberate use of musical quotations; however, the highlight is, in

fact, its strong experimentalism, which imposes on the performer a series of creative musical choices unlike the usual definitive score.

The quotation section in *Blirium* has the double function of promoting memories in the public and demonstrating the interpreters' skill in realizing links between the music of *Blirium* and their own ideas for the choice of quotations.

As for the score, there is none; instead, there are only instructions, "a machine to make music", as Mendes explained in his book (MENDES, 1994:85). Nonetheless, *Blirium* cannot be considered a totally aleatoric music, as we have the author's instructions and the pitches of the notes. In fact, this music is better described as a kind of controlled improvisation.

On examining the instructions, we find tables and illustrations, and one can imagine the presence of a Surrealist or Dada touch, because *Blirium* needs a clock to play the music; the clock-hands are related to musical notes, mostly minor seconds, as we see below.

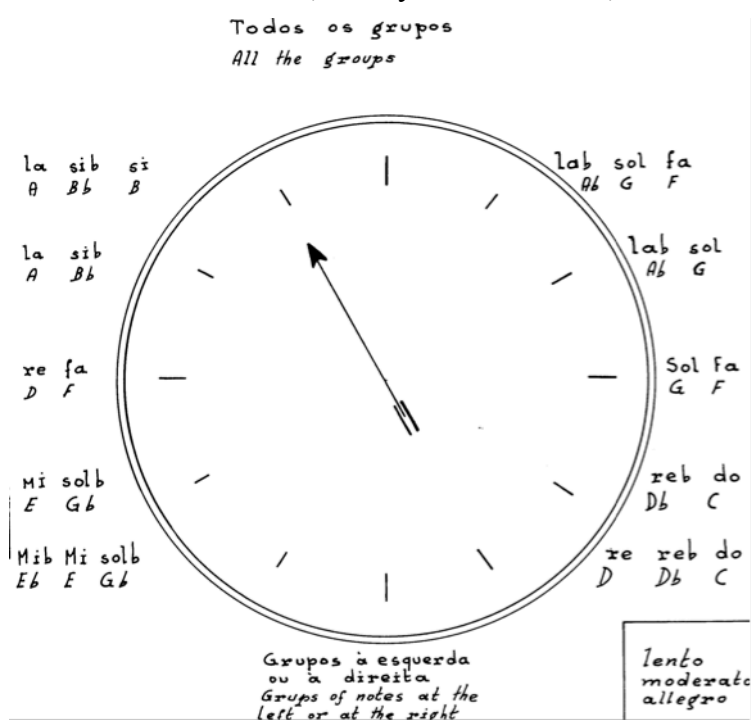


Figura 2. The clock in *Blirium* (MENDES, 1965), defining pitches.

The minimum duration is defined as six minutes, and the instrumentation can be:

- version A – one, two or three keyboards;
- version B – three, four or five instruments of the same family;
- version C – different families, a maximum of six instruments beyond versions A or B.

The most important observation to be made here is that in the versions A and B the same performer can record one or two interpretations in playback to put together with the live performance.

The score consists only of instructions for the performers; a text in the score explains contexts and procedures, and the choices must then be constructed. This is an improvised and partially aleatory performance, given that the sonorous results are controlled by some parameters proposed by the author. The score is in fact a script, made by each performer, requiring them



to write their own planned choices with improvisations *in loco* – that is the essence of *Blirium*.

The performance takes place when the interpreters look at the seconds of a clock or chronometer and according to the number indicated at that exact moment, a group of notes must be played.

In that sense, *Blirium* would be aleatory, but it is already subject to markings within a rhythm, articulations and timbre previously established by Table A, written by the interpreter.

This Table A is a plan where the instrumentalists draw five horizontal lines of the same size on each page, using three pages, that is, fifteen lines in total.

Each line corresponds to Time, or the notion of time by possible durations, using the group of notes indicated by the clock-hand to be played. In each line it is marked when the notes, chords, clusters, and glissandi will be made, using graphisms, such as:

● rhythm;
■ clusters;
⋮ glissando;
• chords.

Figura 3. Graphisms as suggested in *Blirium* (MENDES, 1965) for the construction of Table A.

After writing the five horizontal lines per page, the instrumentalist divides each of them into nine vertical lines, which will give the idea of time within a space - these will be the *beats*. According to the author, these vertical lines are the notion of time in “a metric obtained randomly” (MENDES, 1965).

Then, the performers will be composing their own fifteen lines.

Table B indicates sections of the instrument, a certain number of keys on the piano or the frets on the guitar... that contributes to a variety of musical ideas.

Further Tables can indicate Tempo (slow, moderato or allegro) and Dynamics (from ppp to fff).

There is free choice for the use of legatos, staccatos, trills or tremolos, and any specific element of the instrument – and we will see the possibilities on the classical guitar.

After a number of those transitions watching the clock, Gilberto Mendes proposes the placement of excerpts from any known music that occurs to musician, it can be classical or popular, without time control, but with an estimated average – meaning improvisations with fragments of some song that is "perfectly recognizable" by the public; this is the moment the composer referred to as “uncontrolled freedom” (MENDES, 1965).

Those procedures transform and deform the sonorities, but in an expressive way; these atonal counterpoints – obtained by the three or more layers – create a polyphony, which has points of arrival in the quotations.

To sum up, *Blirium* demands: to read the instructions; to write your own score, planning musical elements and quotations; if it is the version with one performer, to make three solos, recording first and second interpretations, and mixing; to make the performance with improvisation and the playback – or if the performance is with your partners, to pay attention

in the chamber music, mainly to your partners quotations, whether recorded or in presential mode.

## ***Blirium* on three classical guitars: report of an experience**

*Blirium* has already had a good number of performances during the last fifty years.

The premiere was at São Paulo Municipal Theatre, in 1965, with the Brazilian pianists Paulo Herculano (1935-2017), and Pedrinho Mattar (1936-2007) and the percussionist Ernesto de Lucca (1913-1977) in a polemical concert, which scandalized the audience.

Another pianist, Caio Pagano (Brazil, 1940), made the first recording in 1979. The Brazilian Piano Institute has uploaded the music from Pagano's LP to its YouTube Channel. In Pagano's choice of quotations we have Johannes Brahms (1833-1897), Carlos Gomes (1836-1896) and Gustav Mahler (1860-1911).

There are as many renditions in the past as recent performances; in 2015, in the presence of the composer at the Festival of Contemporary Brazilian Music, the percussionist Fernando Hashimoto (Brazil, 1972) used playback for his performance and Gilberto Mendes stayed on stage, explaining the procedures to the audience before the recital.

In my participation in the same Festival, I also used playback with my live performance. The quotations I used were a kind of homage to Gilberto Mendes, a mixture of Serenade by Franz Schubert (1797-1828), *Prelude La Fille aux Cheveux de Lin* by Claude Debussy (1862-1918); Mack the Knife by Kurt Weill (1900-1950); and Brazilian music, *Wave* by Tom Jobim (1927-1994) and *Prelude n° 1* by Villa-Lobos (1887-1959), as well as a guitar piece, *Theme and Variations on "The Magic Flute"* by Fernando Sor (1778-1839). The duration was about nine minutes.

I had the opportunity to show my efforts with *Blirium* to Mendes when working on my Ph.D. (2002-2006). In a meeting with the composer at Santos, he explained the essence of *Blirium* to me and played Pagano's version as an example. After that, I played my musical ideas and quotations, a mix of standard guitar music. Mendes suggested melodic procedures and the ideal size for quotations, saying that the preferences can show the cultural background of each musician, and the development of the music for *Blirium* can show the quality of his/her expressivity and sense of belonging to contemporary music – what a lesson!

Our current experience with *Blirium* was made in April 2021 by remote musical collaboration during the pandemic. This involved three individual performances filmed by smartphone, and a music edition app. I invited my former students Robson da Silva and Thiago Augusto de Oliveira to play *Blirium* with me as a guitar trio. To achieve this, we approached the score of *Blirium*, suggesting solutions for our remote performances.

Firstly, we had a virtual meeting. We argued that the variety of expressive issues and video possibilities in *Blirium* on guitar repertoire and technique has only increased since 1965 - with the enlargement of the use of extended techniques as well as the technology.

At the virtual meeting, we studied how to make the dialogues as chamber music, what quotations to use and the meaning of some of them, and the planning and preparation of the score. In addition I posed practical and conceptual questions involving the contemporary compositions of the 1960s.

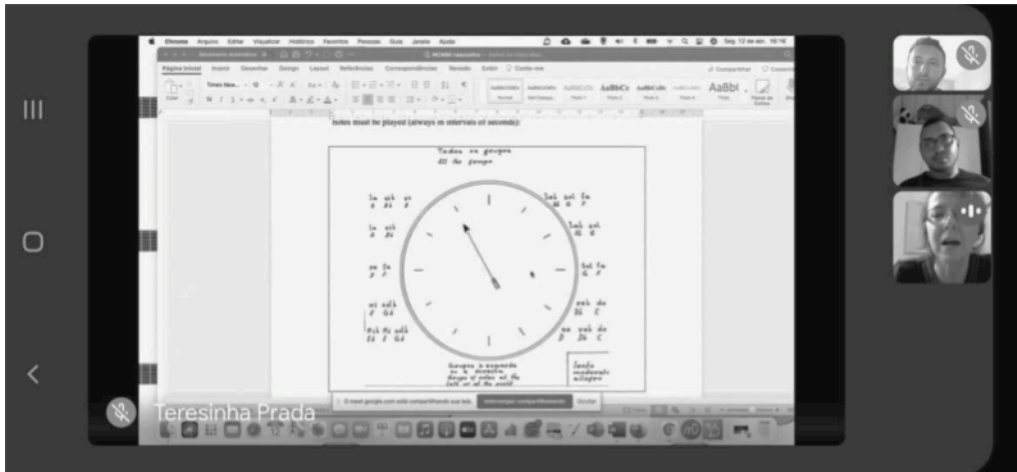


Figure 4. Virtual meeting of the three guitarists, studying how to do the remote performance.

After these meetings, for a few days, we exchanged messages by a communication app and I answered questions about the script of Table A and how to represent the character of the guitar, as this was an idea shared by us - to show the sonorous possibilities of the guitar and its repertoire in the quotations.

Up to that point, I concluded that the meeting and the messages had produced a chosen set of markings, like gestures from an imaginary chamber music; the dialogue could from then on be by telematic means, but given a previous (personal) relationship this can be much more interconnected.



Figure 5. Front cover of *Blirium* (MENDES, 1965)

This project of *Blirium* was developed in stages. Firstly, I made my recording of *Blirium* as a guide, showing the moments of my improvisations and when I would make a quotation; after that, I sent the video to the guitarists Robson da Silva and Thiago de Oliveira. By messages, we had conversations about this first video and the production of the score.

In sequence, Oliveira created his score and sent it to us. Next, he sent his video. Immediately, on the same day, Silva went through a similar process.

Once in possession of the three videos, we made only brief commentaries about the good fruits of this work, in our opinion. As a last procedure, I edited the material with sound and video processing.

In sending the final video product, both guitarists approved the similarity of the sonorous material, which shows that by following the same studied steps and technical conditions, we established common concepts, and the resulting mood was of artistic collaboration between the three performers.

In this experience of *Blirium*, we have made a reduced version. The only test video made of our performance has a duration of about 1'30". The quotations prepared by the trio were two standard excerpts from guitar music of Villa-Lobos: *Prelude n° 3* (1940), bars 23 to 26, played by Oliveira, and an excerpt of the *Guitar Concerto* (1951), second movement – *Andantino*, bars 5 to 9, made by Prada; while Silva played a fragment of *Allegro Solemne* from *La Catedral* (1921), bars 73 to 76, by Agustin Barrios (1885-1944).

The production of the score was planned to provide the simulation of chamber music moments, with attention to each entry of the quotations. The agreement was only to do quotations one after another, taking care not to overlap these recognized pieces.

After this, the music score was produced with the intention of presenting characteristic guitar elements, from the notes indicated by the clock-hands, adding to this a demonstration of the guitar's possibilities.

As a description of the intentions and skills of the three guitarists, Oliveira made his sequence of the clock-hand notes during 1'30" using, in order: Bartok *pizzicato*, trill, harmonics, chords in fortissimo, his quotation of Villa-Lobos' *Prelude n° 3*, variations of tempo, glissandi, another Bartok *pizzicato*, variations of timbre (natural and metallic); Silva, in his turn, used: variations of tempo, variations of the intervals creating a linear melody; Bartok *pizzicato*, percussion on the bridge alternating with notes, glissandi alternating with trills, octave variations of the clock-hand notes, tremolo, his quotation of Barrios' *La Catedral*, another tremolo and finally a harmonic; and finally Prada made: improvisations using the clock-hand notes creating a linear melody, trill, variations of tempo, glissandi, octave variations of the clock-hand notes, her quotation of Villa-Lobos' concerto, trill, chords, variations of tempo, a large glissando with a chord, slurs and a final phrase with harmonics in *diminuendo*.

Moreover, the three guitarists controlled the intensity of their volume during partners' quotations, and created a convincing finale, using *diminuendo* and *poco rallentando*. A kind of climax is reached before the last quotation. This covers a large quantity of factors that were treated in this remote performance.

The combination of a kind of scenario was a relevant aspect, so the three musicians agreed with a neutral ambience such as a flat wall background and casual clothes.

The recordings were made in their houses, in just one take, without editions and after the training of listening to my pre-recorded audio as a guide.



Figure 6. The virtual performance of *Blirium* with Robson da Silva, Thiago de Oliveira and Teresinha Prada, on April 2021.

### **Conclusions: *Blirium*, still in the avant-garde.**

Videos of ensemble performances spread over the Internet in 2020. In the new, remote approach, musicians play, produce music and video, edited and streamed on audio-visual platforms. However, the process does not result in, nor sound like the presential mode – and everybody knows it. Nowadays, the technology for the purpose of making music is really a challenge in itself for performing music.

The central problem is the significant differences from the concert situation, where musicians' synchronization works naturally because they are sharing the same stage. Musicians are prepared for musical practice in live concerts. The pandemic is a situation that can affect the status of musicians, and put their careers at risk, intensifying the difficulties of being a musician.

For example, with regard to recordings, from 2020 these were made at home in a remote situation, and we have perceived in this collaborative musical practice that we have only just begun to create the musical gestures that traditional chamber music would require. There are promises from high-tech companies to resolve issues of delay, transmission and connection.

In our experience of *Blirium*, this environment of bytes and these conditions of performing create the sensation of being more in a recording studio than on a stage. However, when we perform *Blirium* the piece has such a wide range of guitar performance techniques, diversity of dynamics, and interaction in real time, that the sensation of being a musician seems to return – so that this remote and edited performance could work better than most other compositions, probably because of *Blirium's* instructions and free choices, which permit a musical flexibility of tempo.

*Blirium* already anticipates and continually permits a kind of flexibility through its phrases and attacks as natural procedures, constituting a tool for performers in their expression, especially when in playbacks or in collaboration in the virtual environment.

Beyond this, the preparation of scores and studies that a project like *Blirium* promotes, can be a deeply transformative process. In these difficult times, the reconsideration of positions could be the appropriate moment for expanding our concepts.

In 2020 everybody knew that live concerts couldn't happen, so this aspect of culture changed, firstly with teaching activities – a huge number of musicians are teachers too – and then the question of performances, dozens of live concerts flared up after that; the duration of the pandemic has accelerated these decisions.

A word about the challenges of doing a piece like *Blirium*: preparing the score is not writing the musical notes that will be played, but the actual effects, while starting to improvise in real time; letting go of being classical musician is sometimes a challenge, as their procedure is to follow the work of a composer. In *Blirium*, the interpreter must dialogue with the work of the composer, as a co-author, something academic studies (amongst which I count myself, as a former student and guitar professor) do little to prepare ourselves for.

As I said before, I had the opportunity to show previously to Gilberto Mendes the preparation of my first *Blirium* score, and this experience of sharing between composer and performer is so significant, making much more sense, and can be inspiring. On other occasions, we had conversations about his politically engaged productions and how the avant-garde really can be a liberating experience.

The first point is: how much do performers want to be in charge – that is, acting as composers? The jazz musicians have improvisation patterns that are intrinsic to the performance situations; however, classical music involves enormous preparation for playing on stage, just doing the composers' choices.

Returning to the subject that this pandemic imposes, I reiterate that playing *Blirium* is taking a stand, adopting a different position from our classical formation. Distinct attitudes are emerging now, because of the covid-19 restrictions. The remoteness and telematic possibilities have made dozens of musicians move on to video performances, working in unprecedented situations, trying to do something. Thus, some new roles are arriving to the performer, requiring technological skills, and a dialogue with machines. Nevertheless, *Blirium* already had this, since its composer, in the original score, proposed that the music could be done with playbacks; and in that period many composers were defending the use of machines in music; besides which the 1960s were a huge step towards the concept of *work in progress*.

*Blirium* was born under the sign of the New – a music from the 1960s. Probably, my main collaboration in *Blirium* for future performers was to naturalize the request for co-creation. Nowadays, *Blirium* has presented contributions for the construction of our adaptation as musicians, because of its capacity for an open approach and free choices. *Blirium* also represents the thinking of Gilberto Mendes, his free and modern aesthetic procedures, his artistic and committed interests.

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# Reflections on *Re:Mains* for Multi-Pianist: an interview with the composer Christina Athinodorou

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*Annini Tsioutis*<sup>1</sup> and *Christina Athinodorou*<sup>2</sup>

**Abstract.** Following the demanding performance of Athinodorou's *Re:Mains* for Multi-Pianist, Tsioutis interviews the composer in an attempt to identify the challenges of the journey from concept to realization, as re-examined from two different perspectives: retracing the composer's creative process, and the pianist's learning process. The ensuing discussion focuses on technical and artistic concerns – identified as spatio-kinetic – which arise from the specific instrumental setup i.e., three different pianos for one performer. The interview sheds light on how new piano vocabulary is integrated into the already known. It is also argued that the idiomatic writing of the piece can help reveal the pianist's qualities as a performer, and enhance their cognitive environment, leading to a further exploration of relevant repertoire and concert programming, as well as building new bridges of communication with the audience.

**Keywords:** contemporary piano; multi-pianist; toy piano; gesture; space; movement; practice-based collaboration

## Introduction

This paper is the outcome of the collaboration between the composer Christina Athinodorou and the pianist Annini Tsioutis. Following the premiere and the second performance of the work *Re:Mains* for Multi-pianist, and in preparation for the NCMM21 Conference in May 2021, where some preliminary results of this work-in-progress were presented, the composer and the pianist engaged in a written exchange of questions and observations, during which they individually retraced the creative and the learning process of the piece respectively. The paper discusses various subjects which were at the core of the exchange between the artists, and which are considered to be essential for the comprehension of the composer's creative process, as it is crystallized in the work.

A chronology of events is followed by a presentation of the specific characteristics of *Re:Mains*. These are then classified in two categories: innovative and familiar. Next, the implications of this classification for the learning process and the performance of the work are discussed, with reference to the composer's creative process and her objectives therein. The concluding section presents new performance directions and openings incited by *Re:Mains* and novel research ideas sparked by the discussion with the composer.

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## Chronology

*Re:Mains* for Multi-Pianist was composed between 2013 and 2015 by Christina Athinodorou.<sup>3</sup> Having already written much music for the piano as part of chamber, ensemble and symphonic formations, she was looking for a new area of solo piano writing that would magnetize her enough to explore it, not only as a composer, but also as a pianist with extensive knowledge of the solo repertoire for the instrument. Cautious not to approach piano writing through the range of her own pianistic skills, she searched for a way to go beyond the physical, spatial and aural environment of the solo pianist by extending the instrument. The extension of the instrument could be translated into many approaches: its treatment as a poly-instrument (string, percussion, keyboard) through extended techniques; furthering the potential of a prepared piano; or looking into various forms of interactions, such as combining the piano with electronics – fixed, live or virtual – or with other forms of art, such as video, dance etc. Recalling the key moments and events that led her to start working on *Re:Mains*, she narrates: “Back in 2006 I had spotted a beautiful toy piano in a small Athenian toyshop and bought it impulsively. Four or five years later I was walking around Île-Saint-Louis in Paris, and heard a street musician on the bridge playing on a detuned, but the most attractively detuned, upright piano I had ever heard. The blend of the overtones from the non-tempered piano – which reminded me of a big toy piano sound with a greater velocity and register –, together with the sound of the crowd, somehow formed a perfectly harmonious whole. This listening experience was awakened some years later, in 2013 in Pafos, when I began to compare the tuning and the timbre of the toy piano with my own upright piano, key by key.” She continues: “I often wondered how I could integrate microtonality – which is important to me as a composer – in a piano piece, but not necessarily by detuning certain strings inside a piano as Grisey did in his *Vortex Temporum*, or Campion in his recent piano music for instance. I realized that multiple keyboards with slightly different temperaments, timbre and key weight, all played by one pianist, constitute a possibility I had not considered before. My decision to include an upright piano in the piece was based on the uniqueness of the muffled and mellow timbres that could be produced by pressing the practice pedal. Then, I also wrote down various sound combinations between a grand piano and the toy piano as well as between the upright and the toy, and I was led to the final fixed setup for the new piece: the pianist would be in the middle of these three pianos of different sizes and character – the Grand, the Upright and Toy piano – that formed the shape of the Greek letter ‘Π’. With this setting as a starting point, I had found an inspiring keyboard territory within which I would explore solo playing further.”

Situating *Re:Mains* in the broader landscape of her work as a composer, she mentions briefly: “My preoccupation with movement and with regulating movement as energy – since energy presupposes movement – in the course of the piece, became evident in the creative process: new kinds of sequences of physical and aural gestures were born for *Re:Mains*, through my own reflexes, while investigating the new, unusual spatial environment with the three pianos. This was a new experience. For this reason, I considered that it would be useful to provide my *kinesiography*<sup>4</sup> to the performer accurately in notation”. As Leroux puts it

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<sup>3</sup> Composer Christina Athinodorou was born in Cyprus in 1981: <https://athinodorou.com/> (accessed 15 August 2021).

<sup>4</sup> *Kinesiography* (from Greek κίνησις/*kinesis* ‘movement’ and γραφή/*gráphō* ‘to write’): Athinodorou uses this term to describe “the composer’s conception, planning and identification of physical movement and/or sequences of movements which bear an immediate impact on the musical gestures. Conversely, the kinesiography of a piece is the conception, planning and identification of the successions of musical gestures which presuppose a particular physical preparation accordingly.”

substantially: “the musical work is rather a space of kinetic and gestural experiences shared between the one who conceives it, the one who performs it and the one who listens to it.” (Leroux, 2011: 3)

*Re:Mains* was premiered by pianist Annini Tsioutis in Cyprus, in a concert dedicated exclusively to works by Athinodorou which was part of the official programme of events for the European Capital of Culture Pafos 2017.<sup>5</sup> The second performance of *Re:Mains* took place in Athens in 2020, in the framework of the Onassis Stegi contemporary music series.<sup>6</sup> In this concert, a new programme of contemporary works around the idea of three different pianos, Grand piano, Upright and Toy piano (Pestova, 2017: 27-28) was presented, with *Re:Mains* as the centrepiece.

Following the second performance, the composer and the pianist engaged in a written and oral discussion and exchange of questions, answers, and comments on the work. This was important, because up to that point their different geographic locations of residence had not allowed them to provide sufficient feedback to each other after the two performances. Besides, engaging in the verbalization of her performance behaviour after the concerts had taken place, helped the pianist gain new insights, which will be discussed further below.

## **Re:Mains for Multi-Pianist: Presentation and Setup**

*Re:Mains* for Multi-Pianist is composed for one performer playing on three pianos of different sizes: Grand Piano, Upright Piano and Toy Piano. In her programme notes, Athinodorou introduces her work as follows: “*Re:Mains* for Multi-Pianist is a six-movement work, with an approximative duration of twelve (12) minutes. The title *Re:Mains* can be read as *Remains* (English) or *Re-mains* in French, signifying *Hands Again*, or *Hands on Hands* in a freer and possibly, more poetic manner of interpretation. All or some of the seven letters of the title (r,e,m,a,i,n,s) are used anagrammatically or elliptically to create new words which become the titles of the individual movements: *mains* (hands), *reins*, *snare*, *esi* (a transliteration of *εσύ*, which means *you* in Greek), *emis* (a transliteration of *εμείς* which means *us* in Greek), and finally *remains*.” (see Figure 1). However, the thread that connects the different movements is not solely literal, but permeates the coexistence of familiar and unfamiliar musical and technical elements, some of which will be analyzed below.

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<sup>5</sup> The concert took place on the 11th November 2017 at the Attikon Multicultural Space in Pafos, Cyprus. Promotional material: “An audiovisual performance combining contemporary music by the composer Christina Athinodorou with animation by Charalambos Margaritis. Featuring the newly established Ensemble Cyclamen, with the soprano Margarita Elia, the concert includes the first performances of the work *Re:Mains* for Multi-Pianist that will be performed by Annini Tsiouti, as well as the première of the Song Cycle *Ángel Inmenso*.”

<sup>6</sup><https://www.onassis.org/whats-on/music-connects-onassis-stegi-and-panteion-university-vol-5>, accessed 15 August 2021. Alongside *Re:Mains* the programme included works by John Cage, Brice Catherin, Einojuhani Rautavaara and Frederic Rzewski.

<b>Christina ATHINODOROU</b>		
<b>RE:MAINS for Multi-Pianist (2013-15)</b>		
i.	<b>mains</b>	[Grand and Toy]
ii.	<b>reins</b>	[Grand]
iib or bridge.	<b>snare</b>	[Toy]
iii.	<b>esi</b>	[Upright]
iv.	<b>emis</b>	[Upright and Toy]
v.	<b>remains</b>	[Grand and Toy]

Figure 1. Christina Athinodorou, *Re:Mains* for Multi-Pianist. Titles and configurations of movements.

The composer also provides a setup for the performance of the piece: according to the guidelines in the score, on stage the Grand and Upright pianos face each other, and the Toy piano is placed between them – near the high register of the Upright piano and near the low register of the Grand – as shown in the images below:

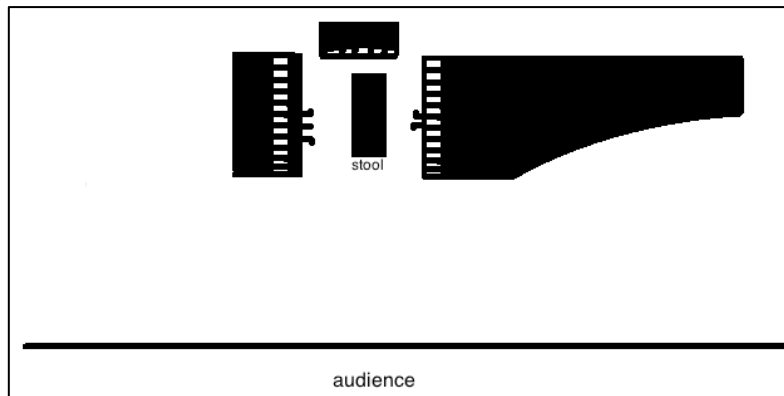


Figure 2. Christina Athinodorou, *Re:Mains* for Multi-Pianist, Setup



Figure 3. Tsioutis performs *Re:Mains* (world première 11/11/2017, Pafos, Cyprus)

## Re:Mains for Multi-Pianist: Inherent characteristics

Although novel in its setup and approach to the concept of composing for piano, the musical notation of *Re:Mains* follows standard norms. The composer has judiciously placed the staves for the different pianos in a way that reflects the usual layout of right-hand on the top and left-hand underneath, as shown in the examples below:

Figure 4. Christina Athinodorou, *Re:Mains* for Multi-Pianist, I. *mains*, bar 9.

Figure 5. Athinodorou, *Re:Mains*, IV. *emis*, bars 17-18.

When asked about notation, the composer explains: “Musically, I am interested in using the familiar to open a window towards the less familiar and discover something new. Possibly the reason is that I value the connectivity between the previously tested and the unexplored, because then there is a compass that allows us not to get completely lost in new information and the filtering will lead to adopting new material eclectically.”<sup>7</sup> Such matters of connectivity

<sup>7</sup> This view is shared with what Saariaho mentions in the chapter *Qualité et fonction du timbre musical* (Quality and function of musical timbre): « Nous sommes à la recherche d’une sorte de connectivité tant de surface que de structure, qui nous projette continûment ou abruptement d’un moment d’expérience musicale vers le suivant, de la qualité du matériau à la nature de son organisation. Les multiples trajets à travers ce champ nous révèlent la forme. Mais il nous faut, en explorant des matériaux nouveaux, plutôt que des relations nouvelles entre des matériaux familiers, acquérir une sensibilité à leur vocabulaire, un sens dont nous puissions vivre loin des ordinateurs, pour que notre imagination musicale découvre d’elle-même les formes possibles au sein même de la matière. » (Saariaho, 2013: 83). English translation: “We are in search of a sort of connectivity which relates to the surface, but also to the structure, a connectivity which continuously or abruptly projects a moment of a musical experience towards what follows, from the quality of the material to the nature of its organisation. The multiple trajectories through this field reveal the form to us. However, in our exploration of new

occur in notation too. So, I try to be as clear and straightforward as possible when it comes to notating my music, although I am well aware that my works are not always easy technically. As a composer, I have found that there is something useful to cultivate over the years: that attention to sound and its complexities, does not necessarily lead to a complex notation. Devising new signs or using verbal or other indications in order to convey a new sound is part of the writing; and broadly speaking, any sound can become part of the particular sound depository or ‘palette’ of a composer. Thus, any sign can become part of his/her notation vocabulary.” She adds: “Listening to a sound internally, imagining sound in as much detail as possible, determines my choices of notation. At the same time, testing a ‘pre-heard’ or imagined sound, hearing it out loud produced by an instrument for instance, is something that can lead to a different path.” She gives an example: “The handwritten sketches of *Re:Mains* reveal that in the first movement (*mains*) I had written the toy above the grand piano, because I intended to begin with a movement for one piano, not being sure whether it would be the grand or the upright. But right before notating the broken chord of the opening, I ‘heard’ the toy piano timbre in it, and a brilliance, which I associated with the grand (see Figure 6). So I knew immediately I would have to change the score layout later”.

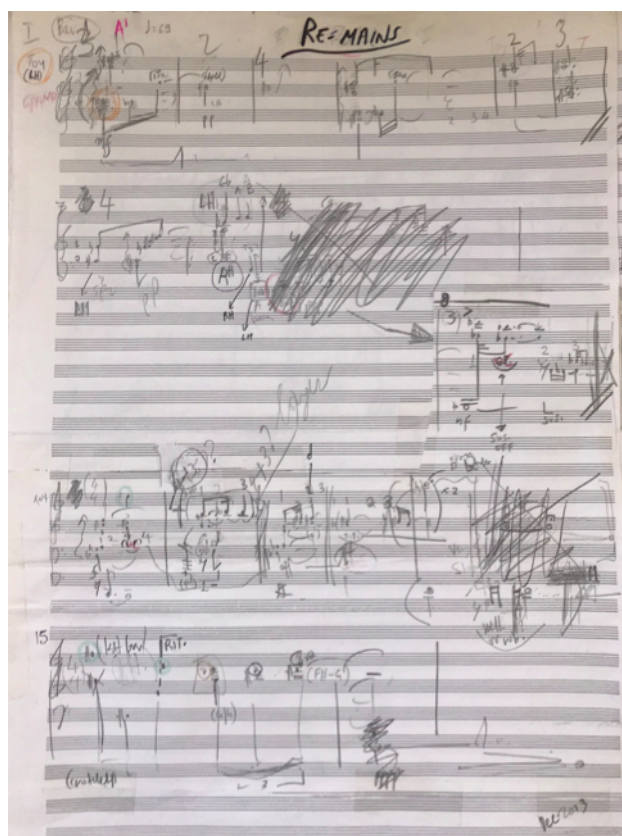


Figure 6. Athinodorou *Re:Mains, I. remains*- Handwritten sketch, Opening [for Toy piano and Grand Piano].

Along the same lines, she continues: “It had become evident that the visual positioning of the instruments in the score would make it easier to establish an immediate connection with the

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materials, rather than in the exploration of new relationships between familiar materials, we ought to acquire a sensitivity towards their vocabulary, and a sense that we could live away from computers. Only then can our musical imagination be activated and lead us to the discovery of the possible forms within the material itself”. (Translation by the author)

physical positioning of the right and left hands. Thus, in the fourth movement (*emis*) for the ‘toy-upright’ pair (see Figure 7), the toy piano stave was placed on the top because the pianist would use the right hand to play on it.”

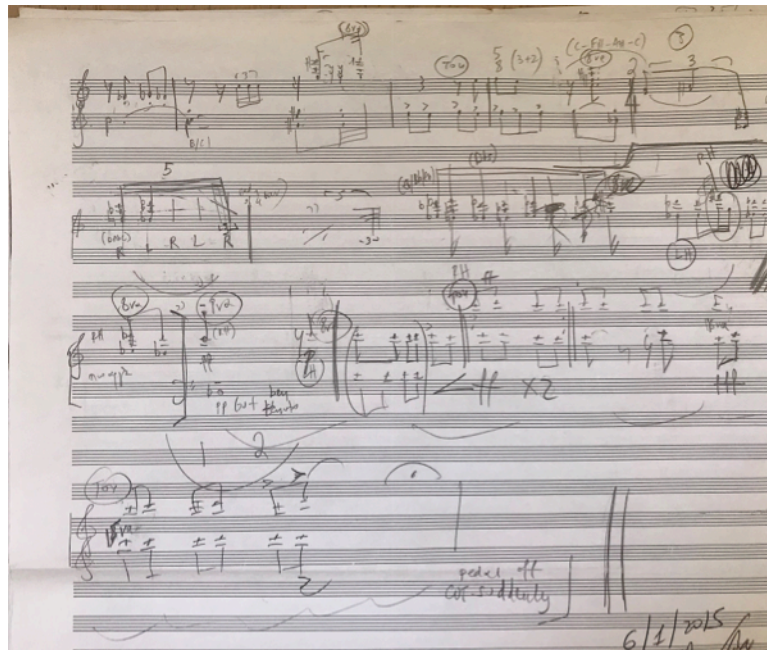


Figure 7. Athinodorou *Re:Mains* - Handwritten sketch from movement IV. *emis* [for Toy piano and Upright Piano]

A second element which can be considered familiar in *Re:Mains* is the fact that it employs idiomatic piano writing. The composer explains: “I recognize the significance of creating music that is idiomatic for the instruments I compose for. The pianistic idiom constitutes a whole vocabulary of physical gestures rooted in specific technical exercises or generated by the very distribution of the white and black keys. (Kaddour, 2011: 7) Yet going further, I would argue that idiomatic could mean inventing new conditions in which the musician(s) will be able to widen what is already natural to them. Enriching their ‘vocabulary’ of physical gestures is something that can potentially add to my music, and of course to the music of other composers. Referring to new *physical - spatial* conditions, the specific arrangement of three different keyboards in *Re:Mains* has enabled this widening of the pianistic idiom.” Furthermore, the same or similar materials are treated differently throughout the six movements. Hence, in order to create meaning with these materials as they appear in different contexts, physical and auditory adjustments needed to be made too. The composer continues: “The piano as an acoustic instrument is played by a human being with a specific anatomy that the composer has to trust and build upon in the creation of a new piece.” Respecting human anatomy when composing music can also be understood as signifying that however demanding a piece is technically, it is within reach and possible to execute, from a practical standpoint.

Difficulties of a different nature such as those pertaining to sound, expression, chord voicing, or pedalling requirements, may also be related to whether a composer respects human anatomy or not. Athinodorou’s *Re:Mains* is a virtuosic and technically demanding work, but its difficulty as such does not lie in what are usually or traditionally considered as technical constraints. In this work we come across frequent metric and tempo changes; extensive pedalling – which is often of an unusual nature, for example the use of the middle pedal on the upright piano, as well as combined pedalling –; the hand span for certain chords; reaching required speeds in different movements; and finding the right colours and expressive

atmosphere. Yet, the human anatomy *is* respected and the piano idiom *is* enhanced through difficult, but perfectly feasible sequences of gestures. The composer explains: “Technically speaking, I am always trying to be aware of the thin line that divides the impossible from the extremely difficult. But of course, I am not demanding things constantly on this level in the course of the music. Moments where there is no particular technical challenge, allow the performer to breathe and perhaps prepare for another demanding part of the music. But difficulty does not always have to do with technique: it might have to do with the accumulation of tension, and for me tensioning is linked to how the different quantities and qualities of energy are understood, notated, distributed and performed.”

After having isolated those characteristics of the work which can be classified as familiar, certain innovative aspects warrant a discussion. The title of the work itself presents a novelty: *Re:Mains* “for Multi-pianist”. As opposed to titles that indicate the instrument for which the work is written clearly – for instance of “X or Y” for piano – the title of the work places the performer at the forefront. It could have been written as “*Re:Mains*” for grand, upright and toy piano for one performer, even if this title is too long, yet the composer introduces a characteristic word for the musician: we can read the ‘Multi-’ before the ‘pianist’, not only as a reference to the multiple instruments in play, but also to the pianist themselves, who now becomes a multi-pianist, a multi-player and a multi-tasking performer.

The specific setup of the work raises certain practical issues, even before the actual performance and already during the learning process. Prior to the first performance, pianist Annini Tsioutis had the possibility to practice on both a grand and an upright piano, however the instruments were not placed in the required positions for the work, but at different corners of the room. This meant having to carry and place the toy piano on the right of the upright piano, or to the left of the grand piano, depending on which movement was being practiced. This hindrance was in fact an advantage: at a very early stage of the learning process Tsioutis was sensitized to the spatial dimension of the work. Accordingly, foretasting, testing and experiencing spatialization was absolutely necessary and inevitable in her path from visualisation to realisation. This point will be further discussed below.

The second point, which is inherent in the work, is the multiplicity of instruments, and thus the multiplicity of ways of playing. More precisely, the three pianos are of different dimensions, key weight, key width, and sonority (difference of sonority between the toy and the “big” pianos and possibly difference of tuning and timbre between the upright and the grand). They also differ in duration of resonance depending on the venue, and in body-related requirements including a varying combination of hand openings, finger stretching, finger striking force and tone production<sup>8</sup>. In short, great responsiveness and rapid adaptability became a prerequisite for learning and performing the piece very early in the process. Furthermore, the fact that the three instruments face different directions is of paramount importance. This does not only affect the return of sound towards the performer – and the audience –, but also the physical gestures of the pianist, who must stretch the arm out and towards the right side when facing the upright Piano when playing on more than one pianos at the same time (See Figure 8), or to the left of the torso when facing the grand piano, in order to reach the toy piano.

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<sup>8</sup> As mentioned by Xenia Pestova (2017: 30): “Awareness and knowledge of this method [that of the toy piano] of tone production calls for a different physical approach to striking the keys.”



Figure 8. *Re:Mains*, second performance, Hellenic première, 6/2/2020, Athens, Greece.

When playing on one piano, pianists deal with homogenous key weight, equal distance between keys, familiar touch and a tuning in equal temperament, unless required otherwise by the composer, or unless the piano is in a poor condition. In this work, one must tackle three different sets of the aforementioned elements. Trained pianists possess a whole battery of acquired movements and gestures, perfected through hours and years of practice, all in the forward direction, i.e. with the front body facing the piano. In *Re:Mains*, these gestures must be adapted in the direction of the right or the left of the torso, depending on which hand reaches out to the toy piano. Furthermore, when reaching out to the toy the pianist must reconfigure the span of the hand and the force of attack slightly before touching the keyboard, as the keys are much smaller and lighter in weight than those of a standard piano.<sup>9</sup> Finally, the pianist's sonic environment is radically changed and spatialized: whereas pianists are accustomed to receiving sound only from the front, there is now a sound source on their right or on their left, depending on which movement is being performed, and on their position on stage.

### **Merging elements: a path towards experiencing a new stage**

How are these two types of elements – familiar and innovative – combined to create the unique experience of *Re:Mains*? One could read the familiar elements as a point of departure towards the innovative ones. They are, however, more than that: they greatly facilitate the learning process and, through that, the establishment of a new mindset, ready to adopt the numerous innovative elements. (Heroux and Fortier, 2014, as well as Chaffin and Toffer, 2006)

The innovative elements in the work result in the creation of a new, spatialized sonic environment, englobing the pianist, who now moves around on stage, turning, standing up, and acting out new movements. It is therefore appropriate to refer to a new type of stage, an

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<sup>9</sup> This point is also discussed in Xenia Pestova (2017: 29). And, this is where the Multi-Pianist performing *Re:Mains* differs from other musicians performing on multiple instruments or keyboards. In organ playing for example, there may be cases where the keyboards of the organs face different directions, yet the cases where the key weight, width and speed of attack are also different, are very rare, particularly in contemporary music.



augmented stage, in the sense of space and sound. These elements combined, already during the learning process, introduce and lead to the incorporation of the performative dimension of the work and to a new perception of sound overall.

## The performative aspect of *Re:Mains*

Throughout the learning process and the performance, the chosen type of notation and, in short, the score of *Re:Mains*, serves as a comfortable backdrop, a source of reassurance for the pianist: it is clear and easy to follow, not only considering choices of sound representation, but also in relation to extra-musical instructions, such as setup, physical movements etc. Yet, to perform in this new sonic environment, the pianist must develop and ‘activate’ a new manner of listening, one that englobes all sound sources and homogenizes playing effects independent of the instrument or the combination of instruments, their position on stage – hence the sound source – and the required gestures. This is in fact something the composer deliberately sought to achieve. She says: “[...] what had been consistently and persistently present in the process of composing in *Re:Mains* – as it often happens for every instrument I am writing for – was the notion of going beyond the boundaries of the listening environment of the solo pianist, to discover what can be found there, and decide whether that serves my artistic intentions.”

Reaching an advanced level of knowledge of the work, with all elements now combined, affords a high-level appropriation of the performative aspects of the work by the performer, now a multi-pianist who performs on an augmented piano and stage, using extended gestures. This is something with which the composer was consciously concerned at various stages of her creative work. In the programme notes, she specifies: “Apart from the audio-visual aspect of musical performance, *Re:Mains* deals with the kinesthetic aspect as well [...]”. When the pianist successfully reaches this final stage of appropriation of the work, ready to give a fluent rendition of the music, its full performative potential is revealed. The performative dimension of *Re:Mains* is in fact totally embedded in the score.<sup>10</sup>

Irrevocably, for the performer, this experience brings about a completely new way of considering piano performance in general, and it introduces new pathways of communication with the audience.<sup>11</sup> The pianist admits: “*Re:Mains* made me break out of my comfort zone, i.e. the small space on stage where I would look at my instrument, and avoid dealing with the audience, sometimes even pretending they were not there. Clearly, this is not a way to build bridges with it. For example, it took me time and a great effort to overcome my public speaking anxiety. However, by facing the challenge to sing or to speak on various occasions – as in pieces combined with *Re:Mains* in the Athens programme, or pieces that the experience of *Re:Mains* triggered me to explore – made me realise how powerful a tool it can be in

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<sup>10</sup> Quoting Anakesa Kululuka: “Ainsi, les gestes musicaux physiologiques et physiques jouent un rôle singulier dans le cheminement de la pensée musicale et dans le conditionnement de la réalisation des œuvres musicales. Ils en sont aussi des instigateurs de certaines de leurs formes et demeurent la référence à la fois d’un comportement et d’une attitude biológico-physiques qui engendrent une idée musicale et son développement, structurés en phrase, en mélodie, en rythme ou en harmonie.” (2001: 11). Translation in English: “Thus, physical, and physiological musical gestures play a unique role in the progression of musical thinking and in the conditioning of the realisation of musical works. They are also the instigators of certain forms and remain the point of reference of a certain biológico-physical behaviour and attitude which create a musical idea and its development, structured in phrases, melody, in rhythm or in harmony.” (Translation by the author)

<sup>11</sup> Although in a different context, that of performing works for solo Toy Piano, Xenia Pestova also notices the difference with traditional piano concerts, in that the Toy Piano Performer «draws audiences closer» (Pestova, 2017: 29).

combination with the piano: moving between keyboards, singing, speaking etc, while playing at the same time, made me see and experience the difference between being a musician seated in front of her instrument, and being transformed into an all-round performer on stage. When I think of it like this, I feel it's a pity you didn't write *Re:Mains* sooner!"

Referring to the role of the body – less frequently mentioned in relation to the creative process –, Athinodorou underlines: “Akin to performance, I see and experience composition not dryly as a craft, but as a psychosomatic process.”

In the same vein, considered as a psychosomatic process, studying and performing of *Re:Mains* can transform a pianist into a Multi-pianist, a new type of performer. A Multi-Pianist performs on an augmented stage, using extended techniques. An augmented stage is one where the pianist moves in different directions, turns around, gets up, and receives sound from multiple sound sources and varying directions. On an augmented stage, the extension of the traditional piano technique and gestures, the extension in space towards different directions, as well as the adaptation to the different types of keyboards and their respective technical particularities are identified as extended techniques.<sup>12</sup>

The pianist remembers: “The staging of the first performance in 2017 in Pafos gave the piece a performative aspect: the music was ‘accompanied’ subtly by live projection of original animations created by the Cypriot visual artist Charalambos Margaritis on a thick black-curtain background, in neutral, low lighting. The setting of the second performance, in 2020 in Athens, was materially inappropriate, because the stage was small, and subsequently there was little room between keyboards, while the audience lights had remained switched on for the entire concert. It was there however that I fully came to grasp the performative aspect of *Re:Mains*, which is written *in* the music. This is quite a feat; this is the essence of musical performance: the body becoming an integral part of the work”.

## Conclusion

The retracing of the learning process and the composing process, the comparison of the two approaches, and the identification of common points was an extremely fruitful enterprise. According to the classification of “Patterns of collaboration among Artists” established by Vera John-Steiner (John-Steiner, 2000: 63-96) the collaboration between composer and performer, in the specific case Athinodorou and Tsioutis, can be considered as a practice-based “complementary collaboration”. Resulting not only in the performances of the work, but continuing through the ongoing dialogue and exchange of ideas and impressions, this practice-based complementary collaboration culminates in the realization of the importance of post-performance verbalization for and by the performers, which not only becomes a significant tool for research, but a personal evaluation tool as well, allowing them to challenge their practice and to discover new directions in which they can experiment and grow.

The in-depth communication between a composer and a performer is crucial, communication in the sense of a back and forth exchange, research, and detailed discussion, and not in the sense of the typical distanced professional stance sometimes adopted by performers and

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<sup>12</sup> Of course, this results in an expansion of the pianist's cognitive environment; discussing this subject is however beyond the scope of the present paper.

composers, often due to lack of time and heavy schedules. The potential inherent in this type of collaboration goes beyond benefits to the participating parties alone.

Finally, the presentation of the score is of primary importance, in the sense of its consistency, coherence and clarity of information, comprehensive extramusical instructions and neat presentation. It allows the communication between performer and composer to begin from a high level already, and it avoids misconceptions, delay, and fatigue.

More specifically, in the case of *Re:Mains*, the legibility of the score, and the fact that the musical notation is standard and clear, in addition to all the benefits commented upon earlier, renders more obvious the fact that the performative aspect of the work is in fact written in the music. This enables the performer to receive the music more naturally, and thus to embody and convey it all the more convincingly, impressively and maturely, to the audience.

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# Syncretic Musical Experiments #19: developing a live performance during a pandemic

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**Abstract.** Companhia de Música Teatral's (CMT) work is based in collaborative creative processes and often involves close interaction between performers and audiences. Due to the pandemic, several of CMT's planned activities were cancelled. New paths had to be discovered and the Zoom™ platform became an important tool to carry on working on CMT's projects. It supported the creation of the music-*Theatre* piece *O Céu Por Cima de Cá* (trans. Heavens Above Here), a live performance offering two different points of view (at the *Theatre* and via Zoom). This paper is proposed by the artistic team that created the performance, who aim to unveil the concepts underlying the piece, the sources of inspiration and the collaborative methodology of working. It is a collective auto-ethnographic artistic research reflection exploring how the piece came to be and how the final performance impacted not only the performers but also the audiences.

**Keywords.** Artistic Performance, Artistic Diary, Zoom Performance, Pandemic, Companhia de Música Teatral

## Introduction

The following paper is an account of a music-theatre piece that *Companhia de Música Teatral* (hereafter called CMT) created and presented during the pandemic and that had its premiere on September 2020. The performance is called *O Céu Por Cima de Cá*, which roughly translates to “heavens above here”. Throughout the text we will use its original name.

Before delving into the conception of the piece, a little background on CMT's work is required, to better understand the driving force that led to its inception, and the forces that molded the performance into its final shape. Whenever CMT is referenced, the aim is to include past, present and future collaborators in CMT productions, unless specified.<sup>4</sup>

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<sup>4</sup> All CMT projects that will be referenced throughout this paper can be better understood by visiting and exploring [musicateatral.com](http://musicateatral.com) or [vimeo.com/cmusicateatral](https://vimeo.com/cmusicateatral).

## CMT's approach to artistic creation

Almost since its inception, CMT has manifested an interest in exploring the power of music to enable both inward self-reflection and outward creation of networks of human connection.

CMT's work is multidisciplinary, having music as a starting point for incursions into different artistic languages. Additionally, a strong emphasis is placed into exploring the boundaries of artistic research, education and community outreach. Therefore, it is usual that a project may unfold several possibilities: a performance, and/or a published book/paper, an installation, a workshop, a training, a lecture, or all of them at the same time. As such, CMT groups its projects into Artistic-Educative Constellations (Rodrigues, Miguel, Vences, Santos, & Rodrigues, 2020). These reflect the myriad ways in which Music intersects with other artistic languages, creating groups of distinct objects that evolve and are, in some way or another, artistically/conceptually connected.

In CMT's work, music is a holistic and transdisciplinary concept, not only referring to sound production, but also to the creation of connections between different groups of people through artistic experiences.

A commonality between many of CMT's productions is the call for audience participation and interaction. These moments serve to blur the wall between artists and audience, bringing the moment from performance (one-way, artist-audience) to experience (omnidirectional, no assigned roles). In this way, feelings of co-presence<sup>5</sup> and sharing are fostered. These ideas are present either in specific moments of larger performances (for example, *PaPI-Opus 8*), or as a general ethos that permeates an entire project (such as in community music projects like Projecto X). The final performances of such projects account for – and sometimes depend on – the unknown generated by organic interactions between people.

In essence, human interaction is a core component of CMT's projects, being a catalyst for growth in everyone involved. The artistic work is then not only an artistic concept made real, but also all the interpersonal relationships that arise during its making. Those relationships are often compelled forward by the physical presence and interaction between the people involved. The sense of the physicality of others enhances and shapes the kinds of connections that arise and is often a component incorporated in the performances.

As in most years, in 2020 CMT was involved in a variety of projects, mostly related to the *Mil Pássaros* (A Thousand Birds) constellation. However, as can be inferred by the title of the paper, those plans fell one by one when the pandemic hit and restrictions were put in place. Suddenly, all prospects of artistic creation ceased, and CMT collaborators were left each in their home, unable to artistically interact and create. After the cancellation of many of the projects from the *Mil Pássaros* constellation, our need for collaborative creation rose, and soon we were looking for ways to keep creating even with all the limitations of the confinement.

This was the point when a series of efforts were undertaken by CMT to retake what it had lost during the confinement, and that eventually lead to *O Céu Por Cima de Cá*. What follows is an account by the artistic team (this paper's authors) that participated in the creation and performance of *O Céu Por Cima de Cá*. This account aims to unveil the concepts underlying the piece, the sources of inspiration and the collaborative work methodology. A brief reflection on the impact of COVID-19 in the inception of the performance will precede a

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<sup>5</sup> The feeling of being present while also being conscious of the presence of others, interacting with them.

larger section detailing, among other things: how the performance came to be; how the stage was set and the scenery and lights were conceived; the expansion on the themes of angels, birds and clouds that had been a source of inspiration; and how the final performance impacted not only the performers but also the audiences.

*O Céu Por Cima de Cá* is enmeshed and embedded in the places where it happens, drinking from their history to build itself. This paper is not only a reflection on the final performance, but also a kind of crew logbook of a voyage that took us to the clouds and beyond, expanding on the webs of relations that were created between each of the artists and the audience(s).

## **Poemário and other tales of overcoming**

When the pandemic hit we lost our capacity for embodied, collaborative, immersive artistic creation. Little by little, throughout the projects we will describe in this section, we reacquired all those capabilities. These projects aren't only the result of our thirst for communication, but also of our dependency on responsive human connections.

By reflecting on the projects that preceded *O Céu Por Cima de Cá* (*Poemário*, *Poemário Vivo* and *ZygZag&Zoom*), we will not only describe what our objectives were, but also what we gradually (re)learned and the connections we (re)forged.

### **Poemário**

The first project that we developed during the pandemic as a replacement for *Mil Pássaros* was called *Poemário* and was a collection of audio-visual poems. It started in March 2020. We imagined *Poemário* as a conversation not happening in real time, but in pieces. Someone would create a video, an image, music, a poem, and another would take that and add something. Eventually, what resulted were small videos we called audio-visual poems<sup>6</sup>, that would range from animated written text, to drawings of birds and hands, etc.

With this project we understood we could still communicate and create together, albeit with some limitations. Nevertheless, we found this way of creation unsatisfactory, and soon started to delve deeper into video communication software alternatives, to allow for real-time simultaneous creation and interaction with audiences<sup>7</sup>.

With this in mind, we started to develop new ways of escaping the limitations of the confinement (without breaking sanitary rules, of course). Thus, *Poemário Vivo* was born.

### **Poemário Vivo**

With *Poemário Vivo*, premiered in April 2020, we recovered our ability to make a live interactive performance. Doing so was not easy and made us deal with a host of technical hurdles. We soon understood that Zoom<sup>TM</sup> (hereafter, Zoom) was a tool that was becoming progressively more massified, and so it was the chosen software for these projects. The reason for choosing a tool like Zoom and not perform only as a livestream is the aforementioned

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<sup>6</sup> We prefer to use “audio-visual poems” and not “short movies” because the association with poetry allows for more liberty in terms of style, content and form.

<sup>7</sup> All videos can be watched on [musicateatral.com/en/constelacao/poemario-2](https://musicateatral.com/en/constelacao/poemario-2)

importance of audience participation in CMT's performances. Zoom allows for the creation of dialogues and connections with who is on the other side of the call. This enhances moments of unveiling that what people are watching is not only a recording or a static performance, but something organic, ambiguous. A window into a different world.

Unfortunately, at the time of the development of this performance, Zoom was not particularly adequate for simultaneous audio performance. Two artists would rarely be in sync, and the sound would be subjected to drop-offs and peaks in volume. CMT continued using Zoom in detriment to other more audio-focused platforms such as Discord or LANDR Sessions, because not only is video an important part of our work, but we also noticed at the time that Zoom was becoming the standard choice for schools and workplaces. And so, we had to use a platform that we were certain the general audience could frictionlessly use. It is a central component of the referenced surprise effect, furthering the sense of co-presence during the performance.

The instinct against isolation pushed us to better deal with plainly anti-musical modes of creating music. Nonetheless, CMT felt that this performance needed to be much more than simple unilateral communication. The audience would need to feel a part of what was happening. These interactions were fairly rudimentary but combatted the idea that the artist is monologuing, turning the process into direct communication, a shared *now*.

We maintained and continued to explore bird imagery, almost as an act of rebellion against the strict measures of confinement. The virus could take our physical liberty of movement but couldn't prevent us from *flying* in our creative imagination.

### ***ZygZag&Zoom***

CMT has been developing *immersive trainings* since 2007. On that year, after diagnosing difficulties related to traditional teacher training, CMT proposed a training model intrinsically related with the artistic experience *Grande Bichofonia* (Rodrigues & Rodrigues, 2014). The model was very well received by the trainees and we became aware of the importance of i) body work and emotional involvement/ development on learning; ii) isomorphic practices and role models in living artistic experiences; iii) the existence of a final artistic presentation at the culmination of the training. These concepts and practices were refined during the *GermInArte* project (Rodrigues, Rodrigues, & Rodrigues, 2018) with the development of three immersive trainings: *Jardim Interior* (2015), *Caleidoscópico* (2016) and *Dabo Domo* (2017).

In a nutshell, the expression “immersive training” describes a process based on the acquisition of skills –artistic, educational, interpersonal– through practical experience, in a real context that can present successive challenges and opportunities to assimilate perceptions and learning in an experiential way with strong emotional significance (Companhia de Música Teatral, n.d.).

In 2020, a planned immersive training week was cancelled due to COVID-19 restrictions. Notwithstanding, and thanks to what we had learned with *Poemário Vivo*, an online training week took place in July 2020, called *ZygZag&Zoom*. These three sonorous words stucked together referencing *Zyg* (a CMT creation), permanent search and adaptation (*Zag*) and, obviously, *Zoom*.

CMT's aim with this training week was not only to give the participants the technical knowledge on how to create artistically using technologies like Zoom, but also to enable the participants to create something artistic as a group. Most of the participants hadn't been able

to participate in active artistic activities since the beginning of the pandemic. Also, most were very tired of working with Zoom in the “conventional” way. The work with the participants not only involved creating and learning, but also provided a safe space to talk about some of the deeper frustrations that the pandemic brought along, while also wandering and exploring creation over Zoom.

The participants were often asked to create something with strangers (other participants). This enabled them to develop their (artistic) communication skills. Although the final results of such exercises were not always the most artistically interesting, the processes of communication and networks that were created were valuable not only for the final performance, but also for the lives of the trainees.

Between the training moments, the trainers/performers had time to experiment and start to develop snippets of what would end up being *O Céu Por Cima de Cá*. Many of our technical capabilities using Zoom were challenged, and we were able to refine what could be done with this software. We also learned how to better use Zoom with a “film-director” mindset. This residency made us think of ways to create something that would have different meanings depending on if the audience was physically present or watching over Zoom.

## O Céu Por Cima de Cá

The experiences described earlier established a path that led to *O Céu Por Cima de Cá*<sup>8</sup>. As explained earlier, the name roughly translates to *Heavens Above Here*. It is supposed to evoke both images of birds and clouds, but also angels, meshed together in the characters we call the *anjitsuri*. This word is the result of the connection between *angel* and *tsuru* (bird), of which they are simultaneously neither and both. Our aim is not to reflect religious imagery, but induce ambiguity in interpreting what they are, where they are and when they are. The place they occupy is an imaginary and limitless one, formless and everchanging, with the only certainty being that it exists somewhere above the place the piece occurs and reflects that landscape.

It should be noted that in Portuguese “céu” not only is the word for “heaven”, but also for “sky”. That ambiguity in naming is present throughout the performance. The piece aims to bring the viewers into a parallel world where present, past, real, virtual, quotidian and art cross, mesh and meld together in an ambiguous tapestry. Images collected during performative incursions by the characters to the place where the piece happens, share space with old movies and documentaries. Collected sounds mesh with digital soundscapes, laments of yore, and normal human thoughts of disquiet. The piece is inextricable from the biography of the place it takes place in. In each city it occurs, we “drink” references of sound and image, which are integrated throughout the performance. A few artistic incursions into the daily lives of the city’s inhabitants occur, when the *anjitsuri* descend on public places bringing birds, examining simple things as if seeing them for the first time.

The *anjitsuri* are characters created from the intersection of different bits and pieces from previous CMT creations, the play *Orizuro* and *Mil Pássaros*. They started as beings that inhabited the same place as birds, but with an almost human form. That anthropomorphism evoked and was inspired by the angels in Wim Wenders’ *Der Himmel Über Berlin* (Wenders,

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<sup>8</sup> First premiered at Vila Nova de Famalicão’s House of Arts on September 19<sup>th</sup>, 2020.



1988). In a similar way, they also share a presence with normal humans, while also inhabiting a more whimsical reality (Figure 1).

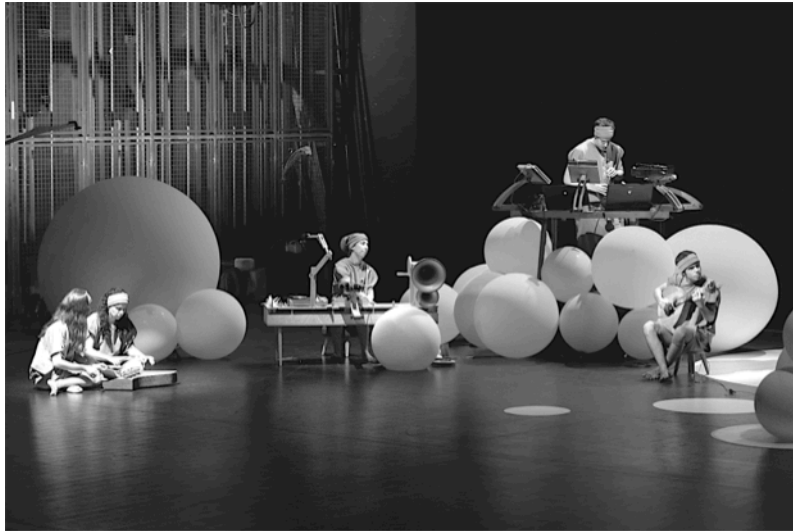


Figure 1. *Anjitsuri* making music

The idea of collecting sounds and images of a city is that each place has over it a different sky, different clouds, maybe even different *anjitsuri*. That infinite space echoes what is beneath it, creating reverberations which mesh sounds from the past and present. The performance should be like the clouds that travel the world, always subject to each place's atmospheric pressions. No two skies are the same.

On the technical side, one of the first questions we thought about when developing the performance was how we could use Zoom asymmetrically, meaning that watching the performance live and over Zoom would yield different interpretations. Our insistence in using Zoom was not only because we weren't sure that we would be able to have people watching live on the room, but also to comment on how teleworking and online co-presence were becoming more and more common. The idea of simply livestreaming the performance was put aside early on, as soon as we started to find ways to integrate who was watching over Zoom into the performance.

### ***The "Listening and re-composing protocol"***

The idea that the piece reflects the identity of each place where it is going to be presented is fundamental in the conceptual framework of *O Céu Por Cima de Cá*. This is both a statement about the need to pay attention to the uniqueness of the places and people living there, as well as an assertion of our own identity as artists: we regard creation and performance as a continuum that we enjoy to *play* with. We decided, therefore, to establish a series of principles to guide the creation of uniquely different versions and inscribe that in the "score" (the general architecture of events that unfold on the stage). This set of principles is what we call the "listening and re-composing protocol".

This is a multimodal process that, among other steps, involves interactions between the characters and the landscape. These take place as performative incursions with spy cams, which in subtle ways capture the place as if it was being seen in secret.

We try to gather older images of the human quotidian, the moments that by being unremarkable end up gaining an almost unreal essence. As if when the *anjitsuri* look down on

earth, they couldn't choose the most interesting parts, and ended up only seeing the normal, the common. These images can come from many sources, but documentaries about the places were the richest, especially their B-roll, which in the case of the documentaries we selected tended to show close-ups of the human face.

To those images we contrast the recordings made using the spy cams. These recordings undergo a treatment to make them look as old and battered as the older recordings, making them easier to merge and confuse, to contribute to the temporal ambiguity we foster during the performance.



Figure 2. Example of quotidian image from old documentary (a farmer in a market) used during the performance

The type of looking that sees mirages from other times is accompanied by a listening that hears echoes of the past. The sounds of *O Céu Por Cima de Cá* include snippets from old and present soundscapes. And so, one of the steps in the protocol is to recover extinct or endangered soundscapes. These are usually borrowed from published ethnographic field work. We imagine this as if the *anjitsuri* listen so carefully to a place that their hearing transcends time. Thus, we base ourselves on what remains of recorded memory, like a lament for a father's death, an interview with an old philosopher, work songs and war songs.

We also record present soundscapes, both very close to the ground and very far away from it. These are soundscapes in the Schaferian sense (Schafer, 1994), recorded in soundwalks, when the *anjitsuri* get as close to the ground as they can, actively listening and seeing what is around them, recording whatever arises without searching for specific sounds.

This listening state is reactive to what seems interesting or characteristic of the specific place, whatever it may be. That judgement is completely subjective to which *anjitsuri* is doing the recording. Specifically, we aim to find a busy place where to record something like a fair or a market, something where the cacophony of human voices blur into a vapor akin to white noise or a murmur of birds. This blurring hum is mirrored by recording the sound of the city from afar, its whisper. Like that, the *anjitsuri* ascend to a high place in the city, to record this hum, this confusion of sounds and voices similar to those a being would listen from heaven.

### ***Algorithm for the addition of clouds to the sky***

Parallel to this, we ask people to record clouds in the sky using an "algorithm for the addition of clouds to the sky". Again, in Portuguese sky and heaven are interchangeable, and so keep in mind this ambiguity going forward. These clouds are being added to that formless and

infinite place that resides above a place. Clouds are a great inspiration for the performance, based in writings by Tolentino de Mendonça, a Portuguese theologian, poet and thinker, but also a thinker, a poet and a philosopher. He wrote a weekly column called *Que coisa são as nuvens?*<sup>9</sup> This column could either be a poem, or chronicles, essays, almost theatre-pieces. They were very influential to the way we look at clouds. Pier Paolo Pasolini's almost homonymous film was also an inspiration, and two of its characters make quick appearances during the performances, asking the eponymous question ("What are the clouds?").

Another very different source that helped us think about clouds was the Cloud Appreciation Society's manifesto for a cloudy sky (Cloud Appreciation Society, n.d.). This manifest compels the reader to shun a cloudless sky, to find faces and dragons and rabbits in the sky, to create a scenic space in clouds where aethereal characters play and live, where meanings take as long to change as our creativity allows.

With this protocol for the addition of clouds to the sky, we ask people from the place the performance takes place in to step back, slow down, sit outside and look at the sky. To be patient and record a time-lapse of clouds, and while doing so, to fly in their imagination. Those recordings are incorporated in the performance at different places. Our aim is not only to collect an archive of clouds and engage the local community in the process of constructing the performance with the artists, but also to invite people to do an almost guided meditation, while rediscovering the poetry of a cloudy sky.

### ***Building a performance***

*O Céu Por Cima de Cá* is composed of nine tableaux which can be grouped into three different categories: Philosophical Quotidian, Earth Seen From Heaven, Rogatory. These tableaux are preceded by a Prologue, and end with an Epilogue, which take place while the audience is entering the venue, and when they leave, respectively, giving the impression that they are not watching a show but a small glimpse into the ongoing lives of *anjitsuri*. There is something which could be called "sheet music", but isn't, that alludes to what can be a normal day in the life of *anjitsuri*. It is neither a "graphic score" nor a technical document, but occupies a place somewhere between a suggestion, a map, a painting, a photograph and a prophecy.

The categories of tableaux correspond to the daily lives of the *anjitsuri* in Heaven, how they interact with each other and what they see of Earth from up high.

The Rogatory is the moment in the performance when "prayers" (thoughts, worries, anxieties) percolate up to heaven. The *anjitsuri* may be able talk human language but answer in poems, songs or dances, probably because they feel that that's what is missing from the people who call them.

What follows is a small description of what each section of the performance entailed. Although everyone has defined "main" roles, the performers at different times take the roles of directors, musicians, dancers, scenographers, sound technicians.

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<sup>9</sup> "What are the clouds?", a reference to Pier Paolo Pasolini's 1968 film *Che cosa sono le nuvole?*

## Stage design

One of the main features when designing the set was to find an element that could work as a coherent base upon which other specific elements could be added. As the idea of clouds was of paramount importance, we decided that to look for a solution that would point into that direction, but would not be an obvious representation of real clouds, as the whole idea of the piece is to invite the audience to a voyage led by their imagination. The aim was not only to bestow them an ethereal appearance, but also to grant them a palpable weight. These “clouds” are not only made of vapour, being the building blocks of the *anjitsuri*’s structures, their tools and playthings. In practice, they are either atmospheric balloons (ranging in diameter from 2m to 8m) or Styrofoam spheres (between 2cm and 15cm diameter), with some being weighed down in place and others being able to be moved freely around the stage. They enable the stage to evolve during the performance, and to hide other scenic elements. At points they act as projection screens, while in others they are used like toys, played with by the *anjutsuri*.

The set design also contains aspects related to other inhabitants of the sky: birds. Wooden elements evoking bird’s feet (an idea previously developed in the constellation *Mil Pássaros*) are used to support the webcams that record the images for Zoom, as well as two instruments that look almost, but not quite, a cello and a violin. Instead of strings, these instruments’ sound emitting sources are meditation bowls. They are, nevertheless, played like their lookalikes, with a bow. They are called “sinolino” for the violin-like, and “cellobello” for the cello-like.



Figure 3. The telephone, with the “clouds” behind it.

The set itself was constructed in an organic way and grew during the rehearsals. This was facilitated by its modular design, which allows greater flexibility when adapting to new stages and theatres and enables the set to echo a place’s ethos more easily. Although this modularity endows the set with variance, this is somewhat constrained by the necessities of lighting design, and because of the existence of static elements in the piece, such as the telephone. The telephone is an anachronistic rotary dial phone that acts as a central piece of the scenography, thought as a direct line of communication between the *anjitsuri* and those on Earth, especially the audience on Zoom. The phone is used in the moments after the Zoom participants are asked to react to a “call center” recording of a list of grievances. Then, a performer takes the object and uses it either to recite a poem or to sing, as a “direct” answer to the supposed grievances of those watching over Zoom.

## **Lighting**

The light design informed important performative aspects of the piece and it allowed us to venture into the territories of software development and video mapping. Specifically, all videos and images projected on the lycra screen and sent over Zoom is controlled by a *TouchDesigner* patch developed according to the particular needs of the performance. This patch, much as almost every aspect of the piece, is modular and continually evolving according to the needs of the performers and the morphing set.

The lights themselves are not only static shades over the scenery and clouds, but active and living elements of the performance, sometimes leading the physical movement of the performers in stage, at other times being led by a large brush or a dance from an *anjitsuri*. This flexibility is further encouraged by the technical rider. Although it states the types and places of the lights used in the performance, each stage configuration invites a rediscovery of the way the light plays on the clouds. Shadow-play is a common element during the performance, and so lights and clouds influence each other in an effort to perfect this effect. In turn, this reinvention elicits new developments in the movement of the *anjitsuri*, adding to the ever-present idea of innovation and reinvention.

The way the images are captured by the webcams to be displayed on a cloth screen onstage and/or over Zoom allows the performers to use light as a part of the scenery that can be played with and manipulated during the performance, as if it were a physical object, akin to the physicality of the “clouds”.

## **Music**

The musical language of *O Céu Por Cima de Cá* is as varied as the backgrounds of the performers. All the performers on stage are multi-instrumentalists, each with his own set of tools and knick-knacks (music boxes, chimes, flutes) that enable the production of varied soundscapes. In the piece, Heaven is seen like a sound factory, and so from it emanates everything from birdsong, to thunder, to laments and poems, to J. S. Bach, to Bob Marley, to John Cage, to Stockhausen, to Wim Wenders, etc.

Every music section is the result of collective work held in laboratory sessions, eschewing scores in favor of free improvisation and memorization. This fluidity allows, as in the scenery and lights, an easier adaptation to what the scene requires emotionally and acoustically. It also accommodates more organic movements from the performers that dance and move through the space without them having to refer to strict timings and tempos. This link between body and sound is in a way similar to the mix of spoken word and song that they use to “speak”. The *anjitsuri* communicate more in music and poems than they do in simple words, and so the musical pieces aim to be as fluid as a conversation.

Recordings from extinct and collected soundscapes are used throughout the performance not only to punctuate the atemporality of Heaven, but also to mesh the performers’ voices and instruments. The samples range from excerpts from dialogues from films such as Wim Wenders *Der Himmel Uber Berlin* or Pasolini’s *Che cosa son le nuvole?*, a TV talk show featuring Agostinho da Silva (Portuguese philosopher) to the grandmother of one of the performers reciting a Goethe’s poem, to markets and birds, a gamelan, boats and thunder, etc. These are used to enhance the fluidity of change between different musical styles and genres.

## ***Movement***

The use of movement and space is very deliberate, being important components of the performance. Accordingly, throughout the week, every rehearsal starts with a body warm-up. These are led by a different performer each day. There is no set routine, but it always involves starting with breathing exercises that lead to full-body movement and almost always evolve into theatrical-music improvisations. The warm-up takes as much time as the performers feel is needed, to “wake up” not only their bodies but also their minds, stimulating their creativity for the work ahead.

These warm-ups aim to heighten the sense of self and the body, its relationship with the space, so that movement throughout the piece can be more mindful and aesthetically consistent.

There was an effort to make an asymmetrical performance, meaning that what can be viewed from the audience and over Zoom is at the same time aesthetically cohesive, mysterious and, more importantly, different. The movements of the performers in space serve to heighten the otherworldly and ethereal personalities of the *anjitsuri*, while also catalyzing the sensation that what the audience is seeing is almost, but not quite, familiar and normal.

During the performance, the *anjitsuri* take on different roles and tasks of their daily lives. Simple tasks can have complex and strange movements. Complex tasks can have subdued movements.

## ***Interaction***

One of the tasks of the *anjitsuri* is to hear calls for help from those on Earth. To explore that, we thought that Heaven should work as a call-center, complete with an old landline. *Anjitsuri* should answer calls day and night. Both as a joke and as social commentary on the unfortunately isolated times this performance was developed in, this call-center is teleworking over Zoom, due to a higher quantity of cries for help.

At specific instances in the performance, a window is opened into Zoom and displayed on the cloth screen, so that people in the live audience can see those who are at home in their computers, and those in Zoom can see each other. A recording (or a performer, in later versions<sup>10</sup>) then reads a list of grievances, in a tone like those recordings common in Government/Hospital/Finance Department lines, as detached from human intimacy as possible. This voice asks those in the call to think about them and how they relate to their lives (broken down cars, financial difficulties, back pain, lost love, loneliness and other mundane tales of woe).

Because simple language can be reductive when you are trying to give a universal solution to the call, the *anjitsuri* answer in poems, songs or dances, their preferred methods of communication. This interaction is one of the reasons that this performance couldn't happen over a livestream. This *window* that connects Heaven to Earth is a fundamental part of the performance, alluded to since the Prologue and commented on until the Epilogue.

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<sup>10</sup> In the later cases where there was an angel reading the list of grievances, there was direct interaction with those on Zoom, commenting on their expressions, clothes and what else could be seen on their camera. This was the case when we redid the performance in April 2021, which took place only over Zoom because of a new confinement.

These moments of communication may appear rudimentary, but given the limitations of the technology, they serve well the purpose of showing those on Zoom that what is happening is not only live, but responsive to them. Suddenly what was a screen turns into a window, with strange beings on the other side!

It bestows an air of mystery and ambiguity to some of the visual tricks that happen with the webcams. To those watching live in the theatre, it reveals that what is happening goes further than the room they are in, into other skies and far away clouds.

## **"What dreams may come"**

There is a myth in theatre circles that on the premiere of *Death of a Salesman* by Arthur Miller, most of the audience was in tears by the end of the play, with some people needing to be transported to a hospital (Isherwood, 2012). In a "sister-myth", on the premiere of Lumiere's *Arrival of the Train*, a stampede occurred when the people who until then hadn't heard of this new thing called movies thought that the train would run them over (Loiperdinger & Elzer, 2004). Although both of these stories aren't probable to be more than myths, they echo the human need of using art to create "windows" into other places, other worlds - to look on a stage, a screen or a page and see more than an artifice, to see something "real". It was this "real", this constructed reality that we strove to create for those who saw *O Céu Por Cima de Cá*. A window into the clouds and the daily lives of their inhabitants.

This performance took place again on April 10<sup>th</sup> 2021 at the Cineteatro Louletano, in Loulé. Unfortunately, it had to occur only over Zoom, because of the restrictions of the pandemic. But, as every hurdle until now, CMT made an effort to overcome the limitation, and so we took the opportunity to perfect and enhance what people saw over Zoom. The process was not as simple as putting a camera in the audience and record the whole stage. Instead, we designed more complex points of view, allowing for more moments of misdirection.

What we learned with the first versions of *O Céu Por Cima de Cá* will undoubtedly impact further versions, continuing the cycle of iteration and creation. All the projects that lead to *O Céu Por Cima de Cá* were a struggle against the invisible limiting forces of the pandemic, that impacted the quality of in-person presence and communication. There is nothing like sharing a place, to be co-present, and online communication is at best an emulation of normal human connection. Nonetheless, every experience allowed us to "cure" some of the "wounds" that the pandemic left on us, and on our audiences. To sate the thirst for human connection that the required isolation forbid. It is to give back to the audience what should always be theirs: the capacity to participate and create moments of artistic sharing.

Other than that, what the future holds is a mystery, as diffuse and ambiguous as what happens above the clouds.

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# The polluted soundscape as music. Reflections on soundwalks

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Boë Caroline<sup>1</sup>

**Abstract.** If composers of mixed, concrete or electroacoustic music as well as sound artists struggle to eliminate from field recordings as much acoustic pollution as possible (Mâche, 2007), this research-creation in music consists, on the contrary, in identifying certain noise nuisances – low intensity and mainly stationary sounds – that our urban ears filter. The purpose is to isolate them in order to archive and map them on a participative website [anthropophony.org], and focus on their singular substance, in a materialistic way – inspired by the noise music (Russolo, 2001). This gives these waste sounds an ontological status, and places creation in the lineage of an aesthetic of rejection (Bourriaud, 2017; Dagognet, 1997). This collaborative website has a double function: the elaboration of a collective geolocalized sound palette to compose spatialized soundscapes, and the preparation of soundwalks oriented on the music of noises. This article focuses on the individual perception of soundscapes and the social relationship produced by walking and listening to a common space.

**Keywords.** Soundscape; Soundwalks; Polluted field recording; Noise music; Acoustic ecology

## Introduction

I am a composer as well as an artist researcher and for several years have directed my works towards the issue of soundscape and the problems of noise pollution that are linked to it. The shift in my artistic work - from scholarly music to soundscape - occurred because of ethical and environmental questions, focusing on the issue of listening, which seems very underdeveloped in our civilization. And this is precisely the purpose of sound ecology, understood as an ethical and environmental commitment.

*Ecology is the study of the relationship between living organisms and their environment. Acoustic ecology is therefore the study of sounds in relationship to life and society. This cannot be accomplished by remaining in the laboratory. It can only be accomplished by considering on location the effects of the acoustic environment on the creatures living in it (Schafer, 1994: 205).*

The commitment is environmental, because it makes it possible to denounce noise pollution, symptomatic of a more general pollution, responsible for the destruction of our planet. When we enjoy the sounds of nature, we dream of *clairaudience*<sup>2</sup>. However, it is almost impossible today to listen to a bird sing or a drop of water fall, without the sound being parasitized by a multitude of other surrounding sounds, as shown by Gordon Hempton who travels the world

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<sup>2</sup> “CLAIRAUDIENGE: Literally, clear hearing. The way I use the term there is nothing mystical about it; it simply refers to exceptional hearing ability, particularly with regard to environmental sound. Hearing ability may be trained to the clairaudient state by means of EAR CLEANING exercises” (Schafer, 1994, p.272).

in order to find areas of one cm<sup>2</sup> without anthropophonic sounds<sup>3</sup> (Hempton, 2016). In this context, we can reactivate the concept of “deep ecology” (Naess and Rothenberg, 2009) which questions the notion of silence, and which was seized by sound artists of the 1950s and 1970s such as John Cage, Yoko Ono and Max Neuhaus. From this genealogy, my artistic and theoretical work is oriented towards the question of listening.

Engagement is ethical, because the way we listen to the world matches our way of being in the world (Pardo Salgado, 2018). The work of educating the ears (Schafer, 1967) allows a certain social refinement, listening to the world and living together. It is this aspect seen from a sociological perspective that will be discussed here. Small soundwalk groups allow this reflection.

This social commitment joins a certain activism:

*The act of listening through public soundwalks and other formal and informal exercises builds environmental and social awareness and promotes changes in social and cultural practices (Polli, 2012).*

## Quality criteria

With the expression “social sculpture”, Joseph Beuys proposed a broad theory of art, which reaches the entire social body (Lamarche-Vadel, Bonito Oliva and Rona, 1985: 86). It is a concept of anthropological art, in which everyone is an artist, because creativity is latent in all human acts. Art is envisioned as a process of thought, speech, discussion, and collective, political, and environmental actions. Human and social relationships are fostered by interactions related to walking and listening during walks. Each *promeneur écoutant*<sup>4</sup> creates his own sound fiction, within a group that interacts with him. And this cultivates the “quality of being” (Lamarche-Vadel, Bonito Oliva and Rona, 1985: 115).

This notion of quality is found in a qualitative sociology (Augoyard, 1979), which looks at the quality of space in everyday life. Because everyday life is a fabric of ways of being. From an anthropological point of view, to be interested in it means to focus on the *endotic*<sup>5</sup>, “to question what seems so obvious that we have forgotten the origin ... To question what seems to have ceased to amaze us forever ...” (Perec, 1989: 11)<sup>6</sup>. This refers to the philosophy of everyday life whose concept comes from Pyrrho: observe the phenomena that we live by ignoring our opinions (Sextus Empiricus and Pellegrin, 1997). Because it is necessary for a moment to forget our repulsion for noise pollution, if we want to experience it, especially regarding constant low intensity sounds – ventilation, electric buzz, etc. – that our ears filter through due to our hearing habituation (Solomos et al., 2016).

Listening to the sounds that we would rather not hear might seem ambiguous at first, but this becomes necessary as soon as we are willing to unblock our ears. Indeed, an effort is required if we wish to resist what Walter Benjamin referred to as the fall in the *rate of experience*, that is, to the growing poverty of our private and collective experiences (Benjamin et al., 2000:

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<sup>3</sup> Anthropophonic sounds are defined by Bernie Krause as those produced by the human species, as opposed to biophonic and geophonic sounds (Krause, 2013).

<sup>4</sup> The expression *promeneur écoutant* (walker-listening) is used by Michel Chion, in his essay on acoulogy (1993).

<sup>5</sup> Endotic anthropology is about what is mundane and habitual, and is opposed to exotic ethnology.

<sup>6</sup> “interroger ce qui semble tellement aller de soi que nous en avons oublié l’origine... Interroger ce qui semble avoir cessé à jamais de nous étonner...” (author’s translation).

365). As Thierry Davila emphasizes in the work of Max Neuhaus, we are “at the time of the reduction of the possibility of experience” because “western man seems more than ever, prey to technical rules which mechanize perception, which instrumentalize it in favor of a purely quantitative sensory logic” (Davila, 2010: 205)<sup>7</sup>.

Quality of experience, quality of listening, quality of being, quality of social interactions, environmental quality, these concepts refer us to the Guattarian ecosophical notion, of an ethico-political nature:

*Environmental ecology should be thought of in one piece with social ecology and mental ecology, through an ethico-political ecosophy. [...] It is a question of] making each other support innovative practices of recomposing individual and collective subjectivities, within new technico-scientific context1 (Guattari, 1989, back cover).<sup>8</sup>*

To clarify ecosophy, Guattari uses the concept of *mechanosphere*. The *mechanosphere*, composed by machinic multiplicities, is called into question to foresee a better quality of living on earth, where ethical-political choices, qualitative rather than quantitative, at the service of the multiplicities of singular desires would be a priority (Guattari, 2003). The machines in question are technological, economic, theoretical, aesthetic and social. The *mechanosphere* represents that layer of interlocking human inventions, which in view of the current record is opposed to the health of the biosphere as well as to the personal development of human beings, to their mental and social health.

In this Guattarian *mechanosphere: technophony*. This term is used by Quentin Arnoux, to designate the layer of electromechanical sounds belonging to the category of *anthropophonic* sounds defined by Bernie Krause (Arnoux, 2021: 92–100). Technophony is at the origin of this research in art which, through the practice of soundwalks, tries to clarify the notion of collective listening of urban daily life, from singular sound explorations and their possible social interactions.

## ***Inframine*, nuance and invention when walking**

It is therefore a matter of refining an approach to sound reality, by unbridling our perceptions hampered “by habit, by a floating attention that does not allow the distinction of acoustic nuances” (Davila, 2010: 208)<sup>9</sup>, an opening onto *enharmonism* (Russolo, 2001, pp. 78–84), onto “new sensory nuances, [...] an observation of the infinite variations of the sound texture” (Davila, 2010: 209–210)<sup>10</sup>. Infinite and tiny variations, of an uttermost tenuity: *inframines*. The term comes from Marcel Duchamp and designates an almost imperceptible interval between two phenomena – an interval so thin that it is perhaps produced by our imagination. It is a dynamic opening of our perceptual field, an intensification of our attention and discernment ability. However, the condition of possibility of the voluntary act of listening to

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<sup>7</sup> “à l’époque de l’amenuisement de la possibilité d’expérience” ... “l’homme occidental semble plus que jamais en proie aux règles techniques qui mécanisent la perception, qui l’instrumentalisent au profit d’une logique sensorielle purement quantitative” (author’s translation).

<sup>8</sup> “L’écologie environnementale devrait être pensée d’un seul tenant avec l’écologie sociale et l’écologie mentale, à travers une écologie de caractère éthico-politique. [...] Il s’agit de faire s’étayer les unes les autres des pratiques innovatrices de recomposition des subjectivités individuelles et collectives, au sein de nouveaux contextes technico-scientifiques” (author’s translation).

<sup>9</sup> “par l’habitude, par une attention flottante qui ne permet pas la distinction de nuances acoustiques” (author’s translation).

<sup>10</sup> “nuances sensorielles nouvelles, [...] une observation des variations infinies de la texture sonore” (author’s translation).

*inframine* sounds is based on the ability to let oneself be immersed without resistance in the thickness of urban sound. Being both active in discernment and available to welcome the infinite sound sharpens our hearing acuity and thus shifts our threshold of perception.

This attitude –or rather non-attitude (Grant and Patterson, 1975)– joins the phenomenological thought of Merleau-Ponty, for whom reflection “sinks into the world instead of dominating it” (Merleau-Ponty & Lefort, 1979: 60)<sup>11</sup>. For the listening-walker, this is about being “a stakeholder in what he observes and in the forest of phenomena that he raises in order to decipher their resonances and relationships” (Davila, 2010: 213)<sup>12</sup>. This decoding of nuances is made possible by the suspension of our dichotomous judgment –*wanted sound / unwanted sound*<sup>13</sup>– to better understand the complexity of the sonic richness of the landscape in which we participate.

Through walking and body movements, sound perception in three dimensions evolves constantly. The dynamic activity of spatial listening is encouraged: no orientation is imposed; the soundscape is offered to us with so many mysteries. We can try to find out where this sound that we are just beginning to hear comes from. It’s a real listening game. Geographically, does it come from the street we will soon cross? Which machine produces it? a mechanical sweeper in the distance? an air conditioner, a high-voltage transformer station, an incorrectly set alarm, an ice-cream machine? Walking allows us to direct ourselves here or there to solve the riddle. This is the reason why Salomé Voegelin talks about a method of exploration:

*In this sense listening is not a receptive mode but a method of exploration, a mode of 'walking' through the soundscape/the sound work. What I hear is discovered not received, and this discovery is generative, a fantasy: always different and subjective and continually, presently now (2010: 4).*

The exploration of the *inframine* is full of uncertainties, its understanding doubtful and fleeting. It carries within it a subjective part of mental creation which tries to complete its own gaps. In this sense, each walker-listener is an artist who silently develops his own sound fiction, from a measurable “acoustic reality” augmented by a non-quantifiable sensitive imagination.

When the walker-listeners are in a group, the sound fiction becomes polyphonic and polyrhythmic, but always remains silent. And that's the whole paradox of this collective imaginary object, endowed with an aesthetic, perceptual-communicative dimension (Barbanti and Marietan, 2011: 12).

## Collective exploration, acoustic community

Small-group soundwalks foster a collective situation of *surécoute*<sup>14</sup>, which stems from an “aesthetic of espionage” (Szendy, 2007). They develop an “almost animal and sound

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<sup>11</sup> “s'enfoncé dans le monde au lieu de la dominer” (author’s translation).

<sup>12</sup> “partie prenante de ce qu’il observe et de la forêt de phénomènes qu’il fait lever pour en décrypter les résonances et les relations” (author’s translation).

<sup>13</sup> Murray Schafer distinguishes between wanted sounds and unwanted sounds in order to contrast sound with noise (Schafer, 1994).

<sup>14</sup> Over-listening. The term is left in french because it is a wordplay between spy eavesdropping “sur écoute” and over-developed listening “surécoute”.

predatory” hyperesthesia (Davila, 2010: 217)<sup>15</sup>, by mobilizing our attentional capacities which are disappearing in our time (Crawford, 2016). This effort of auditory attention, when it is collective, reminds us of our belonging to an *acoustic community*. The notion of acoustic community comes from Murray Schafer, who broadened the model of the individual listener to larger structures, conceiving the soundscape as a system of auditory relationships:

*Schafer’s turn from an anti-noise stance to a listener-centered approach based on the soundscape concept was the critical shift that allowed a subjective, cognitive, and culturally based model to be formulated that described the soundscape as a system of auditory relationships. Enlarging the scope of the model from the individual listener to larger social structures resulted in the concept of the acoustic community (Droumeva and Jordan, 2019: 40).*

For Elena Biserna, walking develops the awareness of belonging to this acoustic community, because “the walking body always establishes a plurality of auditory relationships”, in a soundscape where “the city’s material, cultural, social, and political dynamics are audible and always open to multiple individual and collective negotiations and interactions” (Biserna, 2021: 13). These interactions are favored by our moving body, within a group and in a shared common context:

*It establishes an embodied and situated exchange with the environment (Le Breton, 2000; Sansot, 2000; Thibaud, 2008; Thomas, 2010) [...] while providing an opportunity to participate in the public sphere and to encounter otherness (Jacobs, 1992; La Cecla, 1988; Solnit, 2001). Walking, from these perspectives, becomes a critical tool to perceive, explore, and experience the urban (in its physical, but also cultural, social, and political aspects) in contextual and embodied ways (Biserna, 2018: 3).*

The environment referred to is expanded. The soundscape considers the perceptual and communicative dimensions interwoven between the sound, the cultural, the social and the political. It is a collective engagement with the world, as Andrea Polli points out:

*Listening to a soundscape [while walking] is an activity designed specifically to connect human ears with the environment [and] [i]t’s a way of engaging participants collectively with the world (2012: 261).*

It is this engagement with the world that ultimately gives meaning to listening to the soundscape, and which would celebrate the “human connection and subordination to the complexity of the environment” (Polli, 2012). In this sense, if for Joseph Beuys “a social art means cultivating relationships between humans, almost an act of life” (Lamarche-Vadel, Bonito Oliva and Rona, 1985: 115), then the soundwalk is a true artistic, social, musical and biological act.

The members of this community refine, through the exercise of listening, the awareness of their auditory habituation (Solomos et al., 2016), and realize that the urban soundscape, when viewed as polyphonic and polyrhythmic music, offers the possibility of “opening the ears wide” (Pardo Salgado, 2018) to otherness. It is an act of life.

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<sup>15</sup> “quasiment animale et prédatrice du son” (author’s translation).

## A soundwalk experience followed by commentaries

An act of life, a biological, artistic, and social act which therefore explores the soundscape and opens to the aesthetic experience.

On March 24, 2021, I organized a soundwalk at Place Castellane in Marseille, to explore together some of the intrusive sounds of our urban landscape (Figure 1). It is, as Gosselin defines it, to take advantage of my immersion in a practice to theorize a subject that "works" my practice. (Gosselin and Laurier, 2004).

We went to an underground metro station, whose acoustic universe is made up of reverberations of footsteps, voices, and machines - tickets, cold drinks, photo booth, etc. (Figure 1).



Figure 1. Soundwalk at Place Castellane, March 24, 2021. Listening to the resonances between a drinks machine and a photo booth (photo by Elena Biserna).

We came out on the other side of the square to listen to a surprising advertising LED panel in the cacophony of traffic (Figure 2).



Figure 2: Soundwalk at Place Castellane, March 24, 2021. Listening to an advertising LED panel (photo by Jean-Eudes Trouslard).

And finally, we explored the sounds of an organic grocery store –“Naturalia” retail chain– which, when you enter it, gives an impression of silence (Figure 3).



Figure 3: Soundwalk at Place Castellane, March 24, 2021. Listening to the device of the organic store: refrigerators arranged in a "U", neon lights and air conditioning (photo by Caroline Boë)

Here are of the commentaries –anonymized– on the sound experience of this organic store:

*It's a typical rather high ceilinged indoor acoustic, so it's quite interesting, we can distinguish the sound planes quite well depending on how we move around the store.*

*A soundproof box, there was no more sound, I found it odd, indeed, the absence of sound.*

*What obviously always makes me laugh in stores and that we will find here [is] this kind of sound chamber that absorbs all sounds and presto! we find ourselves in a kind of little moving thing, with these noises of fridges ... as if we were under water, a kind of small electric noise, we wander in a kind of cocoon in which we are a little in suspense in fact, and that made me laugh.*

*For me the organic store is a seemingly quiet atmosphere [...] but if you pay more attention there are lots of noises, lots of sounds that obviously emerge, with all the equipment that is in the store.*

*Another sound that I really liked was the neon lights in “Naturalia”. There were neon lights that made slightly different frequencies, there you go, I liked it enough.*

*Under the fan, the air conditioning system, there were several sounds and one of the sounds was [...] super weird, I wouldn't dare to do it again, but which interested me a lot and which I did not expect, and suddenly, that I really liked.*

*In fact this kind of iiiiii that you don't hear, iiiiii that's there all the time, it's the one I want to suppress because it prevents from hearing other sounds. It prevents from focusing on the details, following the things that change because it's there, a little insidious, permanent, and it stays high-pitched, in frequencies that sound like speech, and suddenly, I think that this is the one I would like to remove, the noise of the fridges, or that kind of electrically powered iiiiii.*

*So that is more the noise of the fridges, but in fact, for me, the noises are linked to the object, and for example my fridge ... when I bought it, I was told: it does not make any noise. And finally, obviously, It wasn't properly fixed to the ground so suddenly it makes noise, and in fact that reassures me. A fridge must make noise.*

*The thing, in front of the fridges inside large or small grocery stores, where we have the purring of fridges all at the same time, it's not that unbearable, because there is a kind of coldness in the noise which is also the coldness, which is behind, [...] they have glass walls, these fridges, glass walls and shelves where the products are tidy. So, there is an aesthetic of the series and the repetition, the more the lighting that there is inside the fridges / glass walls the more the noise... And there, the one where you brought us that made a space in "U" where, in fact, there were refrigerator windows on three sides, and I find that quite religious, meaning that the noise is not disturbing. And this place in front of the "Naturalia" fridges, I find it quite ... religious, that the fact of being there, of having to be there, the fact that they are there ... makes sense. There is real meaning in being there, in this world of coldness, racing, repetition and fan noise. This one is not unbearable at all; I love it very much.*

The aesthetic question is raised by a participant, conceived as an aesthetic of the series, of repetition and coldness, coherent between the place, its function, and its soundscape. It is also an aesthetic of reception according to Roberto Barbanti, an aesthetic of exploration according to Salomé Voegelin, an aesthetic of everyday life for Félix Guattari. It is at the heart of sound ecology.

These comments show how subjective listening is, and that there are no semiotic invariants in sound, which one describes as “purr” and the other as “iiiiii”. If for one we can clearly distinguish all sounds, for the other noise nuisance makes it impossible to distinguish other sounds and he/she would like to suppress it. If one finds it curious, the other loves it very much, a third is overcome by an insidious sound, a fourth feels reassured, a fifth establishes a link with religion. In addition to these perceptions-constructions of singular meanings, the walkers-listeners have collectively identified the different sound origins: refrigerators, air conditioning system, neon lights. This refers to collective intelligence (Servan-Schreiber, 2018).

It turns out that everyone develops their own inner music and enjoys sharing their experience. The participants of this soundwalk (and I include myself) intellectually reject noise pollution, while our bodies use it creatively. This reveals a kind of schizophrenia, a gap between what we would like to denounce in an ethical-eco-socio-political framework, and our human condition of enjoying-perceptive.

## Conclusions

Soundwalks are a new approach to musical composition, since we accept, with John Cage, that everything is music (Cage, 1961). It places sound art in the realm of music, if we agree with Leigh Landy that “the sound, that is, not the musical note, is its basic unit” (Landy, 2007: 17). If music is a sonically moving form (Hanslick, 2018), then the movement of the soundwalk creates music. Current research in music considers this dimension which concerns listening and acoustic ecology. It is an opening to the world that de-hierarchizes the notion of the composer-genius, in which each in his own way sublimates the acoustic reality, transforms it into music.



Urban soundwalks are militant acts, they point to the invasion of space by the technophony and seek to develop the capacity of attention through straining ears. Despite this wish-denunciation of noise pollution, it seems that our resilience takes over, and that we constantly aestheticize our perceptions. This is all the ambiguity of this research, which ultimately shows that sharpening our perceptual auditory abilities leads us to a phantasmagorical, collective, and shared imagination during the walks and discussions that follow. It therefore appears that we can both fight against noise pollution and enjoy the aesthetic experience. The comments received after the soundwalk Place Castellane in Marseille testify.

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# *From home towards a world...* Around the role of music in museum exhibitions

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**Abstract.** What can be the role of music in museum exhibitions? That was the main issue when we conceived the curating project *From home towards a world...* In the early weeks of the pandemic confinement new ideas emerged trying to overcome the once current situation. A group of Portuguese creators conceived the main idea, and the curating project was developed and presented at the *21st Bienal Internacional de Cerveira*. The triadic connection between Literature, Painting and Music is quite unusual and proposes new glimpses that might surely be more and more often developed in a near future. The process took place between visual artists, writers and poets and then in a second phase, with composers (and musicians). Everything was achieved in unexpected completeness through zoom meetings and uncountable WhatsApp messages. The creation process overcame a huge challenge when accomplishing a multisensory culture. We wanted to explore the challenge of incorporating 15 contemporary music composers in this curating process, in a third moment. The colors and words revealed the identity of inner worlds that are deeply thrown in the music, acoustic or electronic, performed by different musicians, instruments, or technological procedures.

**Keywords.** Curatorial Process; Museum/Galleries Exhibitions; Writers, Visual Artists and Composers.

## Introduction

One of the first questions placed concerns the role of music in museum exhibitions. It can be added also *beyond* museum exhibitions, when considering those that can happen in other suitable spaces, such as galleries, art centers or even chosen heritage building and environments suitable to the curating concept. The following question concerns the different ways and roles that music might accomplish under the edge of crossed arts for exhibition purposes. Although we won't be able to achieve full answers, due to the complexity of this subjects, some reflections will be presented as contributes for ongoing and further research.

The previous phenomenological reflections, before decoding the curatorship's process, are a synthesis to characterize the aesthetic background that moved us when addressing to "*from home towards a world*". The exhibition opening occurred during the 21<sup>st</sup> Cerveira International Biennale, in August 2020. In parallel, audiovisual contents were conceived and located in digital platforms such as the Biennale official website, Facebook and Instagram. Since the beginning we knew that it was important to disseminate such an unusual exhibition and the most convenient way, according to the pandemic situation, were the online stages.

One of the main subjects, when conceiving the project, consisted of and was developed upon the belief that aesthetic perception should be taken as an *ensemble* of parceled and specific ones: not only vision and hearing activations, but bodily and tactile introjections/projections

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stimulated by the personal immateriality of each ones reading, contemplating and listening upon those interconnected artistic ideas-substances.

## Conceptual basis for a crossed arts exhibition: words, images and sounds

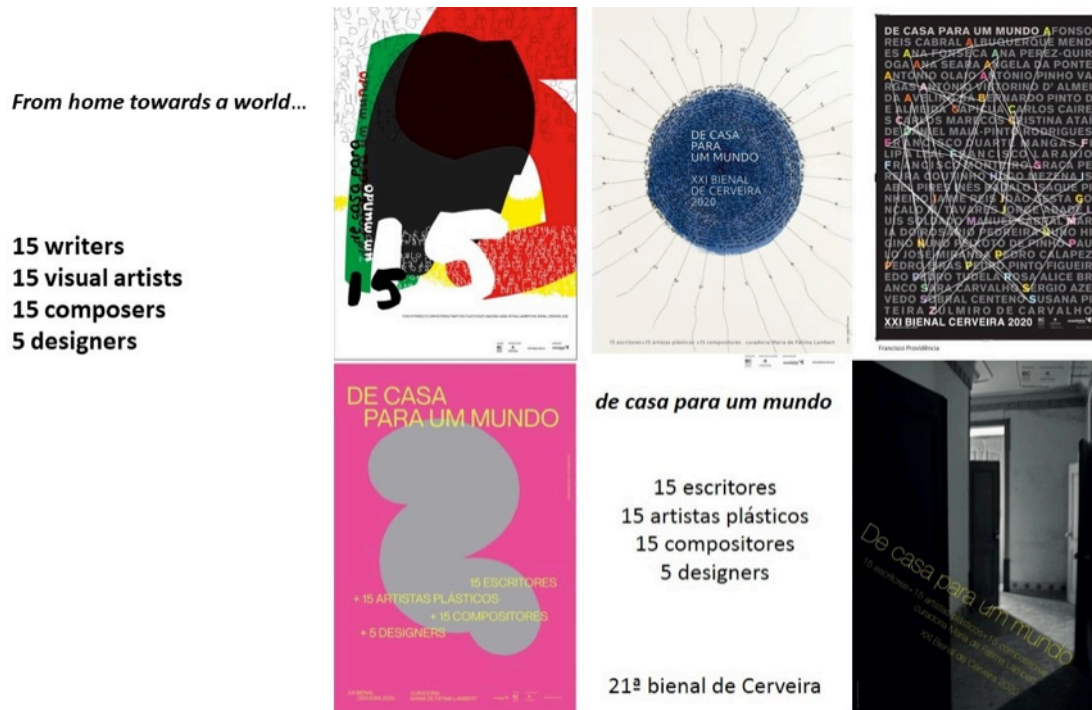


Figure 1: Presentation of the five posters created (left to right, up and down) for this project also part of the exhibition: Nuno Sá-Coutinho; Beatriz Horta-Correia; Francisco Providência; Joana Machado and Miguel Gaspar.

The sound perception in an exhibition depends upon:

- The space-place-environment, architecture and acoustic;
- The location/origin from where sound arises – object, technological display;
- The design exhibition and its relationship towards the other works gathered at the curating (exhibition) project.

The conjunction of these topics was/is the organized central issue that we thought, when observing the characteristics of the **project FROM HOME TOWARDS A WORLD**. So, let's develop a few forewords from the curator and researcher point of view, although it's neither the place nor time to recover (or pull together) the expanded historic connections between words-images-sounds or more precisely: between writing-painting/drawing-composing.

Once, as known from History of Western Culture and Arts (Aesthetic and Philosophy), huge philosophic discussions took place about the following correspondence of artistic creations and “comparatist aesthetic elements” (Souriau, 1983). Souriau assumed his research, classifying the Arts according to the grounds of Music, Painting/Sculpture and Literature, following its correspondences and affinities according to Compared Aesthetic: “The attempt to find “correspondences” between the arts which has been made by modern aestheticians like Etienne Souriau (La correspondance des arts, Paris, 1947) seems, superficially viewed, to be an activity appropriate to the present scientific age” (Schueller, 1953: 334). The French philosopher was aware of the previous arguments about it, namely the 18<sup>th</sup> obsession about

this subject. He recalls, after J. Combarieu, Music as “the art of thinking with sounds” (Souriau, 1983: 4) and both sculptors and painters had same psychological capacities: sculptors, like Pierre Puget, when using his tools, shaped powerful marble pieces or Delacroix, the painter, who developed his painting through conceptual colours’ idiosyncrasy. Music, sculpture, painting as for literature were strong means of thinking and generating ideas: immaterial in raw materials. What for, and why emphasise differences between the Arts if such fundamental analogies are noticeable? Linked ideas and connections between different arts gathered overwhelming reflections and were an unforgettable participation to consolidate thought and art developments. Certainly, we should ponder: “Each language carries its own resources and insufficiencies and deals with the subject in its own way” (Souriau, 1983: 5)<sup>3</sup>. Each Art has its own language, so any “poetic translations and/or transpositions” of each other must be carefully evaluated and taken for. On the other hand, it is well known that along European History of Arts, or Music or Literature, precise situations and circumstances were identified:

- authors – philosophers, poets, painters, architects, directors, dancers, performers and/or musicians – wondered about these links and interconnections;
- several proposals and great achievements seduced the audiences and publics: let’s not forget the immateriality of such heritage for humankind and how crucial it is.

In Ancient Greece *Aedo* performers intrinsically articulated dance, music, theater and poetry - *Triunica Choreia*<sup>4</sup> - and gifted by the Gods (Greek Mythology) so deeply moving audiences. These Expressive Arts, asked for the quality/dimension/concept of *Poiésis*, while as for counterpoint, the Constructive Arts (Painting, Sculpture and Architecture) were based upon the ability/dimension of *Tekne*. Curiously, for the main public, during centuries in Occidental Art History the aesthetic reception was much easily organized and surrounded by the power of image, although performative arts were those which had a major emotional impact. Nowadays, the power of images reached a supreme level, surrounding one’s closer housing circles, so it’s quite clear that non-specialized audiences or publics are more acquainted with Contemporary Visual Arts than with recent Performative Arts’ languages or tendencies; people admit their difficulties and it’s comprehensible that, in a certain sense, Arts surely “speak diverse languages”. Of course, either Arts or Literature, while astonishing their readers, question their aesthetic taste. And, certainly, this matters that the unsolved enigma of aesthetic taste is an added reflection that persecutes contemporary thinkers and people in general. Which arts and art works are precious or depreciated jewels for “common sense and sensibility”?

Another perspective focuses not on the correspondences but on affinities between arts. Affinities can be originated from plural capacities within a single author/person or, more often, it grows from the interchange of authors, each approaching and expressing a different artistic field.

It is known that few people had the virtuosity of having in oneself the privilege of writing, painting and composing, as Hildegard von Bingen did in the 11<sup>th</sup> century, and also acting as visionary and mystic. Quite different circumstances from those of the French painter Nicolas Poussin that undertook the challenge of transposing the Greek *modes*, as structure for the

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<sup>3</sup> “Cada linguagem traz consigo recursos próprios e insuficiências, e trata o assunto a seu modo próprio.” (Maria de Fátima Lambert’s Translation).

<sup>4</sup> See: Tatarkiewicz (1991: 22-27).

composition of sentences/phrases (poems), and also music facing analogous achievements in painting's "underneath" structure. He wanted to organize feelings and emotions in *phrases* (visual and musical) which would be crossing and that could be shared by the three Arts. (But, never losing our faith, let's jump and recall the utopias by Poussin, when in the 18th century he aimed for a kind of interrelated achievement of analogical contents between music, poetry, and painting).

These and other authors, ideas and facts available to be acknowledged in Literature, Art and Music History were bounced by acting out of different artistic characters in Occidental Avant-gardes: Futurism, Dadaism or Bauhaus. The interact complicity arose when musicians, poets, dancers, choreographers and painters renewed creation – aiming an unconventional category of *Gesamtkunstwerk*, such as:

- *Ballets Russes* "original productions" - *The afternoon of a faun; Sacre du Printemps* or *Les Noces*, among others examples, when choreographers, dancers, composers and visual artists took common challenges, facing novelty and scandal – Stravinsky staging his composition for Vaslav Nijinsk choreography.
- Jean Cocteau, acting as poet and movie director, developed his career as draughtsman, although he gathered for his projects others fellow artists, crossing identities and myths – Ballet *Parade* and later, in the fifties, his exclusive cinema version *Orpheus*.
- The paradigmatic relationship between music and painting, according to Kandinsky and Schoenberg<sup>5</sup> grounds, testified along their famous letters, when related to the famous common project *Gelb Klange*.
- The first Dada and Surrealist films should be considered - *Entr'act* directed by visual artists Francis Picabia and Man Ray, which included the famous scene staged by Marcel Duchamp and Erik Satie playing chess at Paris' roofs.

Some decades later and just one more notorious example, the couple starred by John Cage and Merce Cunningham, that called upon Jaspers Johns and Robert Rauschenberg for several creations intrinsically connecting music and dance with visual arts and philosophy.<sup>6</sup>

However, in a curating mood, when thinking about exhibitions - differing from what happens with musical and dance performances - most of the time, music assumed a kind of invisible presence, improving the aesthetic environment were the visual works were displayed, but not being interrelated at the state of a "prime time" of creation with words and images. Nevertheless, let's face present time and slide over Rauschenberg and get closer to Portugal and the curating project that justifies this study.

## **CURATING crossed arts: what about it?**

### ***Few ideas about the subject***

Currently, we are still debating the dynamics of how to accomplish curating, when the terms curatorship and curator have already spill over beyond the visual arts. In the eighties and

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<sup>5</sup> See Arnold Schoenberg & Wassily KANDINSKY. (1987). *Cartas, cuadros y documentos*. Madrid: Alianza Música.

<sup>6</sup> And other events could be noticed, but not concerning the guidelines for the present paper.

nineties of the 20<sup>th</sup> century, different curatorship projects developed sound like intersection spaces - between materiality and being intangible - following paradigms of visual aesthetics.

For sure, we have to be careful when addressing what is understood as *Sound Art* as written by Justyna Burzynska (2018): “The use of the word ‘Art’ within the term ‘Sound Art’ seems to place it in the contemplative setting of the art gallery, inviting its constituent works and practitioners into a constructive discourse with the fine arts.” One might wonder why some visual artists are so much connected towards sound reality as creation and insert (or at least consider it) when producing their pieces, which are labelled no longer as single visual pieces.

Sound (in/of) space overcame the global concept of “solo art”, grasped by visual artists connected with sound design aiming ephemeral purposes and goals. Are we trying to accomplish curatorship processes, in a certain sense, overvaluing the power of equipment/objects, instead of highlighting the immateriality of sound /music in exhibition's context?

Considering the presence of music in museum and art galleries, let's distinguish the different levels and categories when crossing arts/disciplines exhibitions. If not most of times, at least sometimes, music assumes a sort of almost invisible/ inaudible presence, due to different reasons. Is it desirable to point out the shape (what is to be seen directly), the content (semantics and symbology) or maybe both of them? To underline the volume (plastically) from which the sound emerges is quite different from to freely project the essence of sound and music.

According to Kannenberg concept of *The Museum of Portable Sound* (2020) there are variations that can be held in research when in view of *Contemporary sound art curation* (2020, p.62). For sure, when consulting some recent academic thesis regarding *Communicating Through Sound in Museum Exhibitions: Unravelling a Field of Practice* (Cortez, 2022) it's understandable how it really means as right following path, regarding different musical typologies.

After visiting an exhibition, after finishing a book or after hearing the last phrase of a composition, what remains? The inner references we keep, after visiting an exhibition, those which prevail in our mind, turn it possible to be remembered: we call upon mental images, sounds or words as we like it. Exhibitions are these privileged situations when all those existences might be gathered and last after a materialized experience *while/after* being there... in space. That's why it is quite difficult to decide the final display of different artistic/discipline items.

Regarding the concept of “sounds” crossed with visual contents, we see the sound, when the volume (plastically) is underlined from which the sound emerges is quite different from to freely project the essence of sound and music.

In most of the museum/gallery exhibitions sounds/music arises from audio supports that are visible and quite powerful. I mean, we clearly see from which technical container the sound come, from which AV dispositive the sound is generated. Sound turns itself into a material thing that overcomes its immateriality as a heritage issue (also). When mentioning “sounds as objects”, we not always follow Pierre Schaeffer (1959) concepts, just centering it in a phenomenological point of view; referring to do fact that, due to impact an aesthetic multi-perception, sounds turn into objects, 3dimensional things. The visual presence of the technological AV equipment is dominant and - sometimes – its display might distract us from the intangibility of sound - travelling lengthways space and time. Which is not to be considered a curatorship problem, just a feeling and reflection we share. If we're aiming the stillness and essence of sound “in itself”, the visual presence is not an obstacle, just as a

curator I must decide how to connect it. The visual strength of the object that produces or conducts the sound is more powerful and imposes itself over the ephemeral maintenance of musical phrases. In a certain perspective, sound vanishes quickly and the objectivity that keeps it, may postpone its presence. Finally, sound slides away and we keep then inner memory of it as part of existence. We keep the memory of the music perception, achieving its immateriality, overlapping time.



Figure 2: Print screen from website - Barbara London, *Soundings*. (Footnote 6)

In the sixties, Barbara London<sup>7</sup> reached for a major achievement that she has developed until now, regarding Sound and Visual Arts and Technology curating and creation: *Soundings*. In late April Barbara London undertook a remarkable talk at zoom platform *Independent Curators International*<sup>8</sup>. As a visionary curator, a pioneer regarding sound and visual arts, not forgetting technology, she recalled several projects of hers along the years. It's outstanding her inner strength and truthful belief about expanded fields and also as she displayed the sound & visual art installations, when asked for technological interacts.

The present year a call titled *Sound Art in Public Spaces: reinventing public space (for all)* was running.<sup>9</sup> When reading the project's presentation, we understand how the pandemic situation determines a different approach concerning the way public and urban spaces are treated related with Sound Art productions:

*The interpretation, importance and even the very definition of public space has been under enormous pressure this past year. Luckily, great pressure often leads to valuable learning and outcomes. Critically approaching and*

<sup>7</sup> "For Seeing Sound, the artworks take shape as kinetic sculpture, audio-video installation, and visitor-responsive technologies. With headphones notably absent, the exhibition consists of complex environmental sonic experiences, where each artwork simultaneously allows for multiple modes of communal listening." Exhibition *Seeing Sound*. <https://curatorsintl.org/exhibitions/seeing-sound> (accessed on 19 September 2022).

<sup>8</sup> ICI - <https://www.e-flux.com/announcements/375542/independent-curators-international-ici-presents-a-conversation-with-barbara-london/> (accessed on 19 September 2022).

<sup>9</sup> <https://www.wildewesten.be/nl/nieuws/open-call-curator-sound-art-project> (accessed on 19 September 2022).



*ultimately reinventing public space is one of the central challenges we face today. (...) Depending on a list of variables – income, place of residence, age, gender, cultural or religious background – public space has either been significantly limited or enhanced this past year. (...) How do we ensure that this space becomes and remains accessible to the enormously diverse groups in our society? And how do we fill it in so that it is safe and meaningful for all of us? (ICI, 2021).<sup>10</sup>*

### **The late 20<sup>th</sup> century**

In the late four decades of the 20<sup>th</sup> century the power of curators arose, and the dynamics of artistic and cultural policies had new protagonists. We still argue about curatorship dynamics and the terms curating and curator overlap visual arts. But in the eighties and nineties different curating project developed crossing sound in space, with visual aesthetics paradigms. Sound space became a kind of global concept, grasped by visual artists connected with sound, aiming ephemeral and immaterial purposes and goals.

Considering museum and art galleries, and concerning the Portuguese panorama, we can identify crossing arts exhibitions in different levels and categories. Sometimes, music had assumed an almost invisible/ sonorous veiled presence, due to different reasons. We will try to resume.

In certain exhibitions music enters in a backstage frame (for some people is a “surplus”, a “bonus”) “improving” the aesthetic reception in context, generating an upgraded environment. In such case, Music is present while surrounding the displayed visual works, but not being, truthfully, interrelated in the state of prime time of creation, not placed at the same level of images or introduced in the duet words & images. The power of the object is clearly an authority.



Figure 3: Paul Devens – *SweetSpot* – 2015-2019 (with sound). <https://vimeo.com/174123448>

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<sup>10</sup> “With “Sound Art in Public Spaces: reinventing public space (for all)” we investigate how people from different backgrounds interpret public space and to what extent it is (in)accessible to them. We invite five artists to take a critical look at how the public space is perceived for and by various groups in a society under unprecedented pressure, as a result of this health crisis. What has been the most important function of public space throughout this pandemic? And (how) should it shift in a post-pandemic future? How can we, as a society, reinvent public space if we want it to be an inclusive and equal environment for humans, regardless of their income, place of residence, gender, age, cultural or religious background? The sound art installation will be presented by 5 partners of Sounds Now at their respective festivals: Wilde Westen (Belgium) – October 2021; November Music (Netherlands) – November 2021; SPOR festival (Denmark) – 2022; Onassis Stegi (Greece) – 2022; Ultima Oslo Contemporary Music Festival (Norway) – 2022.” <https://www.sounds-now.eu/news/open-call-curator-for-sound-art-project/> (accessed on 20 April 2021).

On the other hand, let's analyze some artistic cases, when the visual artwork might demand partner artistic languages, if the artist decides that the creation is held upon it:

António Olaio<sup>11</sup> considers that his work is based upon: poem/text; music; painting; video and performance art. Each part might be received independently but the truth sense and meaning depends on the display of all items. I believe that either images, written words and sounds fill our dreams of overcoming time. They symbolize, they are meant to be a grant of wide lasting shared experiences, feelings and ideas. How can this composed artwork be displayed? You have to look for a screen, an amplifier; the painting is hanged in the wall... You have to stand still and your eyes will be travelling from one screen from here the sound is released – the text of the poetry is overlaid the developed performance AV recording - towards the painting and back, once and again. All items are linked, intrinsically connected, each one asks for the other...being from the different expressions...gathered by a same aesthetic thinking and creation...

Other possibilities can be addressed such as those rising from the musical/sound performance art and/or the visual-sound performance art. Let's recall Jonathan Saldanha projects, namely his installation *Afasia Tática* for Culturgest/Porto (November 2018), curated by Delfim Sardo<sup>12</sup>: text/voice/sound/images have its existence in kind of plural unisonous. When entering the main room, we merge, grounded but flowing in visual and sonorous achievements (I felt an ascension) in a mood of combined phenomenological perception based upon the circular/cinematic architecture of the building. Other artists and authors could be evoked; these are just an example of the mentioned different approaches to be found in Portuguese Culture.

## **Curating Sound [and Visual Silence - image, sounds and words]:**

Noel Lobley (2014) wrote an interesting article, emphasizing that the concept of curation is applied to both music and the visual arts. As mentioned above and following, we can identify different moods and concepts according to this issue: *curating music in museum exhibitions and beyond*.<sup>13</sup>

As a curator, I had previously weighted in two exhibitions the articulation of visual and sonorous. For sure, the concept and strategy were quite diverse from the one that sustained *from home towards a world...* The concept, in both curatorship's, called upon the mixed perception of audio and visual crossed experiences, when displayed side by side, at a same

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<sup>11</sup> See the registered performance by António Olaio (voice, text) with João Taborda (music), *My Own Moon* (2009): <https://www.youtube.com/watch?v=J9YGz4cxZQc> (accessed on 20 April 2021).

<sup>12</sup> “The *Afasia Tática* project, conceived by Jonathan Uliel Saldanha for the space of Culturgest Porto, is based on a film, still in the process of completion, which is broken down and shown on four separate screens. The fundamental libretto that is present in this film was designed for the piece *Sancta Viscera Tua*, presented at two churches in Portugal during Lent, at the invitation of the parson at Porto Cathedral, in order to construct a participative ceremony that was open to all, and which would include group singing, gestures and light. The dense, mysterious and ritualistic nature of the piece is also to be found in the sound conceived for the film installation, which combines a choir and a solo voice, filling the whole space of Culturgest Porto with the sound of a possible pre-linguistic speech. During the period of the exhibition, Jonathan Saldanha will present a performance for a choir of 50 people, transforming the cinematic space into a scenic mechanism.” Delfim Sardo, <https://jonathanulielsaldanha.com/project/afasia-tatica> (accessed on 20 April 2021).

<sup>13</sup> LOBLEY, Noel (2014). “Curating sound and music in and beyond museum”. *Music in Art*, Vol. 39, No. 1-2 (Spring–Fall 2014), 243-255.

<https://www.jstor.org/stable/pdf/90012962.pdf?refreqid=excelsior%3A455a95b2ca7d778789ec60abf46ed8a5> (accessed on 11 September 2021).

place, although knowledgeable in specific rhythms of time perception. The art works pieces were intrinsically combined, a sort of side-by-side *conversation piece* between sound and visual arts.

The previous curatorships confirmed the relevance of developing a more "daring" project, incorporating musical pieces conceived specifically by the composers. In other words, it was a question of mapping approximations directly related to previous literary and plastic creations. It also showed how much interarts studies could, in terms of aesthetic investigation, from the conceptual "follow up" of the *from home towards a world...* exhibition process – spite of the pandemic context.



Figure 4: Pedro Tudela sound nests installation and Mauro Restiffe photographs.

In 2010 I curated the exhibition *Marginália - d'après Edgar Allan Poe*,<sup>14</sup> for *Plataforma Revolver*, Lisbon, a gallery based in the attic of an old building at Rua da Boavista. Among the five artists, I included Pedro Tudela, a visual and sound artist that conceived a *site specific*. His main idea was structured upon a controlled expansion in that peculiar attic 'space'. He placed (bird) wooden nests in the wood columns that sustained the ceiling; the sound emerged from the nests and you could hear the sound of cutting wood act, resulting from the action of sculpting the wooden nests. At the side, three photographs by Mauro Restiffe amplified the aesthetic reflections about inner and outer architecture. Their aesthetic tendencies might be seen as almost opposites, but due to the display of both creations, they merged and projected plural perception from visual and sound stimulus involving smell and tactile experiences. The acoustic of the attic permitted us to have a full access to the work by Tudela. The sounds, regarding to the results of audiovisual perception process, were not softened by objects or photography's. The visual and sound perceptions where quite melted, therefore connected, and when visiting the place, the public acted according to the overlapped concepts: the aesthetic reception crossed attitudes as spectator and listener. The repeated sound of saw cutting wood arose from the wooden nest, inside of which the stereo was placed. It was unexpected, for most of the people, quite a challenge to recognize and understand the light between the 3D object and the composed sounds after that tiresome human action.

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<sup>14</sup> See Lambert, Maria de Fátima. (2010). *Marginália d'après Edgar Allan Poe*: Brigida Baltar, Jorge Abade, Mauro Restiffe, Pedro Tudela, Susanne Themlitz. Lisboa: Plataforma Revolver.



Figure 5: Works (left to the right): Pedro Calapez' drawings, Pedro Tudela sculpture with sound and José Spaniol poetry posters.

In 2013, a new curating project took place, with Lourenço Egreja: *From Baroque towards Baroque, there is Contemporary Art* was an exhibition that travelled, from Santiago de Compostela (Spain) to Óbidos, back to the North, at Cerveira Biennale Pavilion and finally displayed at House-Museum Guerra Junqueiro, Porto. The group show included a new work by Pedro Tudela, a sound and visual sculpture placed in order to generate unexpected dialogues, approaching José Spaniol's posters with poetic writing and Pedro Calapez's 100 black and white drawings portraying a tree. Once and again, Tudela's visual 3D containers of sounds, were visually striking and, it was understandable that for some public, the echoed sounds – in that large room – were quite unnoticeable. Unless you would approach the sounding sculpture. In a group of eleven paintings, sculptures and installations, I essayed a new perception, according to Tudela' crossing aesthetic and also remembering his sound performances, since the 1990's with his group @C – with Miguel Carvalhais and Lia.

*The invisible exhibition*, curated by Delfim Sardo at Marco Museum - Vigo (Spain), 2009, was an interesting proposal, facing the exhibition concept as a whole connected by the inner connection of silence towards music and sound, images and objects:

*In The Invisible Exhibition we see a mapping of these situations, starting from the homonymous project presented by the curator in Spain and Israel, in 2007, now in an enlarged version. We even went back to modernist artists like Raoul Hausmann, Luigi Russolo, Marinetti or Kurt Schwitters, and we also presented works by António Dias, James Lee Byars, Bruce Nauman, Luisa Cunha, Joan Jonas, Gonçalo Barreiros, Michael Snow, Julião Sarmiento, Gavin Bryars and Juan Muñoz, Ricardo Jacinto, among many others. This is a historic trip where the sound carves space, surrounds us or makes us dive into the narratives suggested by the human voice.*"<sup>15</sup>

<sup>15</sup> Delfim Sardo in <https://www.culturgest.pt/pt/programacao/exposicao-invisivel-20/> (<https://www.youtube.com/watch?v=SYNuFoqAiP0&t=7s>) (accessed on 20 April 2021)

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|---|---|
| 1.VITO ACCONCI – <i>Walking and Talking the City</i> , 2000<br>Fragmento da peça/60''   | 12.ON KAWARA – <i>One Million Years (Past)</i><br>Fragmento da peça/60''  |
| 2.LOUISE BOURGEOIS – <i>C'est la bouillotte qui ronronne</i> , 2002<br>Fragmento de <i>C'est le murmure de l'eau qui chante</i> , 2001-2005/2006      | 13.ON KAWARA – <i>One Million Years (Future)</i><br>Fragmento da peça/60''  |
| 3.JAMES LEE BYARS – <i>Pronounce Perfect until it appears</i> , 1979<br>Fragmento da peça/30''  | 14.ANTONI MUNTADAS – <i>Stadium (homenaje a la audiencia)</i> , 1989<br>Fragmento da peça/60''  |
| 4.JANET CARDIFF – <i>The Forty Part Motet. A re-working of Spem in Alium Nunquam habui. 1575, by Thomas Tallis</i> , 2001<br>Fragmento da peça/3,22'' | 15.BRUCE NAUMAN – <i>Get Out of My Mind, Get Out of This Room</i> , 1968<br>Fragmento da peça/45''  |
| 5.MARTIN CREED – <i>Work Nº 592: piece for harmonica and elevator</i> , 2006<br>Fragmento da peça/20''  | 16.LUIGI RUSSOLO – <i>Intonarumori (Risveglio di una Città)</i> , 1914<br>Fragmento da peça/30''  |
| 6.LUÍSA CUNHA – <i>Do what you have to do</i> , 1994<br>Fragmento da peça/45''  | 17.JULIÃO SARMENTO – <i>Tribu</i> , 1978<br>[versão em português, 2002]<br>Fragmento da peça/60''   |
| 7.CEAL FLOYER – <i>Working Title (Digging)</i> , 1995<br>Fragmento da peça/30''   | 18.KURT SCHWITTERS – <i>Sonate mit Urlauben, Scherzo</i> , 1932<br>Fragmento da peça/60''   |
| 8.RODNEY GRAHAM – <i>Verwandlungsmusik (Transformation Music)</i> , 1991<br>Fragmento da peça/60''  | 19.MICHAEL SNOW – <i>Si Nopo Da (By What Signs Will I Come to Understand?)<br/>Woman of the Bo-sa-so-sho-tribe, Niger, S.E. Africa</i><br>Tema 2 de <i>That Last LP</i> , 1987<br>Fragmento da peça/3'' |
| 9.RAOUL HAUSMANN – <i>Cauchemar, Poèmes Phonétiques</i> , 1919-1943<br>Fragmento da peça/60''   | 20.MICHAEL SNOW – <i>W in the D</i> , 1970<br>Fragmento da peça/1,30''  |
| 10.JUAN HIDALGO – <i>Étude de Stage</i> , 1961<br>Fragmento da peça/60''  | 21.STEPHEN VITIELLO – <i>Dogs in the yard</i> , 2005-2006<br>Fragmento da peça/50''   |
| 11.JOAN JONAS – <i>The Anchor Stone</i> , 1988<br>Fragmento da peça/60''  |   |

Figure 6: The CD contents' part of the Exhibition and Catalogue *The invisible exhibition*, MARCO/ Vigo.

Last year 2020, Delfim Sardo conceived a new exhibition for Culturgest (Lisbon) related to the previous one, now titled *The Invisible - a sound journey through the 20<sup>th</sup> century*, a proposal that renewed the interest in crossing sound, music and visual works, between materiality and immateriality, surpassing the idea of never turning into a “no man’s land project”:

*As a complement to the coexistence of works in the galleries, the exhibition also includes a set of unique moments to take place elsewhere, inside and outside Culturgest, and through which we will be able to follow recent proposals by the Portuguese Ricardo Jacinto and Jonathan Saldanha. As well as witness live, and in a rare opportunity, the concert version of A Man in a Room, Gambling, originally conceived by Gavin Bryars and Juan Muñoz.*<sup>16</sup>

Some of the sound pieces had to be heard with phones and the sound emerging from one and another place was controlled and did not interfere in the aesthetic experience.

Those examples were mentioned; others could also be referred. Anyway, let’s consider that the design of the exhibition area for a triadic project has to approach each for each and as a whole. Despite their differences both conceptual, technic and artistic, sound, words and images are intrinsically moved by intuitions and aesthetic ideologies along the human arch of time.

<sup>16</sup> Idem.

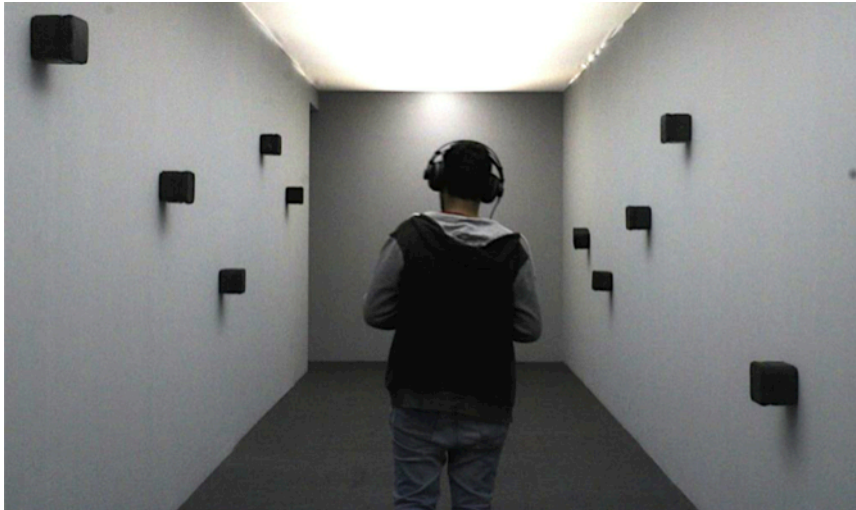


Figure 7: View of The Invisible - A Sound Journey Through the 20<sup>TH</sup> Century. Culturgest. Lisbon. 2020

To draw the chosen locations and display crossed art works – sound and image the in a museum architectural space - is quite a challenge.

Almost every curatorship, when regarding crossed arts faced sound and music not assumed as prime concept; the tendency was to caught the aesthetic experience into a sound corporality mood. Or, we understand the curatorship tendency to firstly grab the image of the display/ equipment used to produce the sound or left through the musical composition.

### **The curating project from home towards a world...**

In the early weeks of the pandemic confinement new ideas emerged trying to overcome the once (and still) current situation. A group of Portuguese creators conceived the main idea, and the curating project was developed and presented at the *21st Bienal Internacional de Cerveira*. Manuel Cabral and Sobral Centeno develop a first thought about an exhibition that should connect writers and visual artists. Following, they asked me to curate the project. I was under the charm of surpassing the more common liaison between the two creations. After choosing 15 writers and 15 artists, Paula Freire had the idea to add 15 composers.

Along with the choice of writers and visual artists, when looking for composers we believed it would be more interesting to gather creators from different generations, artistic languages and aesthetic tendencies. The Portuguese composers<sup>17</sup> with activity since the 1960 towards the younger ones that entered in this circle in this first decades of the 21<sup>st</sup> century. We felt overwhelmed with the new challenge: 45 persons were involved in an ongoing artistic mission during almost three months. And let us not forget also the five designers which conceived five original poster's images according to the curating concept. The posters were art works and displayed as another aesthetic fulfillment.

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<sup>17</sup> For a better understanding of the Portuguese Music Composers since 1950 until the end of the 1980's, see Monteiro, Francisco. (2005). *The Portuguese Darmstadt Generation. the Piano Music of the Portuguese Avant-garde*. Sheffield: University of Sheffield (PHD Thesis).

The project began in the first week of the confinement and its first public presentation took place at the *21<sup>st</sup> Bienal Internacional de Cerveira*.<sup>18</sup>



Figure 8: View from the Exhibition Cerveira Biennale. August 2020.

The Artists created their two-dimensional pieces after the 15 WORDS sent by Writers/Poets. The “duets” [writer/visual artist] were decided considering the nature and essence of each other’s thought and *poiesis*. The 15 inner Worlds of 15 writers were activated, subsumed in few 15 Words, then sent to 15 Artists.

Table 1: The names of the 45 authors, presenting each trio of linked creations.

WRITER	VISUAL ARTIST	COMPOSER
Gonçalo M. Tavares	Pedro Calapez	Sérgio Azevedo
Bernardo Pinto De Almeida	António Olaio	Nuno Peixoto De Pinho
João Gesta	Cristina Ataíde	Angela Da Ponte
Pedro Eiras	Avelino Sá	Jaime Reis
Capicua	Albuquerque Mendes	Ana Seara
Francisco Duarte Mangas	Graça Pereira Coutinho	António Pinho Vargas
Maria Do Rosário Pedreira	Isaque Pinheiro	Carlos Marecos
Filipa Leal	Zulmiro De Carvalho	António Victorino D’ Almeida
Afonso Reis Cabral	Ana Fonseca	Pedro Pinto Figueiredo
Nuno Higinio	Jorge Abade	Carlos Caires
Daniel Maia-Pinto Rodrigues	Ana Perez-Quiroga	Sara Carvalho
Paulo José Miranda	Francisco Laranjo	Inês Badalo
Rosa Alice Branco	Susana Piteira	Francisco Monteiro
Hugo Mezena	Pedro Tudela	Isabel Pires
Manuel Cabral	Sobral Centeno	Luís Soldado

<sup>18</sup> Vila Nova de Cerveira is a small town in the North of Portugal, on the bank of the river Minho, opposite Galicia (Spain). In 1978, 4 years after the revolution that, in the month of April, established democracy, this small community, by those days was still deep in a rural reality of subsistence farming and strongly marked by Catholicism, just like its neighbour Galiza,

From the words, thoughts and poetic acts resulted 15 unforeseen and sublime works, which are the result of various techniques. Everyone's receptivity was filling the air of this double category: aesthetic lungs of Art during our shared confinement of word. Goethe thought was guiding us, recalling his *Faust*: "Thinking, Action and Work". After the choreographies of words, truthful interior landscapes, all of us were moving in outer times and spaces – considering the identities of all the protagonists in the process. Then, more 15 persons accepted the challenge.



Figure 10: Text Hugo Mezena; Art Work Pedro Tudela; Musical Composition Isabel Pires.

The painters were already creating their images when we were able to choose the 15 composers, with the indispensable collaboration of the composers Sérgio Azevedo (Lisbon) and Francisco Monteiro (North). Paula Freire and them were able to shape an unexpected list of composers from very different generations and aesthetics. Each double of creators became a triad, associating the 15 composers in novelty act of dialogue, emphasizing the impetus of a concatenated creation. Once and again, it was held a process of deciding which relationships should be held; and again, considering the characteristics of each group [writer-painter-composer]: the texts and images were sent to the composers. The colors and words revealed its identity as inner worlds, deeply thrown into the music compositions - acoustic or electronic - performed and registered by musicians, using a variety of instruments or technological procedures. In the end of June 2020 all the creations were ready to be presented to the public. Then, as a curator I had a new challenge. How to draw the display of such works combined *in loco*, a single (although quite large) room in Cerveira' public library building? <sup>19</sup>

<sup>19</sup> The first opening took place in this small city in the North of Portugal, frontier with Galiza (Spain), where the International Biennale of Cerveira had its first edition in 1978. Since the beginning, connections between the arts were guidelines, main principles. The Biennale was conceived by a group of artists, under the direction of Jaime Isidoro, painter and director of



É este o corrimão. Se me sentasse nele  
desceria até à tua juventude.

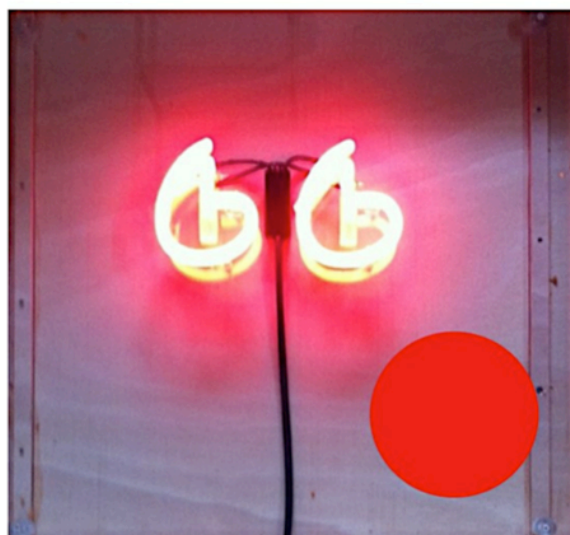
Daniel Maia-Pinto Rodrigues



sara-carvalho

Sara Carvalho  
talvez haja fim  
3'

Henrique Portovedo (saxofone solo)



Ana Pérez-Quiroga  
Aspas, 2020

2 elementos em tubo de neon branco; gás neon (vermelho); placa acrílica transparente azul; vinil de recorte autocolante; parafusos; cabos elétricos; transformador eletrónico. 70x70cm

Figure 11: Text Daniel Maia-Pinto Rodrigues; Art work Ana Pérez-Quiroga; Musical Composition Sara Carvalho.

Music has nearly always been present: in the 1<sup>st</sup> Biennial several performances took place, performed by local music bands. Among others, let's notice the concert/painting titled "Cinestesia", consisting of Richard Marachin music and Nadir Afonso painting.; Hubert e Ishida – "Concerto na Torre da Igreja", Venusia Group - formed in Paris by the saxophonist Jeff Sicart with Gerard Nassoy, Olavo Tengner, Luís Monteiro: "jazz music, plastically enriched, with an involvement on a monumental scale, of slide projection by Carlos Barroco, Romualdo and Fernando Pinheiro."<sup>20</sup> These impulse evolved into a wide range of musical genre that included traditional Portuguese and Galician music and several concerts of classical, electronic, and acousmatic music, jazz, pop rock, in different venues of this small town, over these 20 biennials.<sup>21</sup> Over the past few years, *MISO Ensemble* with Paula and Miguel Azguime, *Carlos Azevedo Trio*, *The Ensemble of Contemporary Music of Lisbon* had also presentations in different Biennale editions.

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Alvarez Gallery (Porto), along with Egidio Álvaro (Portuguese art critic and curator living in Paris). This group had the experience of previous four editions of the *International Art Meetings*, joined by meaningful artists – mostly – from different European countries. This program included artistic residences and was surely an innovation not only in Portuguese cultural panorama. So, it was with a positive thought that, when Cerveira' Mayor challenged the group to produce a Biennale, it was accepted and happened. More than 40 years after, nowadays, Cerveira is both nationally and internationally known as "the City of the Arts".

See also, about the 40 years of Cerveira Biennale: *Bienal Internacional de Arte de Cerveira – 40 anos de Memórias*. (2019). Cerveira: Fundação Bienal de Cerveira.

Regarding Alvarez Gallery: LAMBERT (2001). "Depois de 1950". [+ de] 20 grupos e episódios no Porto do século XX. Vol. 2. Porto: Galeria Municipal do Palácio.

<sup>20</sup> Catalogue *I Bienal de Arte de Vila Nova de Cerveira*, 1978, s/p. (Consulted at Biennale Archive).

<sup>21</sup> Only some of them are referred. At the 2nd Biennale, 1980, Serge Oldenbourg performed a *Fluxos* concert; *Anar Band*, an experimental music group of the 70's constituted by Jorge Lima Barreto, Rui Reininho, Dom Lino and Luis Carlos performed *Música contemporânea improvisada, Concerto – Homenagem a José Conduto* (Contemporary Improvised Music Concert – Hommage to José Conduto – Portuguese visual artist).



Figures 12 and 13: Images from the Biennale Archives of music performances. Credits Daniel Isidoro.

We will only mention three of the composers/interpreters who joined *from home towards a world* project and also had concerts at the *Biennale* along the years: Francisco Monteiro, António Pinho Vargas and António Victorino d'Almeida – this one has always had a close participation at the *Biennale*. We vividly recall his piano improvisations while Jaime Isidoro<sup>22</sup> painted on canvas, influencing each other in the process.

Music is generally not featured in art exhibitions, nor museums or galleries. When it is included, it is announced as a single moment (concert/recital) or simply included as “background music”. More often, it props motion pictures (video, cinema...) or installations. So, the scope when introducing music in this exhibition project *De casa para um mundo/From home towards a world* introduces work by 15 composers of a span of generations. Its musical diversity is wide, representing the different trends in contemporary music.

*Num eterno domingo  
chora a beleza sentada à  
janela:  
não se pode mostrar a  
ninguém.*

Maria do Rosário Pedreira

**Carlos Marecos**  
*à janela, de uma casa  
antiga*  
ca. 3' 45" (15x15')  
Intérpretes: Maria  
Marecos (piano); Carlos  
Marecos (eletroacústica)

carlos-marecos

**Isaque Pinheiro**  
*Aberto de segunda a sábado, 2020. Latão e aço zincado, pintado e envernizado. 104 x 126 x 6 cm*

Figure 14: Text Maria do Rosário Pedreira; Art Work Isaque Pinheiro; Composition Carlos Marecos.

<sup>22</sup> About the life and work of Jaime Isidoro and the history of the International Art Meetings see: QUADROS-FERREIRA (2017).

As considered before, to locate works drawn in a museum/gallery architectural space, displaying crossed art works – sound and image - is quite a challenge. The exhibition design area for a triadic project that should guarantee both the “individual” approach between sound-image-text - each for each other - and all of them as a whole.



Figure 15: layout prints of four pages from the book published in 2021.

That’s why *QRcode* was chosen for people to reach musical compositions. Other curators had already conceived exhibitions with no images, only *QRcode*’s corresponding to images located at Internet websites. In this exhibition and regarding the nature of triple identities as creation to be perceived in complicity the choice was quite easy to select. After edited by the composers, the files were sent by *Wetransfer* or *MyAirBridge* and downloaded. Since the end of July 2020 the 15 files are located at *Cerveira Biennale website* and from there prepared to be heard through any *QRCode App* we might install in our cell phones or computer.

A major concern regards the audiovisual documentation that might be shared in Websites, Youtube Channels and also at Facebook. Before the opening, we recorded 2 interviews/round-table<sup>23</sup> and during *Cerveira Biennale* a guided visit<sup>24</sup> to the exhibition was videotaped, a documentary produced<sup>25</sup> and two round-table<sup>26</sup> more occurred. We asked the 50 authors for AV recordings of short statements and many of them sent their AV files<sup>27</sup> which were shared at Instagram event and Facebook page<sup>28</sup> created under #decasaparaomundo /fromhousetowardstheworld. The page has more than 1000 followers, which is quite good in Portuguese scenery! During the exhibition Paula Freire and Patrick Esteves also recorded statements by visitors.

Last April a book was published by the Town Hall of Matosinhos, Public Library “Florabela Espanca”, where the exhibition was presented for a month and a half. The book<sup>29</sup> consists of three essays: Marcio Doctors (brasilian curator and philosopher); Teresa Cascudo (music

<sup>23</sup> 1<sup>st</sup> video, April 2020: Manuel Novaes Cabral, Paula Freire, Sobral Centeno and Fátima Lambert interviewed by Helena Mendes-Pereira, <https://www.youtube.com/watch?v=Yb9XDRQrHk0> (accessed on 12 April 2021).

<sup>24</sup> 2<sup>nd</sup> video, May 2020: Susana Piteira, Isabel Pires, Paula Freire and Fátima Lambert interviewed by Helena Mendes-Pereira, [https://www.youtube.com/watch?v=gOTf\\_8Seek4](https://www.youtube.com/watch?v=gOTf_8Seek4) (accessed on 12 April 2021).

<sup>25</sup> Guided tour by Fátima Lambert, 15 August 2020. <https://www.youtube.com/watch?v=R4d0BA3e-f4>

<sup>26</sup> See: [https://www.youtube.com/watch?v=oV9x4\\_SvkS0](https://www.youtube.com/watch?v=oV9x4_SvkS0) accessed on 12<sup>th</sup> April 2021).

<sup>27</sup> 1<sup>st</sup> round-table – alive and zoom, August 2020. <https://www.youtube.com/watch?v=GeLfavLzL9U> (accessed on 12 April 2021).

2<sup>nd</sup> round-table – alive and zoom, September 2020. <https://www.youtube.com/watch?v=MLJvkD64t4w> (accessed on 12 April 2021).

<sup>28</sup> Francisco Laranjo (painter) statement:

<https://www.facebook.com/museunacionaldeartecontemporanea/videos/1364056350636237>(accessed on 12 April 2021).

<sup>29</sup> See: <https://www.facebook.com/profile.php?id=100063591160625> (accessed on 12 April 2021).

<sup>30</sup> DOCTORS, Marcio, CASCUDO, Teresa & LAMBERT, Fátima. (2021). *De casa para um mundo*. Matosinhos: Câmara Municipal de Matosinhos.

critic and researcher); Maria de Fátima Lambert (curator and researcher) and three presentation texts by Manuel Novaes Cabral/Sobral Centeno; Fernando Rocha (Matosinhos' mayor adjunct); Luísa Salgueiro (Matosinhos' mayor). During the exhibition two round-table took place, streamed @Youtube Câmara de Matosinhos Channel.<sup>30</sup>

## Coda

This project was a bold challenge since the beginning, because we could not imagine the results from the three linked connections of creations. A common reaction avowed by different authors – writers, painters and composers – consisted in the unknown path they took when accepting the proposal. Some of the persons didn't know each other, others did, but in any of the cases it was the unexpected, a powerful analogy considering the way we have been living since 13<sup>th</sup> march 2020.

The *15 words phrases* arose feelings, thoughts, utopias and distress that visual artists grab when dealing with a canvas 1m x 1m and afterwards the conditions of conceiving a composition circa 2 minutes. Everything was conditioned, and everyday depending one another, just like it should be, being responsible for the common wellbeing in society. Writing, painting/drawing and musical composition were sublime achievements and gifts shared with people that wouldn't be acquainted with such rich feelings and ideas in such dialogue. Maybe, music was more present, in its invisible way of being the last, Art to approach. This reflection might be one of our conclusions, surely thinking about how music entered in this project will not end here. Following Marcio Doctors (2021, n.p.), we easily recognizable the timeless presence and overwhelming power of music:

*Music has something organic, like dance, theater and performance, although we can never separate this physical-corporeal dimension from all artistic manifestations, to a greater or lesser degree, both in reception and in creation, but it's just that music has enormous aggregating power; is able to bring together and connect millions of people.*

The project endures, we hope, in the visitor's memory who saw/heard/read the 15+15+15 works created by this "artistic team" at Cerveira Biennale and the other place where the project has been displayed, meaning also an achievement of geographic accessibility, following a program of cultural and artistic decentralization. During the fall of 2020 and the spring/summer of 2021 this exhibition traveled - and will be travelling - to other Portuguese cities: Monção, Matosinhos, Vila Verde or Lisbon and at Vigo (Spain), due to the public effect it had. The feedback we have is quite amazing; I believe none of us expected it would have such effect. We wondered why so many directors of cultural centers in Portugal and Spain stated such interest about this project. Deep down we understand that music contributed to the difference and became also an aesthetic challenge. The answer was prompt: the triadic connection between Literature, Painting and Music is quite unusual and proposes new glimpses that might surely to be more and more often developed in a near future of ours. The process took place between visual artists, writers and poets and then in a second phase, with composers (and musicians). Everything was achieved in unexpected completeness

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<sup>30</sup> 1<sup>st</sup> Round-table with: Paula Freire, Gonçalo M. Tavares, Albuquerque Mendes and Isabel Pires, the 17th June 2021. <https://www.youtube.com/watch?v=hdWoJOy2GQo> and 2<sup>nd</sup> Round-table with: Paula Freire, Rosa Alice Branco, Susana Piteira, Francisco Monteiro e Fátima Lambert, the 18th June 2021. <https://www.youtube.com/watch?v=QTaLeZJb0a8&t=609s> (access on the 20 April 2021).

through zoom meetings, uncountable *WHATSAPP* messages. Let us recall that this curating project reveals an historical goal that seduces philosophy, aesthetics, poetry and music since past knowledge and creation. Perhaps immateriality.

All the 15 compositions can be accessed here:

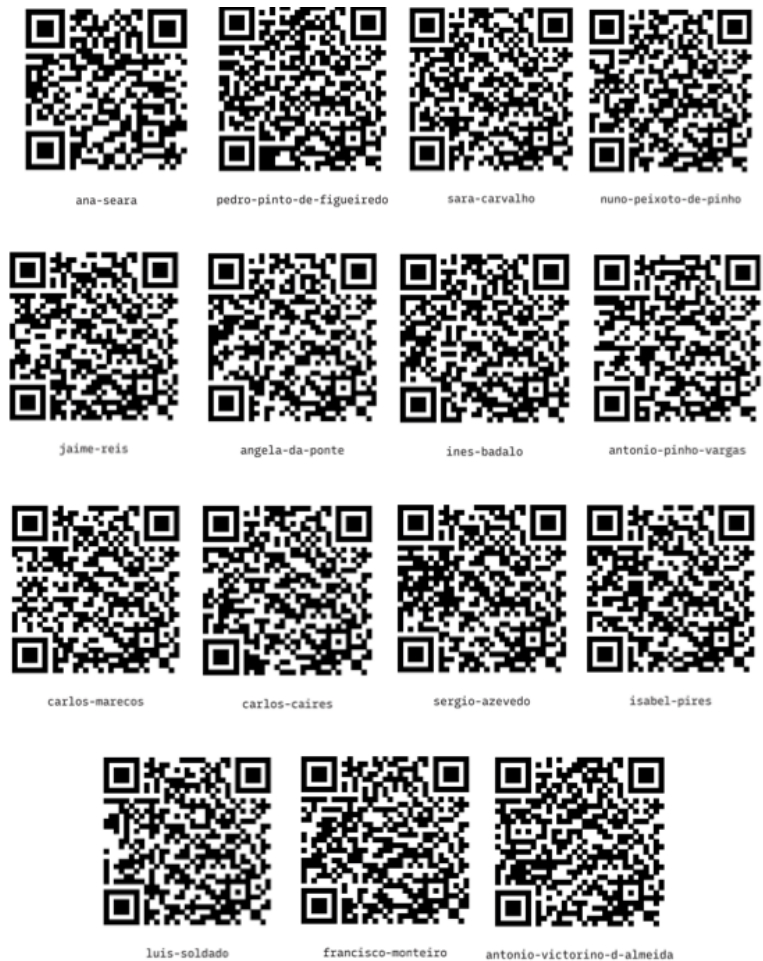


Figure 16: 15 *QR*Codes from the 15 compositions than can be easily heard.

In a near future, it would be interesting to consider the relevance of organizing musical exhibitions: i.e., to devise art exhibitions displaying music for the public as an integral part of the presented work — outside the concept of installation and the so-called “sound art”. It can contribute to a broader aesthetic experience, by enabling a perception enhanced by concomitant but distinctive artistic stimuli. It corresponds, namely, to a trend, duly anchored in the present, regarding the prevalence of aesthetic formulations for a reflective fruition, also worked on in an academic and formative context in higher education. Within the scope of the exhibition's itinerancy, it was possible to develop a mediated work with people who visited the different editions of the exhibition, marked, by the way, by georeferenced in Portuguese territory and in Galicia. On the other hand, the writing-image-sound curatorial project was presented in classes and academic interdisciplinary meetings. It can be an incentive for future projective interpretations for young graduates promoting cultural values in societal terms. The concepts beneath this curatorship project can be expanded and we believe that this kind of exhibitions development are mostly and urgently desirable.

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# Evoking a landscape through the encounter of the voices of performer and composer

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**Abstract.** This work discusses some forms of the traditional relationship between composer and performer, in which creation and conception fall to the first, and faithful interpretation to the second, can be subverted. Those forms of relationship, solidified by the European romantic tradition of the 19th century, influenced musical practices still reverberating today. Here, on the other hand, a creation based on the encounter between the unique voices of the performer and the composer is sought, recognizing the creative powers in both activities. The investigation goes through a creative process that focuses on activating a scene at the time of performance so that a specific landscape – Chapada dos Guimarães in Brazil – can emerge through the performer. Thus, this work outlines some ways of emphasizing creation in performance and the scenic potential of music, as a bodiless flow that wins the bodies through it passes.

**Keywords.** Clarinet; Musical Collaboration; Performance; Composition; Artistic Research.

## Introduction

During the 18th and 19th centuries significant changes occurred in Europe which influenced the way of thinking and acting in western society. In the musical field, it can be noticed that both the conservatory's teaching model and the way the interpreter is devalued in the romantic period put the musician in a situation of a mere reproducer, with no voice, no choice, in a totally passive action. If we observe the educational field, these elements of subordination and submission are also present, educating students in an uncritical way.

On the other hand, we know that art is movement and that its processes generate reflections that result in autonomy, protagonism, freedom, action, creation, decisions, but unfortunately tradition imposes some limits by not dialoguing with the artistic elements and with the contemporaneity of which we are a part. How then can we subvert this traditional logic of subordination of the musician in musical practice?

This article discusses a musical creative process based on the encounter between the voices of a performer and a composer.<sup>2</sup> From the desire to leave the traditional relationship of subordination between composition and performance, and thus create by other means, we discuss some images about music, composition and performance that underpinned the

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practices of this process. We also listed difficulties that arose both in the performative and compositional study, among them the challenge of resuming the process in a doubly catastrophic scenario: of the Covid-19 pandemic and of an environmental disaster in Brazilian ecosystems.

## **The traditional relationship of subordination of the musician**

The beginning of the conservatories' consolidation process occurred in 1795 with the inauguration of the National Superior Conservatory of Music and Dance in Paris, which sought to systematize its teaching practices through didactic materials prepared by its teachers, resulting in a French pedagogical-musical trend that later served as a model for the creation of similar institutions in Milan (1808), Prague (1811), Vienna (1817), London (1822), Leipzig (1843), among others. With the need to teach music to a larger number of students, the systematization of methods emerged as an innovation at the time, in which technical studies were carried out gradually, by means of a standardized methodology, so that students did not depend only on oral transmission by the teachers. Another factor that facilitated access to the methods for more people was the increased production of printed sheet music starting in 1850 (Lima, 2019).

*The most successful attempt to simplify music in order to make it understandable to everyone came after the French Revolution. An attempt was then made for the first time in a large state to put music at the service of political ideas: the meticulous pedagogical program of the conservatory was the first example of standardization in the history of music. Even today musicians are educated for European music, all over the world, through these methods [...] (Harnoncourt, 1988: 15).*

Based on Bourdieu's concepts of habitus and field studies, Pereira (2012) recognized in his research conducted with four different political-pedagogical projects of Music Degree courses from some Brazilian universities the presence of these cited elements referring to the European conservatory music education of the 19th century. According to Pereira (2012) the conservative habitus:

*It would be proper of the musical artistic field and would be transposed (converted) to the educational field in the interrelation established between these two fields. And it would be incorporated in the agents over time in contact with the institution, with its practices, with its curriculum as objectification of an ideology. Thus, music education institutions—as a result of the history started by conservatories—can be understood as opus operatum: field of disputes that has in the conservatory habitus its modus operandi (Pereira, 2012: 135).*

It is possible to observe that the standardization of musical study based on this conservatorial habitus is perpetuated in a sovereign way in musical reality. It is noticeable that currently several music conservatories in Europe have reformulated their ways of teaching and are flexible and open to new methodologies, which use contemporary music and technology in their practices and teaching strategies. However, these considerations in relation to traditional conservatory teaching occur because the pedagogical and repertoire approaches are established only in this European model from the 19th century, and one notices, under certain aspects, a non-correspondence with the diverse musical realities of Brazil in the 21st century.

To better understand the functioning and structure of the conservatory system, and especially its influence perpetuating even today, we need to go beyond and recognize the characteristics

and musical thinking of the historical period in which it was consolidated, the Romantic period.

A careful look at the composer's work in the baroque and classical periods will notice that their role was played more functionally, their works were played on everyday occasions, composers wrote for musicians of their acquaintance and for the people of their time. Their works were hardly ever performed afterward and they had a more utilitarian notion of composition: composing for the occasion, for the moment. In such a scenario, it was natural that the interpreter had more autonomy, voice, and power of decision. The scores were intentionally composed in an incomplete manner and with gaps that were purposely left by the composer, and it was up to the interpreter to define the articulations, dynamics, and ornamentations, who, once based on his knowledge of the language and style of that period, could enjoy a collaborative space for musical realization.

With the social revolutions, the emergence of industry, and urbanization, these relationships changed. The new scenario influenced the way of life of the human being, bringing impact and changes that paved the way for the professionalization and independence of the musician, until then, usually linked to institutions such as the Church or the nobility. Likewise, the musical public was transformed: from small and cultured, it became bourgeois, numerous, and diversified, resulting in the accelerated growth of concert societies. In this new scenario, if composers wanted to succeed, they had to somehow reach a new and vast audience. They no longer composed for their patrons or a well-defined function, but for the future, for posterity, for an ideal audience that was waiting for him/her, that would one day appreciate his/her music and understand him/her (Grout and Palisca, 1988).

The new understanding reflected in the decrease in the performance of works by living composers, giving a higher value to dead composers, conferring a status of genius to the composer. The musical works gained an exaggerated prominence of veneration and the score was overvalued, being considered the materialization of the work of art. In the score, the composer put all the details of the piece and thus was more successful in communicating with the interpreter, and the interpreter, in turn, had the job of faithfully portraying what the composer had to say. Over the years, this fidelity to the work placed the interpreter in a situation of mere reproducer, in a passive action (Domenici, 2012).

The changes concerning the role of the performer that occurred in Romanticism entered the 20th century and Peter Walls in his article *Historical Performance and the Modern Performer* (apud Chueke, 2013: 183–184) exemplifies this prevailing idea among composers: quoting Ravel, “I do not ask that my music be interpreted, but simply played” and Stravinsky, “music needs to be conveyed and not interpreted, for interpretation reveals the personality of the performer more than that of the author, and who can guarantee that the performer will reflect the author's vision without distortion?”

In a counterpoint between the lines of Ravel and Stravinsky in the 20th century and Mozart's writings in his letters in the 18th century, it is possible to better understand these transformations caused by Romantic thought. In Mozart's conception, the musician should play as if the piece was composed by himself. With these thoughts contrasting the different periods, it can be observed that the Romantic interpreter went from an active attitude to a passive one, from a creative interpreter to an attitude of submission.

## Creating through the meeting of voices

How to subvert this traditional logic of subordination of the musician in musical practice? One possible way, and that we discuss here, is to create by the encounter. As Gilles Deleuze and Claire Parnet (1998: 14–15) say, when we work, solitude is absolute; but such solitude is extremely populated by encounters: with people, but also movements, ideas, events... An encounter is something that runs between two people, among many within a process, and that goes in another direction. To create through an encounter is not only to create with someone; more than that, it is to take something of the person, the idea, the movement for yourself, let yourself be stained by that color, let yourself be deformed by that weight, and stain and deform too, so that the process is this *between*, between two or many people.

But these people involved are not generic, ideal. Their voices echo their unicities since each voice is different from any other and echoes in the air the existence of a living throat, a living body (Calvino, 1995). To speak with Adriana Cavarero (2011: 22–23, 40), every voice is intrinsically linked to a body, being ontologically unique; and we perceive the uniqueness of a voice by listening, by the relationship we establish with it.

But this uniqueness is not an intentional construction, authorship that defines a point of origin for all utterances. Such oneness is more like the geography of lines and crossings, meeting points, and intersections. An encounter, here, would not be the junction of two authorships: “they are not encounters between domains, for each domain is already made, in itself, of such encounters.” (Deleuze, Parnet, 1998: 38) Thus, to create by encounters, we consider it important that listening be open to the creative powers of each voice throughout the creative process, whatever the focus of the work of that person, that voice: for example, in composition or performance. It is often in the subtleties of the voice and body that such potencies reveal themselves, and these subtleties need attentive listening.

Again we ask “how”: how to realize a creation that takes place through encounters between voices? If we are interested in researching musical practice (including composition and performance), how to research such a creation?

A first clue is precisely to identify that this involves an artistic practice, a creative practice. Art creates knowledge, but such knowledge is not necessarily verbalizable, but often tacit, because it is constitutively linked to artistic creations through the sensory experiences they engender (Candy, Edmonds, 2018: 66; Velardi, 2018: 45). Researching such knowledge involves delving into the complexity of specific sensory experiences, with their contradictions and differences. Moreover, a creative process also goes through many decisions, detours, by planned and unforeseen encounters. Such a methodology, *Artistic Research*, places the focus on artistic creativity and its inherent decision-making processes; indeed, “artistic research can be defined as knowledge of the process of creativity, not its outcomes.” (Coessens, Crispin, Douglas, 2009: 24)

To do so, it is necessary to encompass artistic making. Thus, this research is founded on a specific creative process, conducted throughout the first semester of 2019 by Jessica Gubert and José Neto, with guidance from Luis A. Montanha and Silvio Ferraz, and resumed in the second semester of 2020.

## A music that breathes

There is an image that in our view could be among the starting points of this creative process: it happens from time to time that we are in a place near the forest and a gust of wind slowly blows in. All the leaves and branches in movement and scraping each other in undulating sound production, with a dense texture. It is the presence of the wind, which has no body of its own but which gains body on other surfaces. Music is perhaps like the wind, one or more energy flows that gain body in sound but also in the space and masses through which such flow passes.

In this way, we can think of music as a collection of images, a mobile of many things, all without order or coordination, brought together by a single flow of energy. All images moved and placed in collision with each other by the same flow, like the wind. Such images, these minimal elements, can thus be memories, elementary reiterations, sound objects, sensations, etc.

It is important to define what we are calling images here since the term has many definitions not only in general but also in the area of music. Several composers have worked with this notion, which in a certain way always goes back to the positive definition made by Bergson (1990) in *Matter and Memory*, and to a more restricted one, the visual image. In this case, we would highlight the theoretical proposals of François Bayle (1993), the poetic reading of Salvatore Sciarrino (2014), or even the image in the compositional cosmogony of Giacinto Scelsi (2006).

When we think about image, the starting point is the one proposed by Bergson (1990: 13): “the set of images, and the perception of matter, those same images related to the possible action of a certain determined image, my body”, thus being every real image, whether spoken, seen, alluded to, dreamed of, and the body an image that welcomes other images.

We also add to this sense a small genealogy of the image and invention, which we can deduce from the first part of Gilbert Simondon's course *Imagination et Invention* (2008: 3): the mental image would be a subset of the body; at birth an image is like “a bundle of motor tendencies (...) in the course of interaction between organism and environment, it becomes a system of reception (...) finally when the subject separates itself from the object, the image is enriched by cognitive relations (...) it becomes a symbol. From the universe of symbols (...) invention can be born”.

But as we said, the wind has no body. This is important to note: the wind has no body, it borrows bodies that it takes on wherever it goes. The wind is only speed, pressure, direction; and it only manifests itself when it sets somebody in motion. On its way, the wind gains body, and in the case of music, it gains sound bodies (concrete or fictitious). Thus, the wind can set a reed in motion and gain body in the sound of what we call clarinet, and in turn, the clarinet has the dimension of its tube modified by the keys that open and close, and this body resonates in a room at the same time that it manifests the source of the wind, of the blow: the body of the player and his/her movements.

The composition is thus the sequence of sound objects that give body to the flow of energy of the imagined wind. The relationship between such bodies would not be of the order of an organization or ordering, but of the order of modulation as proposed by Gilbert Simondon (2005: 559–560) in the idea of *allagmatics*. A flow or image of greater energy and less structuring is modulated by another of less potential energy but greater structuring. The clash between flows or images manifests movements of systole and diastole, like a great breathing body—an idea we take from Gilles Deleuze (1981). Such movement occurs thanks to the

resistance of the body images. Very elaborated body images are more resistant but with less energy; less elaborated body images, less resistant but with more energy.

The interesting thing in bringing allagmatics to think about composition is that, as Simondon defines it, it deals not only with objects, things, and sounds but also with concrete operators at the acoustic level (frequency modulations, interferences, turbulences) and with poetic operators, the latter related to music listening and its various modes of conception. In the passage between one and other objects that shape the wind, operators are activated that allow us to think of sound textures, musical figures, and gestures of the instrumentalist.

In this sense, the composer would not be the one who organizes the sounds, since here she/he deals with sound images and also with motor body images, but the one who enters the game of coming and going and then regulates the flow of energy, always maintaining the movement. That is, she/he enters the game of composition as well as the instrumentalist, the instrument, the performance space, proposing a rhythm between the passages, a rhythm of operators, distinguishing faster operators and slower ones: moments in which body, gesture, and sound resonate and moments in which they oppose each other in a disconnected way.

On stage, the body of one instrumentalist is put in motion with that of another, related by the flow of energy that each body gains from the sound body they share. Instrumental music is a dance. And music is also like that to be seen. In fact, since the 1950s, the 20th century has seen the reappearance of these bodies and dances, not only the instrumentalist's body—as Vinko Globokar (1934–) did with the piece *?Corporel*—but the instrument's body, as Mesías Maiguashca (1938–), Walter Smetak (1913–1984), and Jean Tinguely (1925–1991) used in different ways. In theater, Samuel Beckett (1906–1989), for example, made the mouth appear, exactly one of the instruments that give sonorous body to the flow of wind energy.

If music is also to be seen, it also engenders a scene or scenes. The first scene of the music is the dance of the instrumentalist's body. The second scene is that of the vibrating body of the instruments. And these bodies react to a first energy, for example, the wind. The music would then be this dancing flow that is the result of vital energy—the wind—that goes on for a while without stopping, can be re-fed, can disappear, and close a cycle.

Sometimes such a flow needs to stop, it must stop so that the bodies that appear can breathe; but it must never stop beyond the limit in which the body dismembers, the tension that unites everything disperses. In this sense, instead of thinking about the ideal unity of composition, we can work with the idea of a concrete consistency given by the continuity of the flow of energy and the manifestation of the body that it engenders.

## The Chapada dos Guimarães

To investigate such consistency, we again bring the idea of encounter. It was from the encounter between Jessica Gubert and José Neto that the creative process we discuss here was born. Our idea was to create a piece, together, for solo clarinet—Jessica's instrument<sup>3</sup>. We started by discussing sounds, instrumental techniques, and repertoires that interested us.

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<sup>3</sup> Here we use Jessica Gubert and José Neto's first names, to bring writing and reading closer to the creative process.



Figura 1: Meeting between Jessica Gubert and José Neto, May 10, 2019<sup>4</sup>.

But early on, as we were raising creative desires in a conversation (as can be seen in the video of Figure 1), a very strong and important image emerged for Jessica: the Chapada dos Guimarães, or more specifically Chapada dos Guimarães National Park in Brazil. Such a place is the geodesic center of South America, with a gigantic expanse of forest, rivers, and enormous biodiversity. A specific point in the park, mentioned by Jessica, is the *mirante* (a viewpoint), which is a very high point where you can see and hear all the surrounding forest and birds from an immense distance, as seen in Figure 2.



Figure 2: Chapada dos Guimarães, as seen from a viewpoint. Photo by Fred Gustavos.

For Jessica, such a viewpoint is more than a tourist spot: it brings back memories and specific sensations, related to her history and life goals. When talking about it, more than a clarinetist discussing technical possibilities, something deeper appeared: her uniqueness, something that moved her artistically. To resume Cavarero's (2011) notion of the relational unicity of voice, when talking about the viewpoint of Chapada dos Guimarães, Jessica opened space for her voice.

From this image, we thought: would it be possible to bring the force of amplitude of this viewpoint to the stage? Or, to bring something of Deleuze from Paul Klee (Machado, 2010: 238; Ferraz, 2010: 70), would it be possible to make this soundless force of amplitude of the viewpoint sonorous? How to make the wind of the viewpoint pass through the stage, make it gain body through Jessica and her clarinet?

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<sup>4</sup> Video available at <https://doi.org/10.6084/m9.figshare.14524317.v1>. (accessed on January 10, 2023). (Neto, Silva, 2020a)

One way to accomplish this would be through Jessica's presence: she would not only play sound objects in sequence, but she would make worlds appear, scenes emerge, through her performative work—something similar to the work of an actress on stage. This would be enhanced by her intimate relationship with the viewpoint of Chapada dos Guimarães, with her memories and bodily recollections of that place.

We resume the idea that music is a scene, and therefore, also to be seen: making the wind from the viewpoint pass through the stage would involve not only sounds but the whole performance scene. Just like the bird that gives body to the wind and dances with it, Jessica would give body, would presentify the viewpoint. From these images, we began to elaborate together what we would call *Mirante*: a piece for a solo clarinetist to open the space of a *mirante* (a viewpoint) on stage, to evoke the body of a *mirante* through Jessica's body, her gestures, and sounds.

Such a creative process did not happen linearly and continuously: several difficulties, impasses and crises, discontinuities that, by the way, are part of constructive processes, as Simondon tells us: "Every constructive process is a process that is not only the running forward, but also the returning, the building, and the coupling, the weaving." (2015: 389)

## Challenges in the performance study

One difficulty Jessica encountered during the process of studying the piece *Mirante* was the change in the challenges involved. Until then, the study of the instrument, for her, had been aimed at solving passages with technical difficulties, of sound, articulation, tuning... With the piece *Mirante*, the challenges were different, because besides the musical issue Jessica needed to understand her body movements and create a new relationship in the study, valuing not only the musical aspects but also her own body.

As she had never performed anything along these lines before, this was an aspect of maturation and growth within her musical education: to understand in practice that playing the clarinet is not only about having the clarinet in your mouth; to understand that she is an artist and that the clarinet is only one more way to express herself in front of the various possibilities. But as we said in the beginning, traditional music education sometimes leaves aside this type of relationship with the music and the instrument; thus, it was not so simple to make this change and understand that the whole body is part of the musical work.

Another challenge encountered during the creation process was how to write down the movements on the score, how to mark the movements, define the direction of the clarinet, whether it was to the left or right, what was the inclination of the instrument, upwards, face height or downwards (as also can be seen in the already mentioned video of Figure 1). All these aspects were discussed and adapted in the search for the most idiomatic and clearest possible way.

## Challenges in the compositional study

But changes did not occur only in the performative study of the piece. As we worked, the creation happened more and more in rehearsals, so that the score became a memorization tool shared between Jessica and José. Compositional practice, in this process, involved trying out the gestures even before writing them down, dancing them in sequence in rehearsals and in individual work. As we said before, to enter the game of coming and going, and, in this

dance, to distinguish and propose operators, faster and slower, trying to regulate the flow of energy to always maintain the movement.

In other words, José's compositional practice involved not only proposing sequences of sounds and gestures but also realizing, during rehearsals, how much these proposals helped or hindered the movement. Besides, being open to Jessica's proposals, both the verbalized ones and those that occurred during the performance of some excerpt: what we could call a deviation or even a mistake often brought something more interesting than the original proposal.

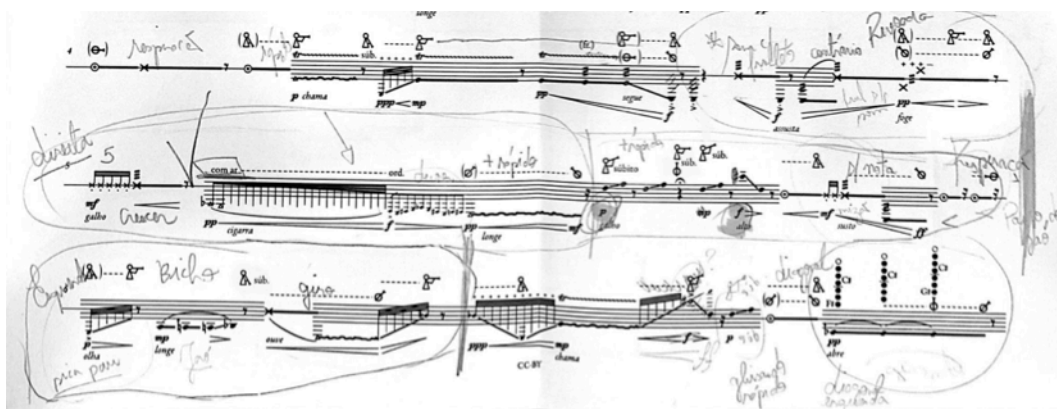


Figura 3: Excerpt from *Mirante's* score, including Jessica's annotations<sup>5</sup>.

During rehearsals, we often decided on movements and sound gestures and wrote them down on the printed score. From a certain point in the process, we avoided making major changes to the digital score, since each alteration changed the visual memory of the excerpts, increasing the aforementioned difficulty in studying. At the premiere, in June 2019, the score with mainly Jessica's annotations (as seen in Figure 3) was the closest to what we had worked out up to that point. Throughout this process, the score ceased to be Jose's ultimate goal as a composer or the rule that would determine what Jessica had to do, becoming more of a means of communication between the two.



Figura 4: Premiere of *Mirante*, June 24, 2019, at Espaço das Artes, São Paulo, Brazil<sup>6</sup>.

In this way, not only did Jessica's work as a performer goes beyond playing her instrument, but Jose's work also approached that of a stage director, who helps, gives indications about

<sup>5</sup> Score freely available at <https://doi.org/10.6084/m9.figshare.14524368.v1> (accessed on January 10, 2023). (Neto, Silva, 2021)

<sup>6</sup> Video available at <https://doi.org/10.6084/m9.figshare.14920101.v1> (accessed on January 10, 2023). (Neto, Silva, 2020b)



the flow, and helps conduct this emergence of a scene on stage. Instead of composition as the origin of work and determining the work of performers, we see it as one more among the practices necessary to a musical creative process.

## Rediscovering the viewpoint

Jessica was born and raised in the interior of Mato Grosso, a state located in Brazil's Midwest region. Besides being a very hot region, Mato Grosso has great diversity and natural richness, being geographically close to three Brazilian ecosystems: the Amazon, the Pantanal, and the Cerrado.

The months of August, September, and October are very hot and dry periods in Mato Grosso. In addition to the intense heat, fires are recurrent at this time of year for various reasons, among them deforestation carried out for fertilizing and preparing the soil for the formation of cattle pastures.

In recent years the number of fires has increased significantly, and the reasons are usually human, accidental or criminal. In 2020 there was a gigantic increase in the number of burnings in the Cerrado and Pantanal of Mato Grosso. It had been a few years since Jessica had spent this period of the year in Mato Grosso so that in 2020 she could see and feel up close the consequences they cause in nature and the surroundings. Those were very dry months and the population learned to live with the heat and the smoke, which, in a pandemic scenario resulting from a respiratory virus, Covid-19, turned into something even more complex.

Since the piece *Mirante* was composed inspired by the birds and the landscape of the Mato Grosso's Cerrado, seeing nature suffering so much from the burning, Jessica felt the need to record the piece in the middle of the burned Cerrado.



Figura 5: Jessica plays *Mirante* in the middle of the burned Cerrado at Chapada dos Guimarães, 2020<sup>7</sup>. Photo by Pedro Thame.

Until then, the image of the Cerrado in her mind, and that she had passed on in conversations during the creation of the piece with José, was of an exuberant, diverse, and living scenery.

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<sup>7</sup> Audio available at <https://doi.org/10.6084/m9.figshare.14920122.v1>(accessed on January 10, 2023). (NETO, SILVA, 2020c).

But these images were drastically modified within this new reality of environmental destruction. However, even in a deplorable scenario, making the recording of *Mirante* in the burned Cerrado was a record and a current initiative, in the search for a dialogue with the elements of contemporaneity, which, in this context, presents itself in a catastrophic, yet realistic scenario.

## Final considerations

The traditional relationship of subordination between composition and performance, although rooted in traditional and hegemonic music education, tends to remove from performance its creative potential. By suppressing creation in performance, something analogous happens in composition: the body's creative potential is suppressed from composition, making it an individual activity isolated from rehearsal practice. In the process we discuss here, we realize that such a scenario ends up hindering the creative process by not harnessing the potentials but, instead, suppressing them.

If music is something like the wind, which gains body through the bodies it passes through, then composition and performance are parts of a process that runs between both. In the encounter between performance and composition, there is not only collaboration but a mixing of roles. Like voices that talk and confuse, and imitate and reverberate each other. Even though each person contributes more within their study domain, the process becomes something that runs between these people, between these voices. Something that comes and goes, that breathes.

And so the scene of music, the dance of the player, and the dance of the instrument itself, can be empowered by the creative desires of these voices. The dance of a bird that wanders in the wind from the *mirante*.

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# Portuguese Musical Groups Dedicated to Contemporary Music Repertoire: new research directions

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**Abstract.** The difficulties encountered by composers in the Portuguese music industry led to some composers starting their own musical groups in the 1970s and 1980s. From the 1990s onwards, it became more common for musicians and cultural organizations to get involved in the creation of ensembles. Several groups emerged, such as Contracello Duet (1993), Drumming GP (1999), Remix Ensemble (2000), OrchestrUtopica (2001), Ensemble 20/21 (2003), Síntese (2006), Sond'Ar-te Ensemble (2007) and Performa Ensemble (2007), among others. This paper intends to analyse the current state of knowledge about Portuguese musical groups dedicated to contemporary repertoire. After a study of the available sources on the groups' history, it is possible to state that there have been no consistent and in-depth studies about these groups. In this context, this paper focusses on the emergent history of the groups as well as their relevance to the Portuguese music scene. Simultaneously, it intends to present the future direction of our research regarding this theme and the importance of studying these groups in order to understand the music scene at the beginning of the 21st century.

**Keywords:** contemporary art music; ensembles; Portuguese music.

## Introduction

The terms Contemporary Classical Music, Contemporary Art Music, Contemporary Erudite Music or just Contemporary Music (CM) do not refer to an enclosed reality (Reis, 2015: 377). These terms are commonly used to refer to music that is composed during the present, music that is contemporary with its reception. It can refer to music composed from 1945 onwards, from the 1960s onwards or from 1989 onwards, or it can also be used as a synonym for “new music” (Barrett, 2021: 235).

From a chronologic point of view, one can find this terminology in use before World War II, for example, in the work of Vereinigung für Zeitgenössische Musik (Contemporary Music Association) which, between 1927 and 1932, promoted the music of living composers during the Weimar Republic in Munich (Ibidem). Apart from that, several authors have used this term, or similar expressions, to refer to numerous musical languages, mainly developed in Western societies after 1945: Morgan (1991), Bosseur (1996), Griffiths (1995), Azevedo (1998), Nattiez (2003), Cook and Pople (2004), Taruskin (2005), Vargas (2008, 2011), Paddison and Deliège (2010), Martingo (2011), Rutherford-Johnson (2017) and Brodsky (2017).

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However, the changes that music underwent after 1945 may not correspond to a linear narrative or evolution of compositional approaches, so it is common to associate the term CM with systems, methods or schools of composition such as atonalism, serialism, electroacoustic music, indeterminism, minimalism, and spectralism, which are associated with composers such as Pierre Boulez, Karlheinz Stockhausen, Luciano Berio, John Cage, Steve Reich, Emmanuel Nunes, Jorge Peixinho, Gérard Grisey, Constança Capdeville, Arvo Pärt, Brian Ferneyhough and João Pedro Oliveira, among others (Fesch, 2019; Assis, 2018).

CM can also be characterized from a social point of view, as seen in the definition from Brodsky (2017: 108-109): it includes “agents who call themselves composers”, its composers and interpreters often have a “sort of specialized training” in universities or conservatories and follow “some kind of apprentice or studio model”. There is “direct engagement (...) with the concept of musical work, often involving the creation of textual objects” (scores, words, Max/MSP patches) (Ibidem). There is a presentation or interpretation of the work by specialists (instrumentalists or composers taking on the role of interpreter), western classical instruments are frequently used in conjunction with technology, they generally have external funding, and they are presented in “concert venues in which the works of the Western classical canon are also often present, to an audience with living memory of such works” (Ibidem).

From the point of view of musical notation, we see that throughout the second half of the 20th century, composers sought new instrumental sonorities and new types of musical notation emerged. Consequently, musicians need to be familiar with a wide variety of instrumental techniques that are required in new works, commonly known as extension techniques or contemporary techniques. These are instrument-specific, usually appear in the interpretation notes of the work, and differ from the techniques used in earlier periods as illustrated by Stone (1980) or in the Bärenreiter publisher book collection, which includes Josel & Tsao (2014) and Buchmann (2018). More than just knowing and mastering the extended techniques of their instrument, the musician must know the artistic language and context of the composer whose work they are playing. Such specificities have led to the emergence of groups dedicated specifically to CM, which is the focus of this article. This article is part of an ongoing investigation in which, using the case study of five Portuguese musical groups, the historical path of musical groups dedicated to CM and their contribution to contemporary artistic creation and dissemination will be studied. In this paper we present a historical framework of our object of study, then analyze the current state of knowledge on the Portuguese musical groups dedicated to CM. This is followed by a description of the emergent history of five musical groups (Drumming Grupo de Percussão, Síntese – Grupo de Música Contemporânea, Sond’Ar-te Electric Ensemble and Performa Ensemble and Ensemble DME) and an outline of the future direction of our research on this theme. The results from this research are based on the analysis of the existing bibliography and the analysis of the information available on websites, social media and the groups’ published catalogues, informal conversations with musicians, as well as the information available on news and radio programmes.

## **The Portuguese Musical Scene**

The Fundação Calouste Gulbenkian (FCG) was created in Lisbon in 1956, and made the emergence of CM possible in the Portuguese music scene by supporting contemporary music creation and event production (Nery and Castro, 1991). It also granted scholarships to younger Portuguese musicians, who could develop their music studies in other countries with

renowned composers such as Karlheinz Stockhausen, Iannis Xenakis, Pierre Boulez and attend Darmstadt courses (Ferreira, 2007a; Silva, 2010). This was how the new generation of Portuguese composers began to form. It includes Filipe Pires, Álvaro Cassuto, Jorge Peixinho, Emanuel Nunes, Álvaro Salazar, Cândido Lima, among others. Ferreira (2007a) describes this generation saying that “the new composers propose to make an aesthetic revolution of classical music without regard to consequences, facing the resistance of the neoclassic school and the resistance of some renewal composers”<sup>2</sup> (Ferreira, 2007a: 45).

The 25 April revolution in 1974 established political democracy and contributed to social and cultural change in Portugal (Silva, 2010). However, contemporary music production continued to face a range of threats (Ibidem). It was difficult to ensure regular contemporary music programming (Ibidem). This possibly happened due to a range of reasons, such as the absence of a substantive cultural policy with long-term strategies in Portugal, insufficient public investment that was out of step with the rapid transformation of society and artists, demands for specific technical material for performance, or the specific interpretations and techniques required to perform the works (Ferreira, 2007b; Telles, 2011). Thus, the limited presence of CM in musical programming, combined with the need felt by composers for their musical creations to be presented and disseminated, led them to create their own musical groups (Silva, 2010).

In this context, Jorge Peixinho founded and led the Grupo de Música Contemporânea de Lisboa (GMCL) in 1970. In 1973, Cândido Lima created Grupo de Música Nova in Porto (Ibidem). In 1978, Álvaro Salazar established Oficina Musical in Porto (Henriques, 2010). These three groups had the objectives of stimulating the creation of new music, promoting the diffusion of the contemporary repertoire, producing sound recordings and sheet music editions of new works, and developing new publics through pedagogic activities (Grupo de Música Contemporânea de Lisboa, n.d.; Silva, 2010; Henriques, 2010).

The first CM festivals also appeared in the 1970s. These included the Encontros de Música Contemporânea da Fundação Calouste Gulbenkian (EMCF CG), which took place each year from 1977 to 2002 (Nery & Castro, 1991; Seabra, 2002). For each edition of this festival, new works were commissioned from both Portuguese and international composers, and works were performed for the first time in Portugal by composers such as Luciano Berio, Morton Feldman, Pierre Boulez, Luís de Pablo and Alfred Schnittke (Nery, 2010). The EMCFCG also promoted the work of Portuguese composers or composers residing in Portugal such as Filipe Pires, Emmanuel Nunes, António Pinho Vargas, João Rafael, António Chagas Rosa, Isabel Soveral, Sérgio Azevedo, Pedro Amaral, and put on concerts by music groups such as GMCL, Grupo de Música Nova, Oficina Musical and ColecViva (Nery, 2010).

In 1985, Constança Capdeville created Colecviva. This group arose from Capdeville's need to create a group dedicated to works with a strong visual component and an “avant-garde scenic-musical language with its own characteristics, combining concert, theatre and dance, which together with sound exploration, music, word, light, gesture and movement constitute the performance”<sup>3</sup>. (Magalhães, 2019: 93).

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<sup>2</sup> “(...) os novíssimos propõem-se revolucionar a estética erudita sem olharem a consequências, perante a resistência da escola neoclássica e a atitude de assimilação seletiva de alguns compositores consagrados” (Ferreira, 2007a: 45). Author translation.

<sup>3</sup> “(...) linguagem cénico-musical vanguardista com características muito próprias, combinando concerto, teatro e dança, que juntamente com a exploração sonora, a música, a palavra, a luz, o gesto e o movimento constituem a performance” (Magalhães, 2019: 93). Author translation.

In the same year, the Miso Ensemble was created, consisting of Paula and Miguel Azguime, a flute and percussion duo using real-time electronics. The group's concert programmes reflect "an approach based on the threefold practice of its creative members: composers/instrumentalists/improvisers", in which "real-time music computing as a complement and extension of acoustic instruments has given rise to pioneering work in research and creation"<sup>4</sup> (Centro de Investigação & Informação da Música Portuguesa, n.d.). Following the work developed by this group, a range of other initiatives also emerged: Miso Music Portugal, Miso Records (1988), Miso Studio (1989), Festival Música Viva (1992), Orquestra de Altifalantes and Concurso de Composição Electroacústica (1999) (Miso Music, 2021; Szczypa, 2020).

From the 1990s on, new groups began to emerge, created not only by composers, but also by instrumentalists, associations, and cultural institutions. It is in this context that, in 1993, Duo Contracello was formed by Miguel Rocha and Adriano Aguiar. In 1999, Drumming Grupo de Percussão (Drumming GP) was formed in Porto. As the result of a project for "Oporto - European Capital of Culture 2001", Remix Ensemble emerged in 2000, and is currently the resident group at Casa da Música (Fernandes, 2010; Casa da Música, n.d.).

Other groups have emerged in the early 21st century, such as OrchestrUtopica founded in 2001 by the composers Carlos Caires, José Júlio Lopes, Luís Tinoco, António Pinho Vargas and the conductor Cesário Costa (OrchestrUtopica Ensemble, 2019). The Lisbon Ensemble 20/21 was founded in 2003 under the artistic direction of Pedro Figueiredo (Lisbon Ensemble 20/21, 2020).

In 2006, Síntese – Grupo de Música Contemporânea (Síntese – GMC) was founded in Guarda. In 2007, Performa Ensemble was created. The emergence of these groups marks the beginning of decentralization and the formation of groups in cities other than Lisbon and Porto.

Following the activities of Miso Music Portugal, the Sond'Arte Ensemble was created in 2007 (Fernandes, 2010). The Ruído Vermelho trio was created in 2010. And, in 2013, the Festival Dias de Música Electroacústica prompted the formation of Ensemble DME. Other groups have also created and promoted great work in the sphere of Portuguese contemporary music: Opus Ensemble (1980), Ensemble Darcos (2002), Quarteto Lopes Graça (2005) and Quarteto de Cordas de Matosinhos (2007).

The groups considered in this article have developed their work in precarious and unstable financial conditions. Remix Ensemble is, until now, the only one to receive direct support from the Ministry of Culture. Most groups are legally constituted as non-profit associations with each group adopting specific statutes. As legal entities, they can apply for public funding such as the government support programmes managed by Direcção Geral das Artes (the cultural agency of the Ministry of Culture) or funding from other institutions such as Fundação Calouste Gulbenkian or Fundação Gestão dos Direitos dos Artistas.

Likewise, associations and festivals have emerged that promote the creation and dissemination of CM. For example, the Associação Arte no Tempo, which has in its origin projects the Jornadas Nova Música and Festival Aveiro Síntese, promotes the development of new audiences through the initiative "Crescer com a Música, Que música ouvimos?"

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<sup>4</sup> "(...) reflectem uma abordagem que assenta na tripla vertente dos seus membros criadores: compositores/instrumentistas/improvisadores (...) e onde a utilização da informática musical em tempo real como complemento e extensão dos instrumentos acústicos tem dado lugar a um trabalho pioneiro de investigação e criação" (Centro de Investigação & Informação da Música Portuguesa, n.d.). Author translation.

[“Growing up with Music, What music do we listen to?”], and Associação Portuguesa de Compositores [Portuguese Composers Association] which promotes a series of seminars on writing techniques and contemporary instrumental interpretation called IpC – Interpretes para Compositores [Players for Composers].

Additionally, Miso Music Portugal created the Centro de Investigação e Informação da Música Portuguesa [Centre for Research and Information on Portuguese Music] in 2001 and, in 2006, launched an online database that acts as a repository for musical works and information on various Portuguese composers from the 20th and 21st centuries (Szczyba, 2020). Also, the Atelier de Composição has produced several music recordings, and has edited musical scores and books about contemporary Portuguese composers. The MPMP Património Musical Vivo is in charge of editing the magazine *Glosas*, an important publication for the promotion of CM in Portugal.

## Studies on Musical Groups

Studies on the history of contemporary music groups have been carried out in Portugal and in other countries in the fields of both history and ethnography. Research by Cohen-Levinas (1998), Fesch (2019), Telles (2020) and Santos (2021) has contributed to setting the direction for future research on the subject.

For Cohen-Levinas (1998), narrating the history of the groups dedicated to CM depends on knowledge of the history of the groups’ musical composition and the actors involved at the time. The biographical investigation of musical groups extends beyond the groups themselves and serves to document the historical period, the actors and the forces at work (Levi, 1989).

In parallel to studies dedicated to groups of performers, there are studies dedicated to specific institutions that have supported the creation and dissemination of CM. This is the case with work by Gayou (2007) on the historical path of the Groupe de Recherches Musicales, referring specifically to technological developments and the associated innovative musical conceptions.

In the Portuguese context, Telles (2020) has studied the history of Grupo de Música Contemporânea de Lisboa (GMCL). The author analyses the number of concerts, the most frequently played composers, and the number of premieres made by the group. She examines the impact on the dynamics of the CM scene and proposes dividing the group’s 50 years of history into three distinct periods.

In a different approach, an ethnography of the Remix Ensemble by Fesch (2019) addresses, among other topics, the motivations for the group’s emergence, the role that the founding members played in the group’s musical orientation, the tours and international reach of the ensemble, the commissions of works, the premieres, and the difficulties faced by the group. The results of the author’s investigation are mainly collected through semi-structured interviews, but also through document analysis. This methodology enables a holistic understanding of the relationship between members of the groups and composers, artistic directors and institutions, and of the relationships between the performers themselves.

The methodologies used by Telles (2020) and Fesch (2019) complement each other, making it possible to identify a greater diversity of historical and behavioural issues that enrich our knowledge about the object of study. In effect, the interaction between oral testimonies and documentary sources makes it possible to better understand events and actions, and this leads to a more corroborated, accurate and convincing conclusion (Bastian, 2017).



The research described above demonstrates an interest in the future of contemporary music, and a significant increase in related research. The present research focuses on the history of Drumming GP, Síntese – GMC, Sond'Ar-te Electric Ensemble, Performa Ensemble and Ensemble DME. Documenting the activities of the groups dedicated to CM preserves our recent musical heritage as Pires et al. (2018) explain.

## **Five Portuguese musical groups dedicated to CM**

The five groups under study in this research have not yet been addressed in depth by other authors. The information about them comes from booklets for audiences, press news, cultural listings, music critiques, social media posts by the groups, events and information posted by other people on the groups' social media, interviews in the press or on radio, and CD booklets or booklets showing the programs performed by the groups. Each of the groups is addressed individually below.

### ***Drumming Grupo de Percussão***

Drumming GP was founded by and is directed by Miquel Bernat (Drumming, 2011: 9). Bernat “was invited by the director of the Escola Profissional de Música de Espinho (...) to teach master classes, in 1991” and in 1994 he was invited “to direct the first higher education degree in percussion at the Escola Superior de Música e Artes do Espectáculo [Higher Education School of Music and Performing Arts] in Porto” (Drumming, 2011: 7).

In a radio interview with Antena 2, Bernat mentions that in these masterclasses he placed great importance on the musicians' training in chamber music, without neglecting individual work with the students. In 1999, the group was instituted “by virtue of the experience needed to perform live and to show the training work being developed at the EPME (in the first Professional Course in Percussion) and in ESMAE (in the first Higher Education Degree in Percussion in Portugal)” (Ibidem: 9).

Drumming GP interprets diverse repertoires ranging from “classical percussion to jazz, by way of electronic music and rock”, and it “also develops music for theatre, opera and dance shows” (Ibidem). It also develops educational-pedagogical activities in social domains “with non-professionals, with children and with older people in culturally under-served areas” (Ibidem).

Likewise, the group's programming is adapted for audiences of different age groups and different cultures. This includes the creation of a timbila orchestra that performs music from an oral tradition of Mozambican origin and the creation of the first steel drum band in the Iberian Peninsula (Ibidem).

The group is organized into small internal groups composed of percussionists who specialize in a certain instrument (Bernat, 2020). Thus, we find “a different team for a different project: the steel-drummers, the minimalists, the drummers, the electro, the keyboarders, the afro, the Hispanic” (Drumming, 2011). Currently the group is made up of the percussionists André Dias, João Cunha, João Dias, João Simões (executive production), Miquel Bernat (artistic director), Nuno Aroso, Paulo Oliveira, Pedro Góis, Pedro Oliveira and Rui Rodrigues (administrative director), Suse Ribeiro (sound), Vanessa Pires (project management) and Emanuel Pereira (lighting) (Drumming GP, 2021).

Drumming GP was resident at “Porto 2001 – Capital Europeia da Cultura” [European Capital of Culture] and performed at several concert halls in Porto and Lisbon – Culturgest, Centro Cultural de Belém, Teatro Rivoli, Casa da Música – and internationally at Auditorio Nacional de Música (Madrid), L’Auditori (Barcelona), Théâtre des Bouffes du Nord (Paris), Deutscher Musikrat (Karlsruhe) and the Institut Français d’Afrique du Sud (Johannesburg) (Drumming, 2011).

In addition, Drumming GP organizes seminars and conferences, and develops experimental workshops. The group’s discography includes “Step by Step: António Pinho Vargas”, “Wavy Horizon: José Manuel López”, “ARCHIPELAGO: LUIS TINOCO, Drumming”, “TEXTURES & LINES: Drumming, Joana Gama & Luis Fernandes”, and “Peixinho Patriarca Percussão” (Drumming GP, 2021).

### ***Síntese - Grupo de Música Contemporânea***

Síntese was created in 2006 and is based in Aldeia do Bispo (Guarda). The group came about due to the initiative of a group of professors from Conservatório de Música de São José da Guarda who organized the first “Festival Síntese – Ciclo de Música Contemporânea da Guarda”, in 2006, with the support of the conservatory. Later, the group became independent from the conservatory but continued the festival and became an instrumental group (Síntese - Grupo de Música Contemporânea, 2021a).

Along the way, the group commissioned and premiered works by several Portuguese composers or composers based in Portugal, such as Sérgio Azevedo, Eduardo Patriarca, Christopher Bochmann, Anne Victorino de Almeida, Amílcar Vasques Dias, José Carlos Sousa, Ângela da Ponte, Paulo Vaz de Carvalho, João Delgado, António Chagas Rosa, Sara Carvalho, Duarte Dinis, João Pedro Oliveira, Pedro Amaral, and António Pinho Vargas (Ibidem).

The members of Síntese vary. The current members are Carlos Canhoto (saxophone), Helena Neves (vocal), João Pedro Delgado (viola), Carisa Marcelino (accordion), Rogério Peixinho (cello), Gustavo Delgado (violin).

The group has released recordings including “2010” (2010), “Portuguese Contemporary Music for Viola and Electronics” (2015) and “Shout” (2016). In addition, this group has collaborated with international ensembles and musicians such as Proxima Centauri (France), Ensemble 20-21 (Spain), Les Temps Modernes (France), Paulo Alvares (Brazil), Jérôme Laran (France), Frauke Aulbert (Germany), Vincent David (France) and Christophe Desjardins (France) (Síntese - Grupo de Música Contemporânea, 2021b).

Síntese also develops pedagogical activities for music students and for local people without music training, with the aim of developing new audiences. One example is the project “Vanguarda na Aldeia” in which local people from each performance location are invited to perform in the concert itself (Síntese - Grupo de Música Contemporânea, 2021b). The group’s educational activities also include producing works such as A Porta Estreita by Sara Carvalho and Carta aos Remanescentes by Hugo Vasco Dias.

### ***Performa Ensemble***

Performa Ensemble was formed in 2007 and it includes musicians, professors and postgraduate students from the Department of Communication and Art at the University of Aveiro (UA), as well as guest performers. It includes Jorge Correia (flute), Helena Marinho

(piano), Belquior Guerrero (guitar), Luís Bittencourt (percussion), Henrique Portovedo (saxophone) and Sara Carvalho (composer).

Performa Ensemble “focuses its activity on the area of composition and instrumental performance, through the premiering, dissemination and recording of works by authors who express interest in collective and interactive work with performers”<sup>5</sup> (IMPAR – Initiatives, Meetings and Publications on Artistic Research, 2018). In this way, it gives rise to “an exchange of ideas and realizations that allow theoretical reflection, supported by instrumental practice, creation and interdisciplinarity”<sup>6</sup> (Ibidem).

This group has performed throughout Portugal at festivals and in concert halls such as Centro Cultural de Lagos, Conservatório Superior de Música de Vigo, O'culto da Ajuda, Casa da Música, Conservatório de Música de Coimbra, Auditorio del Conservatorio Profesional de Segovia, among others (Performa Ensemble, 2021a). In order to internationalize the music made in Portugal, in 2015, the group toured Brazil (Rio de Janeiro, Natal, João Pessoa, Belém and Salvador) with the programme “Compositoras Portuguesas do séc. XX-XXI” [Portuguese Composers from the 20th and 21st centuries] and, in 2019, toured Italy and Greece with the project “Intertextualities” (Performa Ensemble, 2021b).

Similarly, there are visible links between the programmes performed and the projects developed at the University of Aveiro, where the group’s members are based. This is the case with the projects “Euterpe unveiled: Women in Portuguese musical creation and interpretation during the 20th and 21st centuries” and “Xperimus – experimentation in music in Portuguese culture: history, contexts and practices in the 20th and 21st centuries”, which was a partnership with the Xperimus Ensemble and the dancer José Meireles to perform two music-theatre works by Constança Capdeville – *Don't*, Juan (1985) and *Double* (1982) (Performa Ensemble, 2021a; Universidade de Aveiro, 2018; INETMD, n.d.).

Performa Ensemble has premiered works by several composers, including Cândido Lima, Alexandre Delgado, Carlos Marecos, Fernando Lapa, João Pedro Oliveira, Miguel Azguime, Evgueni Zoudilkine, Sara Carvalho, Ricardo Ribeiro, Nuno Figueiredo, Ângela da Ponte, Túlio Augusto and Rui Penha (Performa Ensemble, 2021a).

In addition, the group recorded “Crossover” (2008) and contributed to the recordings “Cultures électroniques 20” (2008), “Momentum” (2010), “7 Pomegranate Seeds” (2012) and “Fados” (2014), in which the composers were challenged to “reinvent/deconstruct”<sup>7</sup> fado as a musical tradition and genre (Performa Ensemble, 2021b; IMPAR – Initiatives, Meetings and Publications on Artistic Research, 2018).

### ***Sond'Ar-te Electric Ensemble***

Sond'Ar-te emerged from the work started in 1985 by the Miso Music Ensemble and became official in 2007 (Sond'Ar-te Electric Ensemble, 2021a).

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<sup>5</sup> “O Ensemble foca a sua actividade na área da composição e da execução instrumental, através da estreia, divulgação e gravação de obras de autores que manifestem interesse num trabalho colectivo e interactivo com os intérpretes” (IMPAR – Initiatives Meetings and Publications on Artistic Research, 2018). Author’s translation.

<sup>6</sup> “Pretende assim dar lugar a um intercâmbio de ideias e realizações que permitam uma reflexão teórica, apoiada na prática instrumental, na criação e na interdisciplinaridade” (Ibidem). Author’s translation.

<sup>7</sup> “(...) desafiou vários compositores portugueses a reinventar/desconstruir o fado enquanto tradição e género musical” (IMPAR – Initiatives Meetings and Publications on Artistic Research, 2018). Author translation.

The group's members include Sílvia Cancela (flute), Nuno Pinto (clarinet) and Elsa Silva (piano). This group is characterized by the way it combines acoustic instruments with electronics in the fields of new technologies linked to musical creation, new audience development, national circulation and promotion of artistic creation, training and encouragement of new performers and composers (Sond'Ar-te Electric Ensemble, 2021a). The group commissions new work through the competition "Sond'Ar-te Electric Ensemble Composition Competition – new chamber music with electronics". The group has also made several recordings, including "Sond'Ar-te Electric Ensemble – vol. II & III – XXI Century Portuguese Chamber Music" (2014), which brings together works that Sond'Ar-te has premiered by 10 Portuguese composers: Miguel Azguime, Tiago Cutileiro, António Sousa Dias, Bruno Gabirro, Cândido Lima, Ângela Lopes, Rui Penha, Ricardo Ribeiro, António Chagas Rosa, Luís Tinoco (Sond'Ar-te Electric Ensemble, 2021a; Sond'Ar-te Electric Ensemble, 2021b).

Sond'Ar-te has performed in venues such as the Centro Cultural de Belém (Lisbon), Casa da Música (Porto), and the Guggenheim Museum (Bilbao), as well as at festivals such as the Autumn Festival in Warsaw, and City of London Festival. The group has toured Galicia and also performed in cities such as Paris, Berlin, Cuenca, Toulouse, Tokyo and Seoul (Sond'Ar-te Electric Ensemble, 2021b).

### ***Ensemble DME***

Ensemble Dias de Música Electroacústica (Ensemble DME) formed in 2013 as part of the activities of Festival DME, which was created and directed by the composer Jaime Reis. The group's core members are instrumentalists who teach at Conservatório de Música de Seia – Collegium Musicum. The group regularly collaborates in the activities developed by Festival DME (Festival DME, 2021a).

Ensemble DME presents a "variable instrumental geometry", as demonstrated at a concert on November 11, 2020 at Cinetatro-Avenida de Castelo Branco (Festival DME, 2021b). This concert started with a solo piece for viola, followed by a duet for flute and clarinet, then a piece for a trio (flute, clarinet and piano), and the first part of the concert ended with a work for flute, clarinet, piano, violin, cello and electronics (Festival DME, 2021b).

The group has performed in different parts of Portugal, including Seia (where the group is based), Porto (Casa da Música), Lisbon (Palácio Foz), Vila do Conde, Castelo Branco, and Évora, as well as internationally in Belgium (Belgium Logos Foundation) and Brazil (Festival DME, 2021a).

The group's current members are Pedro Pinto Figueiredo (musical direction), Carlos Silva (clarinet), Ana Telles (piano), Ludovic Afonso (violin), Ana Monteverde (viola), Ângela Carneiro (cello) and Mariana Vieira (electronic music programming), (Festival DME, 2021b).

Ensemble DME has performed works by Portuguese or Portugal-based composers, such as Christopher Bochmann, Jaime Reis, Jean-Sébastien Béreau, João Pedro Oliveira, Daniel Moreira and Paulo Ferreira Lopes, as well as works by international composers, among them Brian Ferneyhough, Elliott Carter, Gérard Grisey, Ludger Brümmer and Mario Mary (Festival DME, 2021a). Since 2017, the group has released recordings such as "On clarinet" (2018), exclusively dedicated to the work of João Pedro Oliveira and "Fragments de Mémoire" (2019), with works from Christopher Bochmann and Jean-Sébastien Béreau (Festival DME, 2021a; Festival DME, 2021c).

The journey of the work *Fragments de Mémoire* offers a good example of the continued collaboration between different institutions from the Portuguese music scene. Festival DME commissioned composer and conductor Jean-Sébastien Béreau to make the work, which was premiered in Teatro-Cine de Gouveia on December 27, 2015 by pianist Ana Telles (Festival DME, 2021c). The following year, a version of the work was released by AVA – Musical Editions (Festival DME, 2021e). On September 24, 2016, the work was premiered in Minas Gerais, in Brazil (Festival DME, 2021d). On November 15, 2016 the work was performed at the Museu Nacional da Música in Lisbon to mark the release of the score by AVA (Festival DME, 2021e). Later on it was recorded and edited for a CD with the same name: “*Fragments de Mémoire*” (2019).

In this way, the dissemination of the work involved several players: the team/association that commissioned and disseminated the original musical work, the composer, the performer, concert venues, music publisher, record label, and the institutions that financed it.

## **Conclusion and Future Directions**

The history of music groups is as important as the history of composers in understanding the musical context where creation takes place and how today’s society interacts with contemporary music.

The five groups studied perform analogous activities and contribute in a similar way to the contemporary music scene through masterclasses, concerts, organizing festivals, and recording CDs. However, they have distinct characteristics in terms of the motivations that led to the foundation of each group, the places where they are based, their instrumentation, the academic and professional background of their members, the works they choose, and the way they structure a concert programme. The artistic direction of Drumming GP and Síntese is guided by instrumentalists whereas the artistic direction of Ensemble DME and Sond’Ar-te is led by composers. The Performa Ensemble is steered by both instrumentalists and composers. From another angle, we can see that Sond’Ar-te developed at a greater distance from education institutions than the other groups, as Drumming GP, Síntese, Ensemble DME and Performa Ensemble had, at least to start with, a connection with music education institutions in Portugal. However, despite the support they have from education institutions, Drumming GP, Síntese and Ensemble DME have been progressively moving away from that sphere, while the Performa Ensemble maintains a very direct connection to the University of Aveiro and the projects developed there. Ensemble DME and Sond’Ar-te have introduced works with electronics with a dedicated electronic music performer, whereas in the other groups there is a greater promotion of repertoire for acoustic instruments, although there may also be works with electronics.

All groups perform repertoire that fits with the way contemporary music is defined by Fesch (2019), Barrett (2021), Assisi (2018) and Brodsky (2017). However, the groups are not limited by these definitions. In their repertoire there are intersections with other artistic movements, as is the case with Drumming GP’s inclusion of jazz, world music and rock, or the Performa Ensemble’s “Fados” project. Additionally, these groups, besides contributing to the internationalization of the repertoire of Portuguese or Portuguese-based composers, play an important role in the cultural scene of the region where they are based.

The five cases explored show the important role played by music ensembles in the dissemination of contemporary artistic creation, and the way that groups and organizations work together in a network to dynamize the Portuguese music scene. It is this network that

enables the groups to be active. It is made up of institutions and funding bodies, associations that promote events, spaces that host music activities and, and the media, without which the groups' activities would not have the visibility they have managed to achieve.

Studying these groups, and understanding the importance of their work, deepens knowledge about contemporary music in the Portuguese context. This research also offers an opportunity to reflect on the preservation of artistic and cultural heritage in Portugal, and contribute to its enhancement and dissemination.

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# Ibero-American contemporary music ensembles: *ABSTRAI ensemble* as a case study

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Fernando dos Santos<sup>1</sup>

**Abstract.** The ensemble performance involves social and musical interaction between a group of performers. In its practice, communication and interpersonal interaction skills emerge, in which this creative and collaborative process can be considered one of the main properties of musical performance. The processes of creating contemporary works (from composition, notation and instruction, research, experimentation, interpretation, and performance) present new challenges for performers and contemporary music ensembles that confront a new and modern musical universe. This case study will interconnect the *ABSTRAI ensemble* (Brazil) activities, related to the dynamics and practices inherent in the interpretation of the pieces from the contemporary repertoire until the premier works, also discussing the prospects for promoting the contemporary music repertoire in its territory.

**Keywords.** Contemporary music ensembles; *ABSTRAI ensemble*; Ensemble performance.

## Introduction

The profound transformations in music production that have occurred in recent decades have caused a dramatic transformation of the place that music occupies in society. The Ibero-American territory is also impacted and presents a discourse that reflects in its research, practices, processes, performances, and ensembles dedicated exclusively to contemporary music, not to mention the intense development of contemporary music itself –new ensembles, personalities, trends, technologies, and values. In this scenario, different ensembles are responsible for the diffusion and dissemination of contemporary music in this territory.

The strategies of musical interpretation, instrumentation, and performances are fundamental aspects of research on musical performance and the promotion of contemporary music. Despite the recent increase in the number of researches dealing with performance studies, there is still a long way to provide a proper overview of this field, especially with regard to contemporary music. Reflect on the aspects that permeate musical performance in contemporary music is complex. The genealogy and activities of ensembles that are responsible for the diffusion and dissemination of contemporary music can show the experience necessary to achieve mastery of skills for ensemble performance, based on aspects as organization; instrumentation; program choices; repertoire search; testing techniques; performance approaches.

The processes of ensemble performance depend on practical procedures. Therefore, a necessary experience to achieve mastery in interpretation must be complemented by a specialized training discipline. This article will be also discussing the approaches issues from the first album from the *ABSTRAI ensemble*, entitled *Experiência* (2018), a result of a

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dynamic and collaborative work, which reflects the actions of the ensemble in spreading contemporary music, and contributes to the performance as a creation narrative.

## Musical Performance in the 21<sup>st</sup> century

Musical performance is a fundamental part of humanity, a form of artistic manifestation characterized by a performance that happens in time, involving action. This present and immediate action of the performer (whether instrumentalist, singer, conductor [ensemble]) occurs in the enunciation of a work (communication and materialization), exposed to the criticism of the other(s): concert or recital. The term performance, etymologically, finds in its root the Latin verb *formare* – to give form, to make, to create. In the musical context, the term is used as a synonym for execution, interpretation, and practice (each of the terms has distinct meanings). There are different agents during its action, which are also related to the emphasis and realization itself.

*Every musical performance involves at least one agent (instrumentalist, singer, or conductor [ensemble]) and four fundamentals: 1) mastery of the physical manipulation of the instrument; 2) extensive knowledge of the musical text to be interpreted, as well as the aesthetic considerations related to it; 3) conditions to interact with the psychological aspects involved in the exercise of the profession and; 4) conditions to recognize the limits of your body constantly and primarily in contact with the instrument (Ray, 2005: 39).<sup>2</sup>*

The construction of musical performance is a complex process that involves deep knowledge of music and other areas that work together. In recent decades, there is a massive growth of research dealing with music performance around the world. In this sense, there are two preliminary possibilities to treat musical performance as a research object: (1) a generalized look at the process; (2) a look at a stage, a specific moment within this process (Ray, 2005: 55).

The process of organizing a musical performance is related to a topic that must be mapped and studied, locating also, specific moments that are essential to its action. The potentialities of the performer in preparation, realization, and evaluation are essential, and it is possible to identify what needs to be developed and worked on. It is fundamental to understand the need for evaluation (self-evaluation), which can improve the performance, based on the reflection of previous interpretations, as well as the aspects that need attention and help from others (teacher, counselor, physiologist, psychologist).

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<sup>2</sup> “Toda performance musical envolve pelo menos um agente (instrumentista, cantor ou regente [conjunto]) e quatro fundamentos: 1) o domínio da manipulação física do instrumento; 2) o amplo conhecimento do texto musical a ser interpretado, bem como as considerações estéticas a ele relacionadas; 3) condições de interagir com os aspectos psicológicos envolvidos no exercer da profissão e; 4) condições de reconhecer os limites do seu corpo constantemente e prioritariamente no contato como o instrumento” (author’s translation).

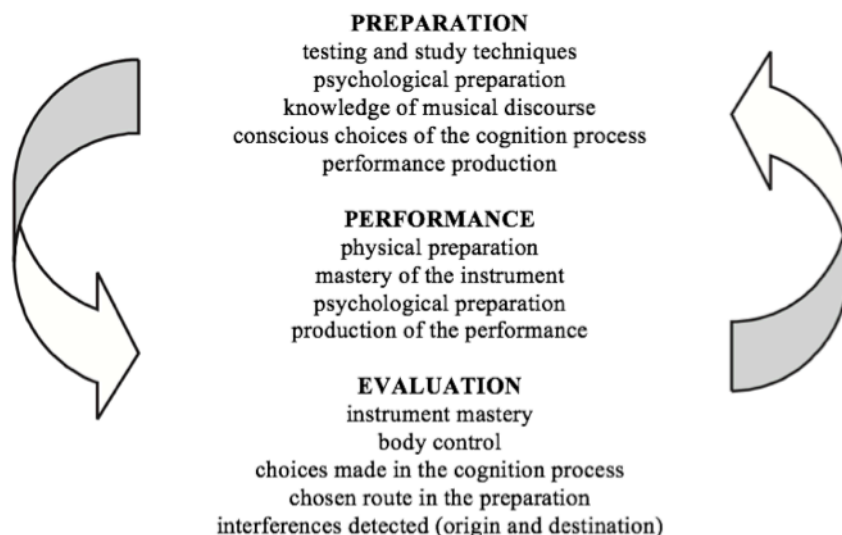


Figure 1. Elements of Musical Performance (Gabrielsson, 1999; Ray, 2015: 55)

The practice is a fundamental role in the construction of performance and is also considered a common term to describe the process of preparation for musical performance. Awareness is needed regarding practice, which involves all the previously mentioned aspects (preparation, performance, and evaluation) and permeates the process for building an efficient performance. The 20<sup>th</sup> century has brought transformations that have had a direct impact on musical performance practices. In contemporary music, the performers and ensembles face different innovations and have a wide range of possibilities to contribute to new musical work, in some cases as a collaborating creator himself. In this sense, chamber music has become a vehicle for exploring new ideas in the face of a broad horizon of scriptures, poetics, notations, and technologies, and which involves all that is recent.

*[...] The musical reading of the contemporary music repertoire has become a highly demanding task and has posed new challenges to its performers [and ensembles]. [...]. Facing a contemporary work, the interpreter [ensemble] is confronted with a musical universe that is largely singular and new, unlike the interpretative practice in traditional music, which deals with a historical scripture, widely decoded and shared (Almeida, 2011: 73).<sup>3</sup>*

In the 21<sup>st</sup> century, the way all processes are stimulated, planned, and evaluated will be reflected in the performance. It is the performers and ensembles that provide the data about the tensions that emerge between theory and practice, creativity and control during the process of artistic creation. In this sense, the contemporary repertoire demands creativity and objectivity. The practical strategies should promote awareness and integration of the processes inherent to the construction of musical performance. The challenge for performers and ensembles of contemporary music is to generate original (but stylistically appropriate) ideas and maintain coordination while translating those ideas. “Therefore, a systemic

<sup>3</sup> “[...] A leitura musical de grande parte do repertório contemporâneo tornou-se tarefa de alta exigência e propôs novos desafios a seus intérpretes [e conjuntos]. [...]. Diante de uma obra contemporânea, o intérprete [conjunto] se confronta com um universo musical em grande parte singular e novo, ao contrário da prática interpretativa na música tradicional, que lida com uma escritura histórica, amplamente decodificada e compartilhada” (author’s translation).

approach –based on processes in which individual and social creativity mutually reinforce each other– is necessary to enhance creativity effectively” (Fischer et al., 2005: 486).

### ***Ensemble Performance***

Ensemble performance involves social and musical interaction among a group of performers. In the practice of ensemble performance, interpersonal communication and interaction skills emerge, and this creative and collaborative process can be considered one of the main properties of musical performance. This process involves all the ensemble performers and permeates specific aspects that are fundamental, like originality, expression (externalization of the creative idea), social evaluation (the process by which others consider the creative output and judge its value), and social appreciation (Fischer et al., 2005: 484).

It is common to observe that several ensembles dedicated to contemporary music use the term ensemble. *Ensemble* can be defined as a group with unlimited possibilities (different formations and instrumentations) for interpretations involving more than one person, ranging from a trio to a symphony orchestra. Coincidentally, *ensemble* also refers to the precision with which the musicians play together. “In particular, rehearsal of ensemble music often involves parallel collaboration, as ensemble members may do preliminary preparation of their own parts of a piece before playing it together as a group” (Bishop, 2018: 3).

For ensemble performance to happen it is necessary that the individual parts fit together. The aesthetic and social goals of ensemble performance vary depending on the sociocultural context, choice of repertoire, and genre, performers generally intend to communicate information about musical structure (or not) and their expressive intentions, such aspects are not a matter of individual variation, but an inter-individual agreement. Exist different fundamental aspects to ensemble performance: coordination, communication, social factors, and individual roles (Goodman, 2002: 153).

*In a musical ensemble, interpersonal communication skills are important because performers need to discuss with co-performers and share information such as performance interpretations performance goals, or performance cues with one another. Many studies have reported that appropriate interpersonal communication in ensemble work enhances performance quality (Kawase, 2015: 351).*

Addresses questions of how ensemble interpreters coordinate their actions to produce an interpretation based on expressive performance parameters are also fundamental. In this sense, parameters of behavioral cues (based on auditory and visual cues) related to expression and its transformations, psychological mechanisms characterize ensemble musical performance. Likewise, these aspects allow performers to achieve interpersonal coordination in fundamental musical principles (tempo, intensity, and intonation) while exerting the flexibility needed to match artistic expression. Cognitive, motor, and social factors potentially also constrain or influence ensemble performance (Keller, 2015: 2).

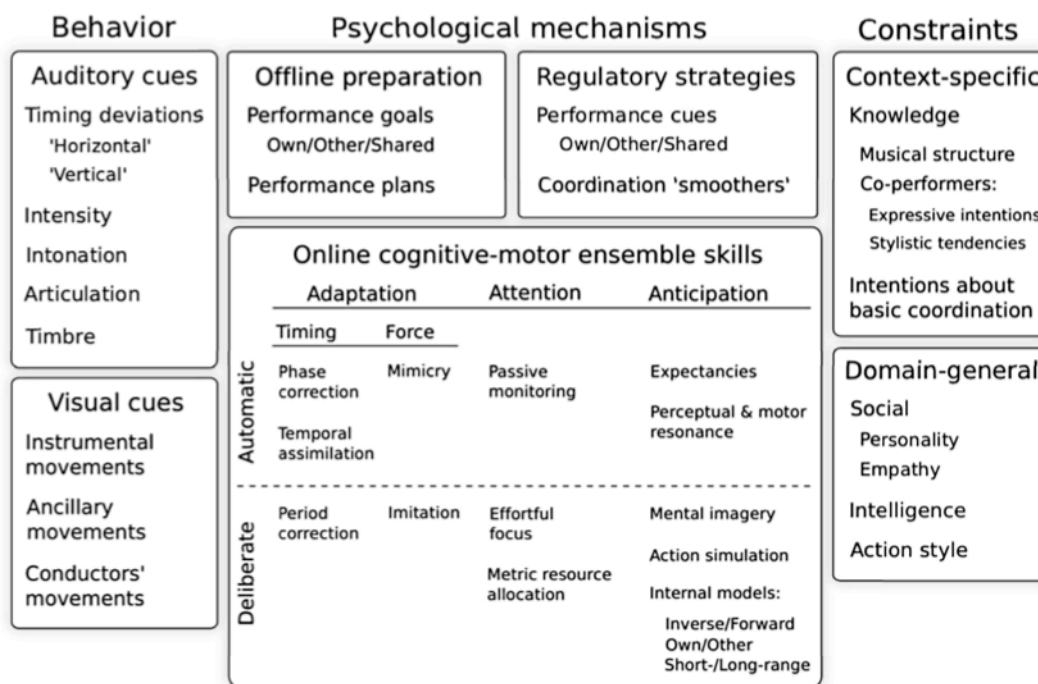


Figure 2. Overview of concepts related to behavioral cues, psychological mechanisms, and factors that may constrain or influence interpersonal coordination in expressive ensemble performance (Keller, 2015: 3).

As in individual musical performance, ensemble performers signal their expressive intentions through auditory and visual cues, but together these behavioral cues are imbued with additional communicative functions related to group cohesion. Regular preparation strategies and real-time ensemble skills facilitate adaptation, attention, and anticipation. The processes for interpersonal coordination and interpersonal alignment of ensemble performance parameters depend on practical procedures. Therefore, the experience necessary to achieve mastery in solo performance must be complemented by a complementary specialized training discipline dedicated to developing strategies and skills for ensemble performance. “In research contexts, creative output is typically evaluated on the basis of its originality and appropriateness” (Bishop, 2018: 2).

### **ABSTRAI ensemble (Rio de Janeiro, Brazil)**

The *ABSTRAI ensemble* was founded in 2005 in France by saxophonist, teacher, and researcher Pedro Bittencourt (b. 1975). The name came under the influence of the book “Concerning the spiritual in Art” (1912) by the author Wassily Kandisky (1866-1944). In the same year, the group was invited to the opening concert to celebrate the year of *Brazil in France* (cultural agreement between these countries, making possible an extensive cultural program in regions of France), in the exhibition *Iberê Camargo: cyclists and other variations* at the Galerie du Musée de Beaux Arts, in collaboration with composers Alexandre Lunsqui (b. 1969) and Herry Crowl (b. 1958). Between 2005 and 2010, the group performed in Europe, participating in different concerts and festivals.

In 2011, the group begins its activities in Brazil with resident musicians from the city of Rio de Janeiro. At this time, the performance of the *ABSTRAI ensemble* intensifies due to the commitment of all the members in the dissemination and propagation of contemporary music.

In this year and the following one (2012), the group was selected by the *Música de Câmara* of the Secretary of Culture of the State of Rio de Janeiro. Within this project, the group collaborated with several Brazilian and foreign composers. The group also had as an unusual proposal a resident composer, which in 2012 had as guest the composer and flutist Pauxy Gentil-Nunes (b. 1963). “This structure, unique and unprecedented in Brazil, allows the collaboration between performers and composer to be an important aspect in the constitution of the group, making interpretation and musical creation a joint and interdependent practice” (Coelho, 2015: 225).

In 2013, the *ABSTRAI ensemble* inaugurates its participation in the ‘XX Bienal de Música Contemporânea Brasileira’. In 2014 they tour on Mexico, performing concerts at the *Centro Mexicano para la Música y las Artes Sonoras* (CMMAS) and *Muse Universitario de Arte Contemporânea* (MUAC), with support from the *Ibermúsicas* program. Between 2015 and 2017, the group had the opportunity to participate in the program *Partituras* (TV Brasil), perform at the *XXI Bienal de Música Contemporânea Brasileira*, perform in different concerts around Brazil (e.g., Cidade das Artes; Espaço Guiomar Novaes; Instituto Cervantes; Parque Lage; Sala Cecília Meirelles), participate in several festivals (*Festival de Inverno de Ouro Preto*; *Festival de Música de Londrina*; *Festival Internacional de Música de Câmara*; *Festival Música Estranha*; *Festival Villa Lobos*; e *VI Semana Internacional de Música de Câmara*), and also be resident ensemble at the *Bienal de Ópera Atual*.

### **Organization and Instrumentation**

The organization of the *ABSTRAI ensemble* is dynamic, besides being instrumentalists, many of the members act as university professors in the city of Rio de Janeiro – and dedicate their research/practices to contemporary music. In this sense, the formation of the group is not thought in instruments, but in people. In its performances, the group also uses electronic resources. The electroacoustic apparatus allows expansions of the instrumental means, in which the group explores the peculiarities and possibilities of mixed electroacoustic music.

*The ABSTRAI ensemble included in its arsenal this very current resource that is the research on sound production itself (beyond working with "ready-made" sounds) and its tools, which can cover both electric and electronic instruments (such as electric guitar, synthesizers), and the use of computers in sound processing, during the creative process, in real-time in performances and improvisations (Gentil-Nunes, 2018: 8).<sup>4</sup>*

The *ABSTRAI ensemble* wants to be an instrument not only for spreading culture but also for contributing to musical diversity. “In professional ensembles, the impact of social factors on communication is moderated by well established conventions concerning matters of organization, administration, repertoire choice”. (Keller, 2015: 32-33).

### **Program’s choices and Repertoire research**

The dialogue is fundamental to the group and is an important part of its practices, at the beginning of the seasons there is a discussion of the participation of each member. At each

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<sup>4</sup> “O Abstrai incluiu no seu arsenal esse recurso tão atual que é a pesquisa sobre a produção do som em si (para além do trabalho com os sons “já prontos”) e suas ferramentas, que podem cobrir tanto os instrumentos elétricos e eletrônicos (como a guitarra elétrica, os sintetizadores), como o uso do computador no processamento sonoro, durante o processo criativo, em tempo real nas performances e improvisações” (author’s translation).

program's choices, there is a dialogue about all the works, in which all members participate as musical directors of the group with ideas and proposals. In this sense, interpersonal relations between members function on the basis of respect, harmony, and empathy. "Individuals coming together in an ensemble must reconcile potential differences related to idiosyncrasies in their preferred intensity profiles. This necessitates interdependency in fluctuations in dynamics between parts in the ensemble" (Keller, 2015: 23). Also, it is important to note that the program choices are also related to the opportunities and resources available.

The repertory research is a continuous flow investigation that develops naturally, especially with all the latest technological impacts, the ease of access to information, recent events, and cultural and social advances, all these aspects have a direct impact on the group proposals and decisions. In 2018, the *ABSTRAI ensemble* recorded their first album entitled *Experience*. The title of the album is based on the work 'Experiência' by the composer Phivos-Angelos Kollias. The repertoire of the album is original and all the works are destined for the group, with the collaboration of composers: Phivos-Angelos Kollias (b. 1982, Greece), Michelle Agnes Magalhães (b. 1979, Brazil), Rodrigo Lima (b. 1976, Brazil), Didier Marc Garin (b. 1963, France), Pauxy Gentil-Nunes (b. 1963, Brazil), Roberto Victorio (b. 1959, Brazil), João Pedro Oliveira (b. 1959, Portugal). The instrumental formation used was: cello, bass clarinet, flutes (contralto, bass), guitar, percussion, piano, saxophones (soprano, alto, tenor, and baritone), violin, viola, and voice, as well as active perception and electronic sounds.

The album *Experiência* proposes the challenge of absorbing, understanding, enjoying, and imagining the senses that music can transmit to the listener, stimulating "the creation of sound, tactile or olfactory images, which come together in counterpoint with the instrumental sounds of the work itself. [...]. These [works] also reveal themselves as an invitation to an active and at the same time oneiric listening, projecting us to places, memories and affections" (Oliveira, 2018: 6)<sup>5</sup>.

*The CD Experiência does justice to its title. It is a collection of works that prove that contemporary music is alive and creative. It is also the clearest proof that instrumentalists who are interested in playing this genre of music have a rich and fruitful field of exploration. Their intervention is not only necessary, but has the potential (as is the case with this CD) to take the music to levels of performance quality that will certainly convey to those who listen to it, the richness, variety and aesthetic value of today's compositional production (Oliveira, 2020: 8)*<sup>6</sup>.

### **Testing techniques and Performance approaches**

The rehearsal dynamics are based on their own collaborative processes. The *ABSTRAI ensemble* can be considered an organism, a group of people (from instrumentalists and conductors to producers) that constitute a being, and that performance approaches should be related to the inherent dynamics and practices. There is an organization of time and duration

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<sup>5</sup> "a criação de imagens sonoras, tácteis ou olfativas, que se conjugam em contraponto com os sons instrumentais da própria obra. [...]. Estas [obras] também se revelam como um convite para uma audição ativa e ao mesmo tempo onírica, projetando-nos para lugares, memórias e afetos" (author's translation).

<sup>6</sup> O CD *Experiência* faz jus ao seu título. Trata-se de uma coleção de obras que comprovam que a música contemporânea está viva e criativa. Também é a prova mais cabal que os instrumentistas que se interessam em tocar este gênero de música tem um campo de exploração rico e frutuoso. A sua intervenção é, não somente necessária, mas tem o potencial (como é o caso deste CD) de levar a música a níveis de qualidade performática que decerto transmitirá quem o escutar, a riqueza, variedade e valor estético da produção composicional dos nossos dias" (author's translation).



for rehearsals, in which all members of the group find a common denominator in how each piece will be worked on and developed. “As musicians coming together to rehearse a piece bring their own preconceptions of the music, they must find a way to reach consensus on how expressive performance parameters should be modulated” (Keller, 2015: 32). The performers’ musical abilities (e.g., their technique and sense of rhythm) and the testing techniques are crucial in rehearsal, also the interaction skills are in constant dialogue. The group also carries out pedagogical activities, such as composition meetings and interpretive practices, workshops and masterclasses, and commented concerts for the formation of audiences.

The *ABSTRAI ensemble* has a strong vocation in its territory, and is the instrument of many of Brazil's contemporary composers, having collaborated, commissioned, performed, and recorded national composers of various generations. The repertoire of the group tries to summon the widest range of the current scene: from new complexity to improvisation and the use of fixed or real-time electronic devices, where performance approaches are in constant transformations. “Brazil has a living and original contemporary music tradition, which deserves to be better known by the public, and which stands as a culture of resistance, because it is music that, at the same time as it enchants, makes you think and talks about the present moment, what people are living” (Gentil-Nunes, 2018: 6).

## Conclusion

As a conclusion in contemporary music, it is necessary to build a collective narrative that gives meaning to the musical text, and the ensemble performance and all its creative processes require groups that dialogue with their territories, attentive to all cultural and social events, and that understand the reality of their time-space. The *ABSTRAI ensemble* understands the constant transformations occurring in society and presents artistic proposals as a means of transforming this space, as well as contributing to the formation of audiences.

The Ensemble performance is a type of cooperative teamwork. The creativity of the ensemble and social creativity can and need to be integrated with the reality of the territory in order to develop innovative artistic solutions and deal with all the existing problems. Throughout these fifteen years of existence, the *ABSTRAI ensemble* has stood out as one of the main contemporary chamber music groups in Brazil, stimulating the production, interpretation, and premiere of new musical works and being an instrument for the diffusion and propagation of contemporary music. The group is attentive to the small details and nuances, and also acting as a form of resistance in the midst of a territory that is devaluing art, culture, and science every day. Their intervention is not only necessary, but has the potential to take the art to levels of performative quality that will certainly transmit to those who listen to it, the richness, variety, and aesthetic value of the contemporary music.

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# Isao Nakamura his activities in the Internationale Ferienkurse für Neue Musik in Darmstadt (1986-2008)

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Joevan De Mattos Caitano<sup>1</sup>

**Abstract.** Since the 1950s the *Darmstädter Ferienkurse* has been welcoming Japanese composers, performers, musicologists, music critic. This article deals about the activities of Isao Nakamura in Darmstadt between 1986 and 2008, who performed in various concerts and as instructor in percussion seminars in close cooperation with his wife Kaya Han in the *Konflikt Duo*. Nakamura's engagement coexists the interculturality in new music in full dialogue with Brazilian samba and other Japanese traditions such as Shintoism. The legacy of Isao Nakamura puts him in a privileged position, because he was one of the most important protagonists in the entanglement Darmstadt and Japan after the cold war.

**Keywords.** Interculturality; Performance; IMD Archiv; Darmstadt; Percussion; New Music; Isao Nakamura; *Duo Konflikt*.

## Introduction: early career in Japan and arrival in Germany

Isao Nakamura (b.1958) began studying organ keyboard in children's music classes at a Yamaha school which was near his home in Osaka. He subsequently studied piano and in the third year of primary schools, he planned to apply for a piano entrance exam, however, before the test, a piano teacher at the high school was kind enough to hear Nakamura playing and pointed out his rhythmic potential visible in the percussive piano touches. She recommended him to focus on his percussion studies because Japanese music schools and universities were in need of excellent percussionists. Isao Nakamura was in the habit of playing the drums at temple festivals. He probably started practising percussion in the fourth grade of primary schools, culminating later in his entry to Tokyo University of the Arts [Geidai], where he came into contact with classical music and local music from various countries in Professor Fumio Koizumi's ethnomusicology course. In class, students listened to folk music from around the world on records of the time, and it was then that Nakamura heard samba for the first time, exciting his rhythmic interest in the sounds and dance contained in Brazilian music. In those encounters, Nakamura became involved with music outside the confines of classical music.<sup>2</sup>

After his studies in Tokyo, Nakamura first played as a percussionist, studio musician and sambista for musical theatre, film and television recordings, jazz and Brazilian house concerts in Japan. In 1984, he migrated to Germany. First he learned German language and in 1985 he

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<sup>2</sup> Interview with Nakamura available at <https://www.youtube.com/watch?v=dxVMIjcr6WA> (Accessed on April 01, 2021).

passed the entrance examination for post-graduate studies I at the State University of Music Freiburg (*Staatliche Hochschule für Musik Freiburg*). He and his wife and pianist Haya Han completed graduate studies 1 and 2 focusing on concert examination and soloist studies. After their studies in Freiburg, Haya and Nakamura got jobs at the same university and then both were appointed professors by the Karlsruhe University of Music.<sup>3</sup>

Isao Nakamura completed his studies at the German University and continued to broaden his interest in other cultures, including instruments such as hand drums from Iran, India, Turkey, Egypt. Nakamura advocates that through music we can learn about the depth of culture by analysing musical instruments, the learning of which also requires learning how the instruments are used, this means assimilating the characteristics of each instrument to deepen the performance. In the engagement with musical diversity in the world, he has engaged with contemporary music and performed works by various composers who are absorbing their own cultures by putting in dialogue distinct traditions, in intercultural compositional works. And in these pieces they use all these different instruments.



Figure 1. Isao Nakamura playing at Darmstädter Ferienkurse 1994. Photographer: Sascha Müller. Photo from Isao Nakamura's personal archive. Used with permission.

According to Nakamura, the Japanese *taiko* is a formidable instrument that differs greatly from instruments in Western music in Europe. Each percussive instrument requires completely different techniques because they produce different sounds. Engaged in his own cultural exchange, he emphasises on the importance of persistence, clarity and sonic sharpness in the performance of the instruments, which converge into unifying forces in rehearsals and concerts for new music. Nakamura seeks to trace the real meanings of individual percussion instruments to access their possible spiritual roots or social functions in the back of their minds. In the creative performance process, Isao harnesses the energy of wind, electricity, nature, noise and earth, and emphasises that his technique is not to hit but to drop, similarly an apple falling to the ground (Hiller, 2014: 24-26).

Since 1992 Nakamura has been a drum professor at the University of Music in Karlsruhe training students with skills for soloists and ensemble instrumentalists. In 2006 he founded the *Isao Nakamura percussion ensemble* in Karlsruhe, which consists of students from the university who are directed by him. Nakamura has been teaching the polyrhythmics of Brazil,

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<sup>3</sup> Email from Isao Nakamura to the author of this article on April 24, 2021.

Africa reasoning rhythms as languages. In the teaching environment, he tries to transmit feelings and joy to the students in the process of making music.

## Experience with Stockhausen and the first activities in Darmstadt

From 1986 to 1991 Isao Nakamura took part in rehearsals of Stockhausen's works in Kürten which culminated in further rehearsals in the recording studio. He recorded *Michaelsreise* [Michael's Journey] around the world, soloist version on CD in Cologne. Nakamura rehearsed the piece for two weeks in Kürten in 1986. The premiere was in May 1986 on Radio Bremen. After that, Stockhausen, Nakamura and other instrumentalists performed in several concerts in Germany, Italy, France, England, Austria, Portugal, and Soviet Union. In Stockhausen's house, Nakamura got to know the large collection of rins [おりん], which are used in Buddhist rituals in Japan, where many families have a small Buddhist shrine with a rin to contact a deceased person. Stockhausen bought these rins in Tokyo in the late 1960s, where he had worked for the NHK radio station in Tokyo, which points to the cross-cultural examination of musical, religious and formal aspects with regard to his connection of Stockhausen to the representation of a cosmic order, in Asia and Europe (Fuji, 2008).

According to Nakamura, for a Japanese, to impress Rin is to establish a connection between the dead and the living.

*When we make the first tea of the day, first we take the tea to the dead in the little Buddhist house at home. Then we hit Rin and give him the first tea and say good morning father! for example. So for us, Rin is basically not a musical instrument. I told Stockhausen about that, because he didn't know about that. That's why we don't buy Rin by pitch, but by tone!<sup>4</sup>*



Figure 2. Isao Nakamura's personal archive. Used with permission.

Isao Nakamura's first participation in Darmstadt was closely connected with the intermediation of the professor and percussionist Bernhard Wulff, who established contacts with Wilhelm Schlüter, assistant director Friedrich Hommel at the IMD (Schlüter 2012). In 1986 Bernhard Wulff wanted to present the percussion ensemble of the Freiburg Music Academy in Darmstadt and the students played at the opening concert of the Summer Courses. Students who decided to continue participating in the Summer Courses after the opening concert received full scholarships from IMD. Nakamura learned a lot from Wulff

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<sup>4</sup> Email sent by Isao Nakamura to the author on April 26, 2021.

during his studies. He had several good ideas and contributed to the proper development of Nakamura, because besides playing drums, Professor Wulff also composed works and conducted. Nakamura continued his studies two years later in graduate studies II (soloist studies) with Wulff.<sup>5</sup>

In Germany, Nakamura's activities as a performer of solo duo and ensemble pieces, as well as soloist in orchestral works, focused on contemporary musical art. He rehearsed intensively with John Cage, Luigi Nono, Karlheinz Stockhausen and Mauricio Kagel, Toshio Hosokawa, Heinz Holiger, Helmut Lachenmann, Wolfgang Rihm, Hans Ulrich Lehmann, Youngghi Pagh-Paan and others. Certainly, his postgraduate training in Freiburg with Bernhard Wulff expanded his horizons through contact with various percussion instruments. Wulff's sensitive handling of the instruments and his knowledge of their cultural origins were exemplary for Nakamura's interpretations which are allied to accurate technique, virtuosity, concentration and strict control which places the performance in the tension between ceremonial ritualisation and the liberated motor skills present in the polarity of Japanese Shinto and Brazilian Samba.

On Isao Nakamura's abilities, Professor Bernhard Wulff stated:

*Isao Nakamura studied with me in the master's and soloist programme and qualified himself through many solo concerts and his participation in various ensembles, including several years in the Stockhausen Ensemble. Later he was appointed to the professorship in Karlsruhe.*

*The Freiburg Percussion Ensemble, which I lead, was invited to Darmstadt several times. Isao had participated in this. The connection was made through Mr Schlüter and Mr Hommel.*

*Isao is an exceptional talent - he has an enormous stage presence and a great talent for sound qualities and physicality of sounds. He is one of the few people who can elicit a sound of high quality from any object that reaches the heart of the listener.<sup>6</sup>*

In 1986 Isao Nakamura won the *Kranichstein Music Prize* in Darmstadt and in 1988, he was invited to the Ferienkursen and premiered James Wood's *Stoicher* together with two soloists (James Wood and Steven Schick), and 6 percussionists (Trudu, 1992). The instrumentalists subsequently recorded the piece on the cd "james wood - stoicheiana" in England (Warnaby, 1990: 20-25).

## Consolidation as a teacher in Darmstadt

In 1993, Friedrich Hommel and his wife travelled to the festival in Akiyoshidai under the artistic direction of Toshio Hosokawa and established a partnership. The Darmstadt/Akiyoshidai project enabled an invasion of Japanese participants at the 1994 Darmstädter Ferienkurse, which was the last year of Friedrich Hommel's direction at the International Music Institute Darmstadt (Gronemeyer, 1994; Sparrer, 2012; Galliano, 2013; Caitano, 2019).<sup>7</sup> Isao Nakamura was invited as an instrumentalist and lecturer, because

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<sup>5</sup> Email sent by Isao Nakamura to the author of this article on 26 April 2021.

<sup>6</sup> Prof. Dr. Bernhard Wulff in email reply to the author of this paper on March 25, 2021.

<sup>7</sup> The *Akiyoshidai Music Festival and Seminar* led by Hosokawa from 1989 to 1998 was important in the history of Contemporary Music in Japan because it promoted exchange between European and Japanese musicians. Akiyoshidai was

Friedrich Hommel planned various drum activities in Darmstadt. Other percussionists like James Wood, Steven Schick, Robert van Sice were invited and played in trios at percussion concerts. Isao Nakamura performed the solo piece *SEN VI* by Toshio Hosokawa in the opening concert. Musicians and composers who were connected with the *Akiyoshidai International Music Festival* were invited and performed a concert at Orangerie. Isao played *Landscape* for duo with Mayumi Miyata and also performed a solo piece for marimba *Duo II* by Tatsuya Kawasoi. In addition, Isao conducted *under the umbrella* by Jō Kondō with the students of the *Karlsruhe Percussion Group* at the opening concert.<sup>8</sup>

In 1995, Solf Schaefer took over the leadership of IMD and conceived bold projects to play new music outside traditional venues. The interdisciplinary inclination of this director fostered discussions and aesthetic reflections around new music that was the subject of public debates updating vocabularies about the subject space compositions and sound installations that emanate from an expanded concept of composition and reach the art of sound (Gronemeyer, 1996: 76-799). Darmstadt as a space for New Music and other arts was put into practice in the implementation of the Symposium on Music and Architecture held during the *Darmstädter Ferienkurse 2002* under the direction of Christoph Metzger with the participation of several speakers composers and architects such as Peter Zumthor, Bernhard Leitner, Robert HP Platz, Toshio Hosokawa, Isabel Mundry, Wolfgang Rihm, Gerhard Müller-Hornbach, Claus-Steffen Mahnkopf and Gernot Böhme, who presented a constellation of reciprocal relationships in compositional and spatial constructions, which reflected the growing international importance of sound art in the new music scene at the beginning of the 21<sup>st</sup> century (Metzger, 2003).

In the field of new music for percussion, the changes in Schaefer's leadership were remarkable. Until 1994 the drummers rehearsed in the large sports hall, but in 1996 the percussionists rehearsed for the first time in the *Edith-Stein* Schule. There the musicians had one sports hall and three medium-sized rehearsal rooms. With more rooms they could rehearse much better. The lecturers were Nakamura, Mircea Ardeleanu and Zoltán Rác. Mircea and Zoltán were there for the first time as instructors. At the percussion concert at the opening event, Isao played Kagel's *Lárt bruit*, which he premiered at the Cologne Philharmonic in 1995. Mircha and Zoltán also played solo pieces. The participants were students of the three faculty members and some others. The instruments came mainly from Karlsruhe MHS (Isao), Lugano MHS (Mircea) and Darmstadt.<sup>9</sup>

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instrumental in uncovering new talents, among them composer Misato Mochizuki who studied in Paris, taught in Darmstadt in 2008 and 2014. Misato Mochizuki teaches composition at *Meiji Gakuin University* in Tokyo.

<sup>8</sup> Interview with Isao Nakamura in April 2021. On the use of the shō (笙) instrument in new music from an intercultural perspective, see Utz 2007 [Intercultural composition as a challenge. Transformation, breaking and critique of myth in works for the Japanese mouth organ shō ].

<sup>9</sup> Interview with Isao Nakamura in April 2021.



Figure 5. Mauricio Kagel and Isao Nakamura in the Cologne Philharmonic at the world premiere of *Lárt Bruit* in July 1995. Mauricio Kagel and his wife, Isao Nakamura and his mother, the director Franz Xaver, and Manos Tsangaris (photos from Isao Nakamura's private archive, used with permission).

In 1998 Isao Nakamura premiered works by the composers Julio Estrada, Gerald Eckert, and others in Darmstadt. That same year, he took part in concerts with the musicians of the Yūsei ensemble that was present in Darmstadt thanks to the mediation of Toshio Hosokawa who acted as simultaneous translator in workshops.<sup>10</sup> At that Ferienkurse, composers from different countries discussed the old and the new hierarchy, dualism and pluralism at a Round Table, whose theme was “The Abdication of Europe? The globalisation of new music” with the participation of Chaya Czernowin, Julio Estrada, Toshio Hosokawa, Liza Lim und Manfred Stahnke, and moderation of Peter Niklas Wilson.



Figure 6. Isao Nakamura in rehearsal with Julio Estrada in the Darmstädter Ferienkurse 1998. Photographer: Siegfried Meckle (photo from Isao Nakamura's personal archive, used with permission).

In 2000 Isao Nakamura was part of the organising committee of the *Darmstädter Ferienkursen* when he worked together with the director Solf Schaefer, and other colleagues such as Barbara Maurer, Nicolas Hodges, Michael Reudenbach, Peter Veale, Mark Osborn.

<sup>10</sup> Lecture: Toshio Hosokawa. Darmstädter Ferienkurse 1998. Audio, IMD Archiv.





Figure 8. Solf Schaefer in portrait (photo used with permission from IMD Archiv).

On the importance of Isao Nakamura in Darmstadt, director Solf Schaefer stated:

*Isao is undoubtedly one of the most important performers I have met in all my 35 years of professional experience.*

*In 1984, Karheinz Stockhausen wrote 'Michael's Journey' for a trumpeter, 9 players and sound director. Isao was one of the performers (incidentally, so were M. Svoboda and Simon Stockhausen, both lecturers at the Summer Course!).*

*The premiere took place in Bremen in May 1996 as part of the pro musica nova festival of Radio Bremen.*

*Since that time I have been able to follow his artistic path. His playing is not only distinguished by immense virtuosity, but is always characterised by a 'Far Eastern spirit' which makes his interpretations so unique.*

*Representative of this is the premiere of the complete cycle 'Eolo oolin pour 6 percussionnistes localises dans des position fixes et mobiles' by Julio Estrada with the participation of his students. Isao is not only a fabulous performer, but also a gifted teacher and facilitator! In this respect, I could never do without his participation in the summer courses and he was also an important jury member for me. Also worth mentioning are his numerous solo contributions, as well as many remarkable concerts he has performed together with his wife Kaya Han (Duo Konflikt).<sup>11</sup>*

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<sup>11</sup> Solf Schaefer in reply to the email of the author of this article on March 21, 2021.

## Isao Nakamura and the advent of the *Duo Konflikt*

The conflicting dimension in his partnership with pianist Kaya Han, has become very important in Nakamura's career and finds artistic roots when they both met in their youth. Kaya Han and Isao Nakamura studied at the same music school in Kyoto (Kyoto Statische Horikawa Music High School) in 1974-76. During this stay in their studies, they both made music together. After her studies in Tokyo, Kaya Han started studying in 1982 with Professor Edith Picht-Axenfeldem at the Freiburg University of Music.<sup>12</sup>

In 1996 Isao and Kaya founded *Duo Konflikt* and some composer friends among them Younghy Pagh- Paan, Nicolaus Richter de Vroe, Thomas Lauck and Bernfried Pröve composed specific pieces for this Duo. The two Asian instrumentalists chose the name "Duo Conflict" because Japan stayed on the Korean island as occupant (colonization) for a long time. Kaya as a Korean born in Japan and Nakamura as a Japanese never wanted to forget this terrible history between Korea and Japan. Living in Germany, Nakamura always wanted to preserve this fact. A striking feature of *Duo Konflikt's* professional structure is the convergence of social and cultural horizons. The idea of conflict may sound harsh, but it finds support in the history of Japan's not entirely detached from the colonising burden of Korea and China. The conflicts have become fruitful for the duo who carry a background with repertoires of folk music and contemporary music that develop in the process of sound technique and performance. Nakamura and Han value the cultural contrasts between Japan and Korea that are linked to long history pointing to very different orientations in music and other arts. The contradictoriness between polyrhythmic African music and East Asian music are familiar to *Duo Konflikt*.



Figure 9. *Duo Konflikt* at the Darmstädter Ferienkurse 1996 (Photo from Isao Nakamura's personal archive, used with permission).

In 2002, Solf Schaefer (head of IMD) brought Korean musicians and they taught about traditional Korean music in workshops in Darmstadt. Isao Nakamura and *Duo Konflikt* shared the stage with Young-Cher Park, Younghy Paagh-Paan in an intercultural alchemy.

In 2004, Isao Nakamura was very active in concerts in Darmstadt at a time when director Solf Schaefer maintained a strong interest in Korean culture. That year, Nakamura was invited to play in the *Ensemble Tongyeong International Music Festival (TIMF)* during concerts in Darmstadt. This Ensemble came from Korea and was closely linked to the TIMF, which was

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<sup>12</sup> Email sent by Isao Nakamura to the author of this article on 26 April 2021.

established to celebrate the legacy of composer Isang Yun, who is a native of Tongyeong but built part of his career in Germany, where he taught at the Hochschule für Musik in Berlin and his works were performed in Darmstadt. The implementation of the *Gyeongnam International Music Competition* in 2003, enriched the history of the Festival in Tongyeong which emerged as an exchange platform that allowed the meeting of traditional music and modern music.

In the summer of 2006, Isao Nakamura was present in Darmstadt when he rehearsed and premiered works by Hans Ulrich Engelmann, Klaus Huber and others. At that same meeting, musicologist Jörn Peter Hiekel moderated a symposium on musical cultures *Intercultural traces in contemporary composition*. Several speakers were part of this symposium in Darmstadt, including Toshio Hosokawa, Ralf Alexander Kohler, Christian Utz, Dieter Mack, Klaus Huber, Helmut Lachenmann, Zhu Shi-Rui, Erwin Koch-Raphael, Daniel Péter Bíró, Younghi Pagh-Paan, and others (HIEKEL 2008).

In the context of new percussion music and interculturalism in the interpretative way of Isao Nakamura, Buddhist or Shinto traditions converge, as well as musical styles that mix dance linked to samba that were unified in the creative effort. Nakamura learnt the samba instruments (pandeiro, tambourim, surdo etc.) from Nana Vasconcelos in Tokyo in 1979-80, and later played as a sambista at Praça Onze (Brazilian Livehaus) in Tokyo. There, Isao Nakamura met Clara Nunes, her husband Paulo César Pinheiro and *Nosso Samba*. In 2011, 2013 and 2019 Isao taught at UNIRIO and part of the students who attended the seminars/workshops were enrolled at the UFRJ School of Music. In 2019 Nakamura performed a concert with the wind orchestra of URFJ. Unfortunately, Isao has never participated in Carnaval in Rio de Janeiro, however in September 2013 he visited the Escola de Samba da Portela (Portela Samba School). In September 2019 Nakamura performed the bumbo solo in the compositional works *Thunder* by Peter Eötvös and *Exotica solo* by Mauricio Kagel in a concert at Sala Cecília Meirelles in Rio de Janeiro.<sup>13</sup>

The experiences with the Japanese drum in convergence with the sounds associated with the Japanese religious form of Shintoism have fecundated remarkable traits in Nakamura's artistic career, whose trajectory has always been open in completely opposite directions. Dialogues with these opposites determined the essence of Nakamura who teaches samba to his students, because the inclusion of dance and voice in the virtuosity, can enrich the precision and amplifies the joy during the performances. The Japanese Isao Nakamura remains faithful to samba, but remains one of the most requested percussionists in workshops and concerts of new music in Germany, Japan and other countries (Hiller, 2014: 24-26).

Table 1. Performances by Isao Nakamura and Duo Konflikt from 1986 to 2008.

<b>Ferienkurse 1986</b>		
Pianobsession	for percussionists	Jurg Wyttenbach
Denk daran, die Erde ist eine Trommel	for 4 percussionists	Thomas Lauck
Blossom	for instrumental ensemble	Chan Wing-wah
East 11 th Street NY 10003	for percussion ensemble	James Dillon
<b>Ferienkurse 1988</b>		
Stoichea	for 2 percussionists, 2 percussion ensembles, 4 keyboards and electronics	James Wood
<b>Ferienkurse 1994</b>		
Anschläge	for B.A.V (for solo percussion)	Thomas Lauck
Rezonanzen II	for piano and percussion	Thomas Lauck

<sup>13</sup> Email from Isao Nakamura to the author of this article on April 24th.

Ta-Ryong IV „Die Rückseite der Postmoderne“		Younghi Pagh-Paan
Trio für eine(n) Pianistin (en)		Thomas Lauck
Interludium A	For piano solo	Isang Yun
Birds Fragments II		Toshio Hosokawa
Duo II	For marimba	Tasuya Kawasoi
Musique de Tables		Thierry de Mey
A Volcano Mouth / Under the Umbrella		Jō Kondō (近藤譲)
SEN VI		Toshio Hosokawa (細川俊夫)
<b>Ferienkurse 1996</b>		
Resonanzen II		Thomas Lauck
Nachtklänge		Toshio Hosokawa
Diameter		Bernfried Pröve
Stück	for timpani solo	Peter Eötvös
Ertastet / licht		Nicolaus Richter de
L'art bruit	Solo for two percussionists	Mauricio Kagel
Andere Räume	for four percussionists with tape	Robert HP Platz
<b>Ferienkurse 1998</b>		
Exotica	Percussion	Mauricio Kagel
Gnadenlos	For percussion and piano	Stefen Schleiermachen
Die Insel schwimmt	For percussion and piano	Younghi Pagh-Paan
Ansage		Solf Schaefer
Shao Yang Yin	(for harpsichord) piano version by Kaya Han	Isang Yung
Aeolo“ oolin	For 6 percussionists in a pentagon	Julio Estrada
<i>Verleihung des Kranichsteiner Musikpreis</i> [Award of the Kranichstein Music Prize]	Word/music	Solf Schaefer, Isabel Mundry (speakers), Isao Nakamura (conga)
Wie Wolken um die Zeiten legt	for flute, percussion, accordion and soprano	Gerard Eckert
<b>Ferienkurse 2000</b>		
Glocken	For percussion and piano	Berndfried Pröve
Interplay	For Marimba and piano	Terumichi Tanaka
In den stachligen Grannen	For percussion and piano	John Cage
Shadow Play		Sohrab Uduman
Un fruscio lungo trent 'anni	For 4 percussionists	Salvatore Sciarrimo
<b>Ferienkurse 2002</b>		
Incipit		Johannes Maria Staud
Ta Ryong IV „Die Rückseite der Postmoderne“		Younghi Pagh-Paan
Tsun Shin / Ta Ryong III	For percussionist	Younghi Pagh-Paan
<b>Ferienkurse 2004</b>		
Musik für 7 Instrumente		Isang Yun
Mah-Dschung	Scenic composition for ensemble and light	Nam-Kuk Kim
Toccata sospesa	For flute and percussion	Bettina Skrzypzack
<b>Ferienkurse 2006</b>		
“...à l'ame de descendre de sa monture et marcher sur ses pieds de soie...”	Chamber concert for violoncello solo, baryton solo, alto part and three instrumentalists	Klaus Huber
TRIO IV	For flute, percussion and piano	Dieter Mack
Passato presenza	Chamber ensemble	Hans Ulrich Engelmann
<b>Ferienkurse 2008</b>		
Woven	For piano and percussion	Maschiro Isijima
Linear Momentum	For vibraphon and piano	Sungji Hong
Rotes Gewölk	For piano and percussion	William Attwood
The woodcutter and the heavenly maiden	For percussion and piano	Nam-Kuk Kim
Upon dry land	Duo for percussion and piano	Gerhard Stäbler

Isao Nakamura's legacy is linked to the emancipation of percussion instruments in concert music in the first half of the 20<sup>th</sup> century. In the past, percussionists were limited to appearances in orchestras, operas and military music, however, the increasing importance of rhythm variation meant that drums could not be restricted to the level of effect and tempo marking. In the works for percussion in the last decades, percussion instruments gained visibility and composers composed works that put the percussionists in the foreground. The pluralist tendencies of new music present works that demand rhythmic virtuosity and extreme skill in improvisation (instant composition) which appeared as a central element in sound processes, playing an important role in multimedia projects and musical theatre (François, 1991; Schmith, 1991; Mowitt, 2002; Brüstle, 2009: 63-81).

In this current and plural context, Isao Nakamura has been a great representative, because since the 1980s he has been part of this scenario playing and recording with various composers who encompass choreography in percussive play, expansion of percussive instruments, objects and materials used percussive voices. Percussionists such as Max Neuhaus, Christoph Caskel, Jean-Pierre Drouet, Sylvio Gualda, Michael W. Ranta, Steven Schick, Keiko Abe, Robyn Schulkowsky, Evelyn Glennie, David Cossin, Edgar Guggeis, Matthias Kaul, Rumi Ogawa, Michael Wertmüller, Simone Beneventi, Zoro Babel, Christian Dierstein, Sven-Åke Johansson, Ivan Manzanilla and Isao Nakamura have established themselves as specialists in the art of contemporary music for percussion performing in numerous concerts and workshops around the world, including participations in the Summer Courses for New Music in Darmstadt (Wagner, 1996; Schick, 2006; Brüstle & Vlitakis, 2016: 292-305).

The trajectory of Isao Nakamura, his experiences and transformations throughout his life, made it possible to engage with Japanese culture and discover other cultural traditions. Isao Nakamura and his wife Kaya Han also contributed to the impact of Japanese culture in Darmstadt and Darmstadt on Japan in the 1990s and early 21st century. The Nakamura presence in Darmstadt enriched this exchange that was implemented since in the 1950s by the engagement of representatives such as Ginji Yamané, Toshirō Mayuzumi, Yoritsune Matsudaira, Bernhard Großmann, Hans-Joachim Koellreutter, Yoshida Hidekazu, Kazuo Fukushima, Minao Shibata, Matsui Ichiro, Akemi Karki, Makoto Moroi, Maki Ishii, Makoto Shinohara, Erwin Born, Yukiko Sugawara, and later, by the activities of Toshio Hosokawa and Misato Mochizuki (Schlüter, 2012).

In the field of percussion activities in Darmstadt and other festivals, Isao Nakamura complements the legacy of other percussionists and groups such as Christoph Caskel, Heinz Haedler and *Internationalen Kammerensembles Darmstadt*, Mircea Ardeleanu and *Lugano Percussion Group*, Zoltán Rác and *Amandinda Percussion Group Budapest*, James Wood, Ivan Manzanilla and *Nonsense Company*, Ricardo Gallardo, *Ensemble Raras Budaya*, Steven Schick, Bernhard Wulff and *Freiburger Schlagzeugensemble*, *das Schlagquartett Köln*, *Haag Percussionists*, *Kroumata*, *Percussion All Stars*, *Straßburger Schlagzeug Ensemble*, *Sō Percussion*, *Nexus*, *Yale Percussion Group*, *Third Coast Percussion*, *Glasotrik-Ensemble*, Young-Cher Park.

## Conclusions

Isao Nakamura's trajectory, his experiences and transformations throughout his life, enabled the rediscovery of Japanese culture and the discovery of other cultural traditions. It is plausible to assume that he discovered his own path for the development of creative exchange between cultures, present in his performances and pedagogical activities that reflect the need

to merge the heritage of Japanese culture with his knowledge acquired in other continents. This convergence has found a fulcrum in the intercultural perspectives implemented in Darmstadt, thanks to the increased opportunities for dialogue and conceptual distribution between the various cultures. Isao Nakamura carries with himself interculturality in new music. In his artistic track record, Darmstadt was very important in internationalising his profile as a percussionist who was gaining the respect of several composers whose works were rehearsed and premiered by him.

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# The Electric Guitar: Forms of Augmentation and their use in the Contemporary Repertoire.

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Daniel Santos<sup>1</sup> and Henrique Portovedo<sup>2</sup>

**Abstract** This article describes the invention's processes of the electric guitar and of augmentation progress. The research pays attention to the context where it came up and link this invention with current concepts from social Sciences and Philosophy that clarify its origin and organological trajectory. In the second section, the article makes a comparative analysis of several composition works for augmented electric guitar in order to better understand the use of augmentation on the instrument. From the observations obtained comparing these case studies, the advances of the instrument in recent History are understood as an evolution towards electronic flexibility and performative playability, volume control and integrated computers. Finally, some aspects of the instrument augmentation process are described, these aspects are related to musical performance and its influence on the development of performative skills.

## I

The Electric Guitar was developed in the decade of 1930s and can be considered a forerunner of the growth of augmented instruments. Its invention was motivated by the volume amplification requirements of the classical guitar in musical ensembles and its existence is the result of a collective and social process of adaptation of the instrument to the needs of the time. Its first developers were Beauchamp and Rickenbacker, who applied the technology of electromagnetic amplification to instruments (RIC, 2021). Later, in the decade of 1940s, there were significant advances coming from Leo Fender and Les Paul, who design the solid body of the guitar. Les Paul also turned the instrument popular with his performances on clubs, radio and television and developed fundamental technology of music recording (Les Paul Foundation, 2016).<sup>3</sup>

From its beginnings, the evolution of the instrument was a collaboration between art and science, especially close between the fields of performing and sound engineering. However, this success was also due to its use by jazz, pop and rock musicians. The idea of social adaptation and collaboration between interdisciplinary areas is, therefore, at the origin of the electric guitar and can be seen as related to latter concepts, such as *assemblage*, introduced by Gilles Deleuze, or *ubimus* (Ubiquitous music, an implementation in the music field of the Ubiquitous computing idea of Mark Weiser). Extracts from original articles related to both aspects are the following:

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<sup>3</sup> Les Paul (...) can also lay claim to having invented multitrack recording. Multitracking involves recording a performance and then rewinding the take to the beginning in order to add more music to it. (Byrne, 2012).



*(...) an emergent field of research that combines several areas from sound and music computing, human computer interfaces, creativity studies, music education, with a strong social and community underpinning (Keller et al., 2019).*

*The concept of assemblage encompasses this reformulation of criteria, considering not only the instrumental technical characteristics, but also the performative practices themselves from a sociocultural perspective, reflecting the identity inherent in contemporary times as the incorporation of different processes and the reconfiguration of concepts and practices (Portovedo, 2020).*

As a result of technological improvements dictated by performance needs, the electric guitar became an instrument constituted by electromagnetic amplification and integrated microphones.

*The three types of electric guitar (...) all use steel strings and magnetic pickups. (...) The pickups “listen” to the string tone’s acoustical characteristics, which are determined by the quality and design of the guitar top (Schneider, 1985).*

There was a shift in the conception of sound in comparison to the classical instruments. In the electric guitar what produces sound, loses importance compared to what reproduces it. In other words, although there is still a very important physical and instrumental component (the body of the guitar), the sound is being defined by the amplifier and the effects.

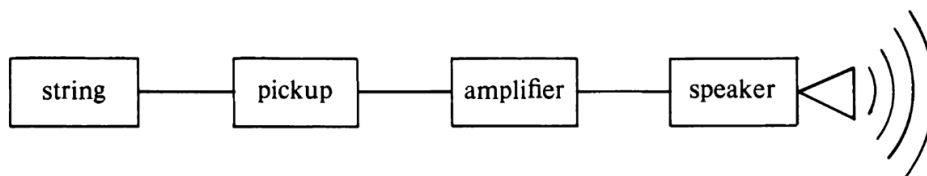


Figure 1. Electric guitar scheme (Schneider, 1985).

The introduction of various elements into a sound chain is the first attribute that makes it an augmented instrument, considering that an augmented instrument is currently defined as:

*A network of sound production and processing units, spatially extended and configurable by the player according to the desired sonic results. (...) The initial sound source (the acoustic guitar) becomes a part of an electro-acoustic chain (Lähdeoja and Navarret, 2010).*

Therefore, the augmented instrument has a series of new features. In Augmented Instruments, the artistic intentionality around the result of the sound takes on a fundamental role. The acoustic aspect is of minor importance, and the musician could integrate the sound into an analogical sound chain or convert the signal into a digital signal. Finally, it is possible to split the guitar signal and use both digital and analogical at the same time. The fundamental point is that there is neither an ideal sound, nor a standard and the potentialities are multiple.

Performative control on the playability is also a critical aspect in the development of an Augmented Instrument. From the external control of the sound parameters, progress has been made to integrate hardware control embedded into the instrument (potentiometers, timbral controls, digital controls), passing through an external hardware control in the setup (pedals effects) to reach a control that also includes an item of computer + software.

Finally, this “sound network” requires the knowledge on the systems that make up the augmentation as a fundamental subject for performers and composers. In addition, relationships with objects, not only have an internal sense towards the understanding of the electronic configuration and signal processing, but also act in an external sense, towards the objects that promote indirect action on the instrument. (e-bow, bottleneck, whammy bar etc.). This kind of external action over the sound network has a close relationship with current studies in the musical gesture, because the indirect gesture becomes a complementary excitation of the internal process.

*Furthermore, a sound-producing gesture can be defined as an excitatory action, i.e., an action of setting some object (e.g., parts of an instrument) into motion by hitting, stroking, or bowing. Excitation gesture are either direct or indirect, depending on whether or not there is an object between the sound-producing element of the instrument and the object carrying out the excitation. For example, the actions of playing the harp or congas are direct since fingers and hands are directly in control of the resonating objects (strings and drum membrane). But there are also many indirect instrumental actions that involve one or more objects in the interaction, for example the bow in string instruments, the key mechanism on the piano, or sticks for drums. (Jansenius et al., 2009).*

Nowadays, all the referred progress in the process of augmentation is applied to the composition for electric guitar. However, even though these features broaden the horizons of the electric guitar as an Augmented Instrument, they also create a problem when it comes to assimilating the possibilities. In fact, there is enormous flexibility in the systems:

*Currently, the electric guitar appears as a user-configurable, hybrid and modular instrument. It is comprised of acoustic, electromechanical and digital parts, all of which are integrated into an instrumental environment. (...) The instrumental environment offers a high degree of configurability for the musician (...) As a result, a wide variety of diverse objects coexist under the common name “the electric guitar” (Lähdeoja and Navarret, 2010).*

Difficulties in expressing written music may also arise:

*If, on the one hand, the maturity of a particular musical aesthetic also translates into the standardization of notational elements, on the other hand, the exploration of sound fields increases the difficulty of stabilizing a symbolic language, residing here one of the greatest difficulties inherent to performance and to study of new music (Portovedo, 2020).*

These difficulties can drift into a practice not equated with theoretical development with learning difficulties, atomized practice, economic gaps and failures in live systems. This reflection leads to the proposal of organizing setups that homogenize the practice of electronics in contemporary music and to the question of what the skills of the performers should be when working with augmented instruments. The importance of performing the works on stage is central to be able to continue with the development of the new contemporary trends, thus obtaining the feedback of the action / perception.

*This leads us to valorize what is perhaps the most important issue for an ontology of music: the fact that situations organized around the production of music would not be pertinent if they were devoid of implications touching directly on questions of action and perception. (...) Action and perception lie at the heart of musical processes, as these musical processes are created by successive operations of concretization having as a tuning tool—as a principle of reality— an action/perception feedback loop (Vaggione, 2001).*

Some of the approaches and works that have been developed for the instrument are shown below, through the analysis of five case studies for the electric guitar written from the late 1980s of the 20<sup>th</sup> century to present. They represent a sample of how the instrument and its sonic possibilities have been thought out. Through the process of “action/perception feedback loop” derived from the performance the needs and possibilities of the instrument are revealed. Frequently, essay and error process through the performance show how some technical issues could be solved and how some aesthetic results could be achieved. Finally, we present some technical and aesthetic directions of the instrument envisioning future directions.

## II

The case studies analysed are the following: *Vampyr!* (Tristan Murail, 1984), *Electric Counterpoint* (Steve Reich, 1987), *Trash TV Trance* (Fausto Romitelli, 2002), *Momentum Anomaly* (Elliott Sharp, 2006) and *Not I* (Stefan Prins, 2007).

Tristan Murail's work *Vampyr!* (1984) absorbs many elements of Hard Rock and Heavy Metal music:

*The desired sound is rather that of the solo guitar as played by Carlos Santana, Eric Clapton etc. (...) The player should put into Vampyr! All the energy of rock music and that includes the appropriate number of decibels! (Murail, 1984).*

The work formalizes certain elements of writing for the electric guitar, such as the directions of the pick and the use of the whammy bar. Despite being the simplest setup of the works analysed, in the performance it is important to be able to modulate the distortion parameters and operate on the amplifier in real time (Figure 1) for which some type of pedal effect is needed to organically control the amount of distortion used at any given time. This use of the pedal effects can be seen in the performance of Flavio Virzi (2011).

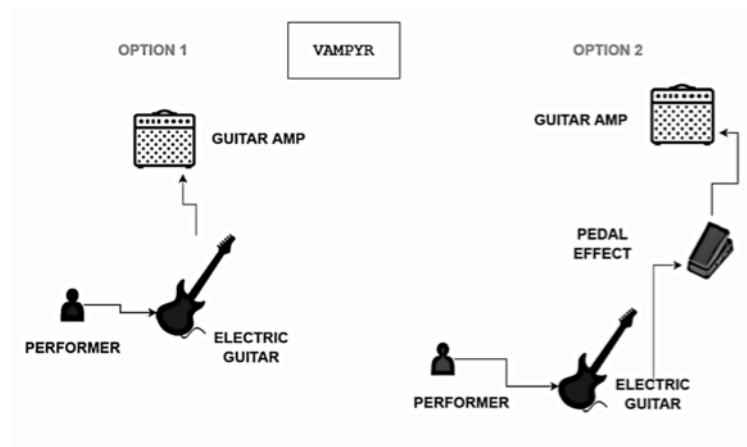


Figure 2. Comparison of two setups to perform *Vampyr!*

This writing of effects is not standardized in the notes that the composer gives, being, therefore, a choice of the performer, who over time tends to make the elements of the setup more flexible, trying to obtain more control.

This example highlights the importance of the feet when playing the augmented electric guitar. In some works, this arrangement of effects pedals on the floor will grow and the use of the feet will be very common, increasing the number of limbs needed to play the instrument.

There also begins to exist a feedback or reciprocal causal relationship between the effects derived from the sound internal processing and the indirect actions applied to the instrument, such as the action of rubbing the pick against the strings, strongly enhanced by the effect of distortion. The same will happen in other works, such as those of Romitelli *Trash TV Trance* (2002), Prins *Not I* (2007) or Sharp *Momentum Anomaly* (2006), where elements that act indirectly on the instrument take on their meaning due to the acoustic phenomena that certain effects have or that the electronics itself generates.

Finally, this phenomenon is also reflected in the use of general compositional writing. The potentialities of the sounds generated by a certain effect or aesthetic are used. For example, the use of distortion enables and increases the listening of the partial harmonics that are used in various passages of the work. The whammy bar generates very flexible *glissandi* and modulations on the pitch that correspond to the aesthetics of the composer, and that are impossible to obtain with a classical or acoustic guitar. This importance of the whammy bar will also appear in other works, especially Prins's and, to a lesser extent, Romitelli's.

Steve Reich's work *Electric Counterpoint* (1987) introduce some peculiarities that separate it from the others analysed in this article, the writing does not use extended techniques or indirect actions on the instrument and its sound is closer to the Pop and Jazz universe than the other works closer to the distorted and loud sound of Hard Rock and Avant Garde. The work was written in collaboration with the guitarist Pat Metheny, one of the leading performers of the electric guitar in 20<sup>th</sup> and 21st centuries.

*Electric Counterpoint* is written for one live guitar and fixed media. In this work the performer could produce its own pre-recorded tape which includes ten guitars and two bass guitars.

*If a performer wishes to make their own pre-recorded tape they are encouraged to do so and will need to record it in a multi-track tape studio. Generally, at least 16 tracks are necessary to allow for alternate takes during the recording sessions. The multi-track tape is then mixed down to a 2-track stereo (or mono) tape for a performance (Reich, 1987).*

The circuit includes the need for a PA<sup>4</sup> to reproduce the sound, in contrast to what is usual in the works of other authors (Prins, 2007; Murail, 1984), who prefer the sound to be transmitted through the guitar amplifier. Reich also proposes in his diagram the figure of a technician to help control the volumes of the electronics and to fire the fixed part. The amplifier appears in the diagram as a monitor for the performer (Figure 3). Although no pedal appears in the circuit, pedal effects could be used, especially the *reverb* pedal.

The fact of introducing a figure that controls the volume of the electronics and that releases the fixed part reduces control and freedom to the soloist who may have a different idea of the properties of the volume and the way of how the soloist and fixed part balance should be adjusted. In Prins' work, the use of a pedal is proposed to control the volume of the electronics, and this pedal could also be used in *Electric Counterpoint*. Furthermore, a pedal can be used to trigger the fixed part and this one can be chopped into at least three parts (one per movement) to articulate the pauses between movements. All this gives the performer greater flexibility, freedom and control. Full control of parts of the electronics by technicians can upset the volume balances of the works that the performer has designed. This can be

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<sup>4</sup> Personal Address System. It refers to the audience-facing loudspeakers situated on the stage, normally in a stereo image, in contrast with the guitar amplifiers, usually situated behind the performer and in a mono image.

solved with a faithful monitoring (amplifier or via headphones) of the balance that is being considered in the PA between live sound and electronics.

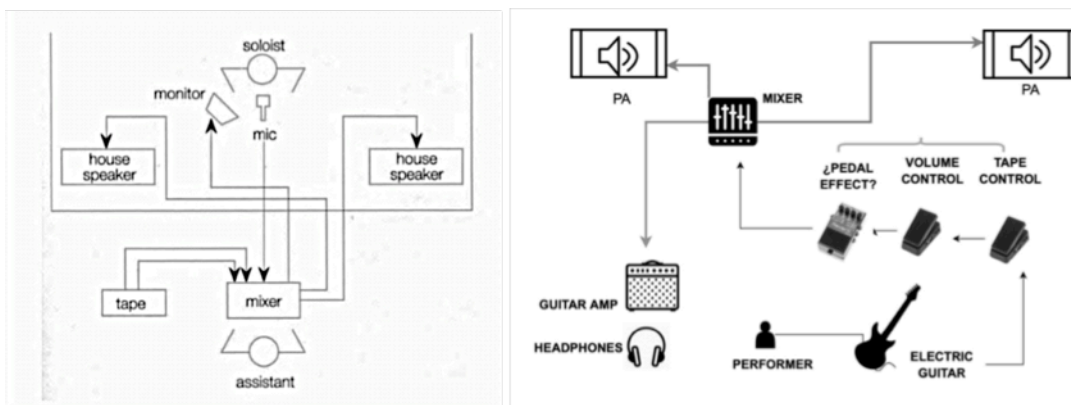


Figure 3. Comparison of two setups to perform *Electric Counterpoint*, on the left the one suggested by Reich in the score of the work, on the right another possibility suggested by the authors of this article.

All this conflict results in certain tendencies of contemporary performance with electronic means: a) make the fixed parts more flexible to give them more naturalness in the performance, and b) control to the maximum possible degree all the parameters of sound and electronics by the performer without depending on an external figure. However, sometimes the work is written as a duo, as is the case with Prins' work, where the electronics, that was initially proposed as a soloist part, ends up being a dialogue with the composer or the live electronic sound system.

Fausto Romitelli's work *Trash TV Trance* (2002) is presented as a composition with Live Electronics more complex in its circuit, and requires the incorporation of a multi-effects rack, a looper station and, in certain approaches, a computer.

It happens again (as in the works of Murail and Reich) the existence of different approaches in the electronic setup. But, unlike the previous works analysed where the different configurations sought different sound results (greater control over distortion, greater flexibility in the fixed part) in Romitelli's work, alternative setups can be used to try to achieve the same result (Figure 4). In that work, the writing of the electronic part begins to be more exhaustive, and the problem is not a shortage of spelling but a difficulty in achieving the desired effect.

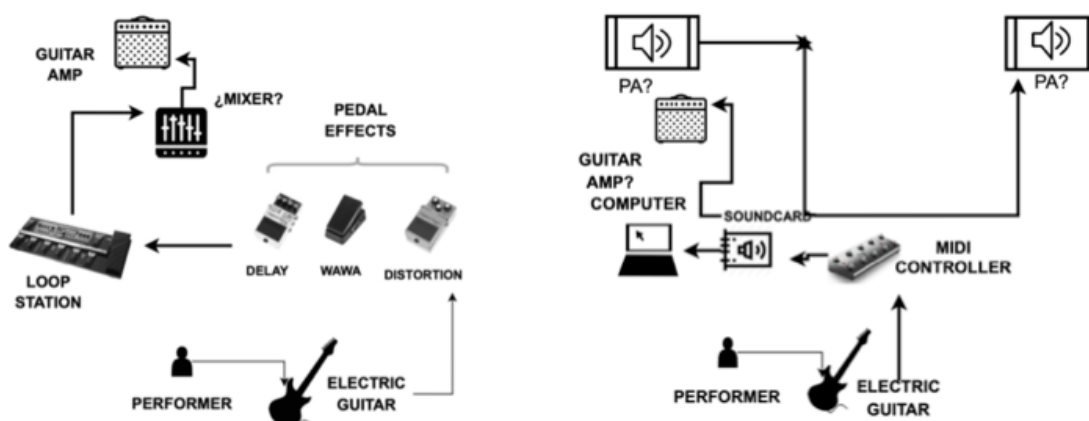


Figure 4. Comparison of two setups to interpret *Trash TV Trance*, on the left without a computer, on the right with it, options such as the mixing console or PA are also suggested.

In *Trash tv trance* the electronic parts that exist in writing are: Distortion (On / Off). Loop 1 (On / Off). Loop Inversion (On / Off). Wawa (Up / Down). Delay (On / Off). Loop 2 (On / Off). Loop 3 (On / Off). Loop 4 (On / Off) and Loop 4 Doubled (double the length of the Loop). Loop 5 (On / Off), Loop 5 ++ (add layers to the loop), Loop 5 +++, Loop 5 +++++, Loop 5 ++++++.

This electronic component of the Fausto Romitelli's work is often hard to achieve. Actions such as inverting the sound of a loop or increasing its duration are not easy and not all loop effects stations can do it in real time. For this reason, the use of a computer may be necessary as a technological support. However, the work can be done without the computer if it is preferred to keep a hardware setup and control the electronics with the feet, as in Yaron Deutsch's version (Deutsch, 2009).

Romitelli's work does not have as an electronic intention only to modify the timbre of the instrument as it happens in *Vampyr!* or increase the instrumental template as in *Electric Counterpoint*, but also affects the temporality of the work through the loops, so that sounds obtained from the guitar itself are sampled and reproduced in a loop.

In *Trash tv trance* there is a huge number of objects for indirect action that are used throughout the work: a metal drumstick, a jack cable on the string, a coin, a sponge, a wooden drumstick, a bottleneck, an electric razor, an e-bow and the whammy bar. This collection is a compendium of all the indirect action mechanisms that can be applied to the electric guitar.

In that work, as in Murail's (although to a lesser extent), untuned sounds and, in general, noise play a fundamental role, which constitutes one of the aesthetic foundations of the instrument.

Elliott Sharp's work *Momentum Anomaly* (2006) is an improvisation for electroacoustic guitar, in its live performance he uses pedals and a configuration of the following type (Figure 5). In words of Elliott Sharp himself, "When I perform *Momentum Anomaly* I do often add pedals: compression, distortion, delay, pitch shifters". The pedals shown in the diagram are illustrative and an image of his live performance could be more accurate to understand the setup. (Sharp 2019). (Figure 5.1)

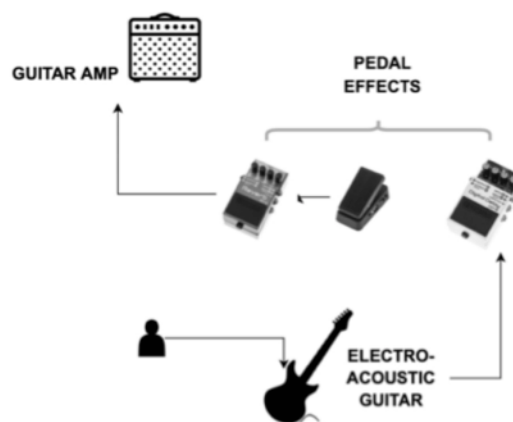


Figure 5. *Momentum Anomaly* Live Setup



Figure 5.1 *Momentum Anomaly* Live Pedals.

From a timbral point of view, the work is remarkable for its absorption of the electronic synthesizer aesthetic through the acoustic guitar components. This idea is highlighted in articles on electroacoustic music as the following:

*The electroacoustic composition, (...) transformed the notion of work, accompanied the development of new instruments and interfaces, and changed the performative paradigms. At the same time, acoustic music proved to be permeable to the new sounds created by electronic means (Portovedo, 2020).*

Composer Sharp himself says:

*(...) my self-developed extended techniques on guitar is with the end of producing sounds that are not necessarily guitaristic. It's a form of synthesis, really (...) The symphony orchestra is a very powerful synthesizer with an operating system written in the 17th century and one must hack it to produce contemporary sounds.<sup>5</sup>*

The electroacoustic guitar keeps the amplification due to the piezo electric microphone that it carries under the bridge and uses metal strings, therefore, it can continue to use devices that react to magnetism such as the e-bow, being an ideal instrument to become a vehicle in those works that require the use of a more present acoustic component.

Sharp's mnemonic script is structured around indirect action techniques and instruments that are applied to the guitar. This form of structuring also offers us clues about the mode of composition in works such as Romitelli's, in which the sequencing of techniques on the instrument becomes a structuring engine and a method for experimentation.

Once again noise, and sound in its broadest sense (not as a tuned sound in the form of a note) becomes a foundation of aesthetics. This also happens in the works of Romitelli, Murail and Prins.

Sharp's approach to the instrument proposes differences with other composers, since he is a musician more involved in the interpretation of the instrument, being himself the performer of many of his works and acting as a musical figure that oscillates between the performer aspects, improviser and composer. This generates different characteristics such as a less exhaustive writing and a more focused investigation in the practice of the instrument.

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<sup>5</sup> Quotes from personal conversations with Elliott Sharp (on 14 April 2021) by email.

Stefan Prins' work *Not I* (2007) proposes complex electronics, but with fewer elements than Romitelli's work, being more synthetic in this regard. It has several characteristics that differentiate it from the rest, a very rigorous writing in terms of the expanded techniques used in the instrument (Figure 6), which shows a great knowledge and exploration of all the noises generated by the instrument.

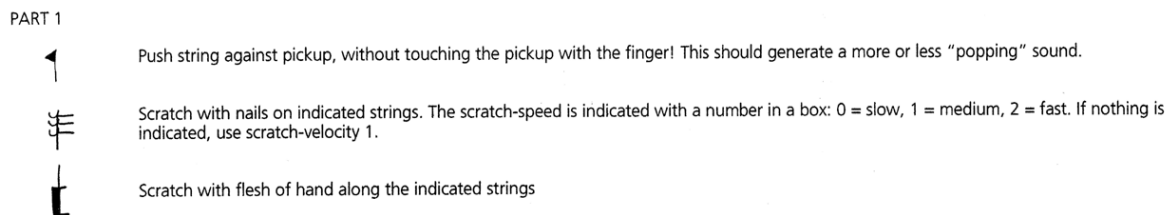


Figure 6. Some descriptions of how to generate guitar noises in Prins' score.

The electronics design features an explicitly bounded output (amp). The electronics that Prins proposed employs a volume control pedal for the electronic output (Figure 7) which is of great importance and can be applied to other works analysed.

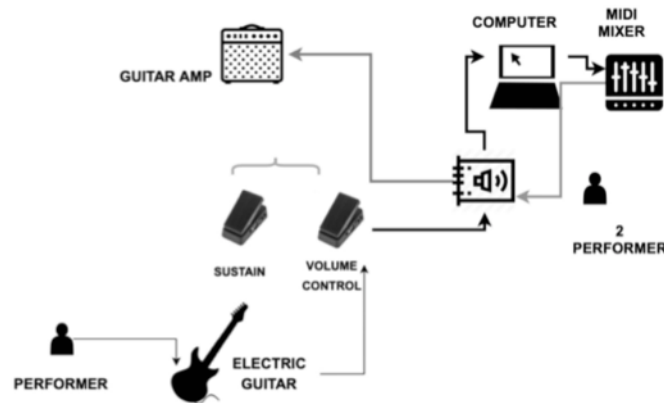


Figure 7. Setup to perform *Not I*.

This work was originally intended for a performer, and that is another peculiarity, but over time it became an interactive work between two performers (the guitarist and the composer himself). The work has several improvised passages that are combined with others whose writing is very rigorous.

*That is why until now it has not been possible for other people to perform the electronic part. Also, when I play it now with Yaron Deutsch, I am using my personal digital 'instrument', which I have built over 12 years to improvise live. This instrument (the combination of a maxpatch and the Behringer BCF2000 interface) was born working on Not I but has continued to grow afterwards.<sup>6</sup>*

Performative gestures are another of the axes and foundations of this work:

<sup>6</sup> Quotes from personal conversations with Stefan Prins (on 13 April 2021) by email.



*In "Not I", after Samuel Beckett's homonymous theatre piece, I envisioned to create a disorientating musical environment in which the relation between the physical act of playing the guitar and the resulting sound is blurred in different levels (What you see isn't necessarily what you get!) (Prins, 2007)*

Another task is taking live guitar samples or samples through granular synthesis, one of the most advanced atomic sound sampling techniques. Therefore, the Prin's work reflects two of the great epistemological concerns of contemporary music: the relationship with the musical gesture and the knowledge of the physical-mathematical phenomenon of sound. Finally, it also uses indirect action elements, in this case a small fan that is added to the whammy bar and the pick.

### III

The uses of electronics in the electric guitar as an augmented instrument have various functions: increasing the instrumental template, modifying the sound, the timbre and the temporal structure, also influencing the sense of gesture.

There are also modifications in the indirect action mechanisms of great importance, some of them are beginning to be of capital importance for the instrument such as the whammy bar (which many guitars do not have) or the e-bow. This laser device is of the type of objects that interact with the electromagnetic phenomenon of the instrument.

The options for making the electronic setups of the works are variable in two ways, to achieve different results or to achieve relatively similar results. The knowledge of these setups and their possibilities becomes a fundamental part of the performer's work.

The works evolve from fixed electronics to Live Electronics system. The property of the variability of the setups makes the performer consider making the fixed parts more flexible, as in the case of Murail and Reich's works. The sound system also becomes an object of reflection, most composers sound through the guitar amplifier, but the PA option is also important and could be used in combination (using the amplifier as a monitor or amplifying the amplifier if its power is insufficient).

The appearance of another figure on stage or in technical control begins to be a reality, sometimes with the sense of external help and sometimes with the sense of a duo. What margin of control a single performer can obtain and what margin of help they may need is an important element to reflect on and may depend on the performer's degree of knowledge about the electronic part of the music.

The noise and the electromagnetic element become fundamental in the aesthetics of the instrument; several composers are beginning to contemplate the possibility of using the instrument as a synthesizer.

### IV

Some conclusions that can be drawn from the foregoing affect the following aspects.

**Performative / technical:** Gradually there is an inversion of the role of the performer, who stops being the musician to become the agent that affects the entire sound chain. This brings the performer closer to the world of hardware so that samplers and loop stations are becoming more present, whose control requires a greater knowledge of aspects of electronics and also of

composition. Furthermore, since the use of these devices is not standardized, experimentalism acquires a key importance as a learning method. Thus, the previously more closed categories of composition, performance, improvisation, and production now interact together in addressing the augmented instrument, its theories, and its repertoire. This is notable on the electric guitar, where getting a proper sound requires sound chain research.

Although the concept of augmentation refers to the fact of maintaining the technique of the instrument:

*Instrument augmentation can be defined as a process in which a given instrument's sonic possibilities are expanded by technological means, without jeopardizing the initial instrument's playing, its sonic and expressive possibilities as well as its ergonomics (Miranda and Wanderley, 2006; Lähdeoja and Navarret, 2010).*

part of the instrument is transformed into its technical approach, being very important to know the possibilities of augmentation, and the creative capacity to deal with both the performance and the sonic possibilities. All this can lead to a failure to update the theoretical potentialities where a certain repertoire or musical theory does not have musicians to perform it. It can also happen that performers begin to develop their own practice without a theoretical framework, simply based on artistic exploration, as it occurs in the world of rock and in urban electronic music.

**Organological:** The dichotomy between external and internal instrument (in its signal processing form) becomes very important. Some external techniques only make sense with some change in the internal circuit. For example, the metal coin on the strings makes more sense if there is a lot of distortion and the e-bow only works if there is the electromagnetic phenomenon. The instrument is being magnified into two directions, external and internal. This is putting the guitar in the middle of the sound chain, not exclusively at the beginning.

**Compositive / Electronic:** Around the fixed parts, a series of fundamental debates will be generated that do not exclusively affect works for electric guitar but rather all instruments and groups in general. The centre of this debate is the contrast between pre-recorded electronics and electronics generated in real time. Progressively, performers are trying to make the fixed part more flexible and increase control, this encourages the development of increasingly flexible electronic systems. In order to communicate these developments, there is a tendency towards the homogenization of certain components, such as the writing of sound setups or effects, through the circuit diagram and technical rider. There is also a search for a more organic control of the effect. It is of great interest for the future to study how these effects can be controlled by gestures through mapping and body monitoring, expanding the activation and modulation gesture of the effect that is normally worked with the feet.

**Social:** In many cases, for composers, technologies are options or tools. However, there can be a feedback of the tools whereby, using the tool, a discovery is produced that influences the creation. This happened with Reich himself that discovered the phase effect when he investigated with recorded tapes.

*That is, technology is a means of creation and knowledge in the work of this author, whose compositional production evolved from purely electronic works without a human performer in a first stage, towards works that used learning obtained by the machine, but were performed with human means or with human means combined with electronics (Santos, 2020).*

The results that electronics generates in its interaction with musical creation are often the result of chance. The social phenomenon of the arts also reminds us of the immense need for

communication between musicians to understand the new perspectives and investigations that are generated in an open, interdisciplinary and experimental environment.

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# Inventory and development of new performance tools in the horn repertoire of the 20<sup>th</sup> and 21<sup>st</sup> centuries

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*Gabriel Trottier*<sup>1</sup>

**Abstract.** Since Hill's *Extended techniques for the Horn* (1983), composers have continued to write challenging music using a variety of new sounds. Further, professional horn players worldwide have expanded their instrument's orchestration beyond the techniques documented in horn treatises. This research classifies new practices through a non-exhaustive inventory of 1) endogenous techniques [related to horn] and 2) exogenous techniques [related to other instruments or art forms]. Each sub-inventory identifies the main performance tools in contemporary horn music, allowing associations with emerging aesthetical approaches. Results may guide composers who develop experimental brass works and provide further means to traditionally trained horn players who approach contemporary repertoire. Providing practitioners and higher institutions with these performance tools may contribute to making music of the 20<sup>th</sup> and 21<sup>st</sup> centuries more accessible.

**Keywords.** Horn and Natural Horn; Extended Techniques Classification and Inventory;

## Introduction

As institutions, ensembles, and performers regularly commission pieces to composers who include new sounds in their works, it is difficult for users to track the wide variety of playing techniques. As an example, the book *Extended Techniques for the Horn* (1983) by Douglas Hill is an excellent didactic resource. Nevertheless, updated inventories are needed as many additional techniques were developed since the mid-eighties. This knowledge gap coexists with issues such as rarely played repertoire, reluctance to program certain pieces and resistance to composer's innovative ideas. The current research updates the knowledge by sharing recent experimentations, aiming to improve the accessibility of the contemporary repertoire for music practitioners. First, endogenous techniques (in other words, techniques directly related to horn mechanics and history) will be presented. Then, exogenous techniques (inspired by other instruments, art forms as well as experimentations) will be described.

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# Endogenous Playing Techniques

## Natural Horn Techniques Relevant to the Modern Horn

### Playing with the Partial of the Harmonic Series

#### Microtonality



Figure 1 - The harmonic serie (PIZKA, 1980: 42)

In equal temperament, overtones 7, 11, and 13 are particularly out of tune. Based on this principle, Douglas Hill developed a quarter-tone fingering chart.

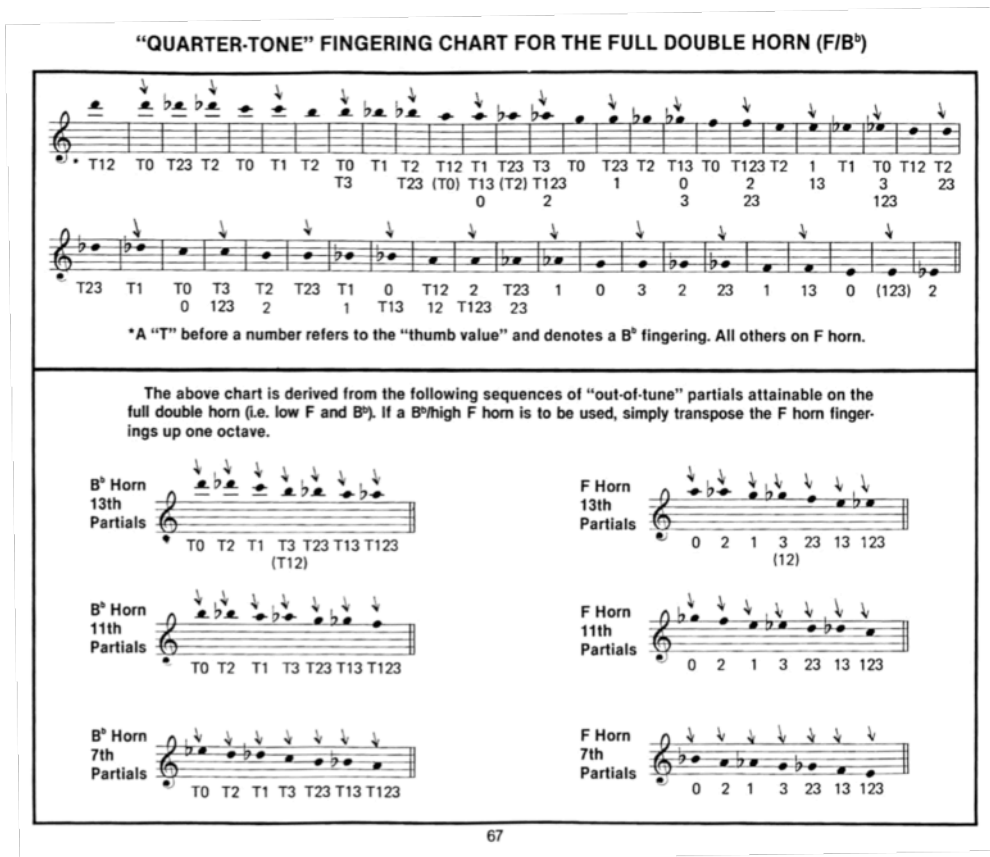


Figure 2 - Quarter-tone fingering chart (HILL, 1983: 67)

This system works well concerning intonation in the medium and high register, although the fingerings' motricity may not be optimal in fast passages. Here is one example of the use of microtonality in the music of Gérard Grisey.



Figure 3 - *Accords Perdus - III. Faux Mouvement* by Gérard Grisey (1988). Used with permission from Hal Leonard Europe Srl, Casa Ricordi Srl.

Microtonality in the lower range needs other approaches that will be discussed later (see 2.1.2.4). Hill also suggests an alternative, which consists of tuning the F side of the horn a quarter-tone lower (HILL, 1983: 68). This solution allows microtonality in a broader register. Nonetheless, alternative fingerings on the double horn (F/B $\flat$ ) are not possible in the low range from C $\sharp$  to b $\flat$  inclusively (see Annex).

#### Harmonic Glissandi

A harmonic glissando is a rapid succession of overtones played consecutively. In this widely-used technique, the lips change pitches on a single harmonic serie. In the following example, Michael Jarrell expends this technique by requiring different fingerings to alter the ascending harmonic series.

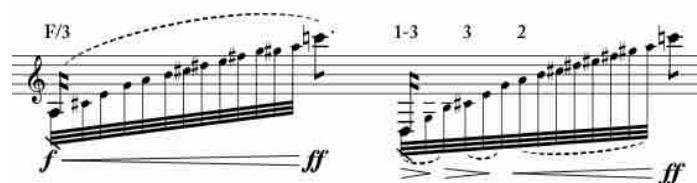


Figure 4 - *Assonance IVB* by Michael Jarrell (2009). Used with permission from Editions Henry Lemoine, Paris.

#### Lip Trills

The well-documented technique of lip trill consists in alternating quickly between two consecutive partials within a same harmonic serie. It was already used in the baroque era (e.g., in Telemann's concerti), as well as in the classical period (e.g., in Mozart's horn concerti) and is still in use in contemporary pieces (e.g., *Cynddaredd - Brenddwyd [Fury – Dream]* [2004] by Heinz Holliger).

#### Split Tones

Split tones are multiphonics produced by the lips vibrating independently at two different speeds. "If [it] is attempted to maintain abnormal lip tension or to consciously play 'between' two natural overtones, then quite stable split tones are created" (BURBA, HÜBNER, 2019: 86). The following notation suggests the result.

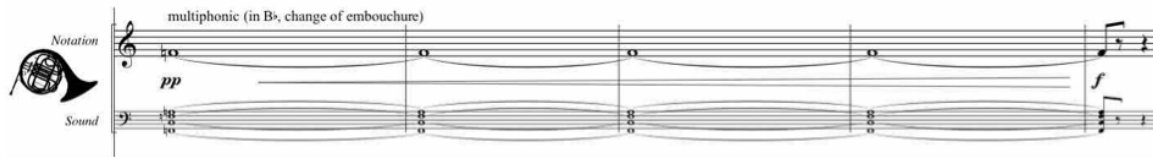


Figure 5 - *Hawk-Eye* by Vito Žuraj (2013/2014). Used with permission from Edicije DSS publishing.

However, Mike Svoboda recommends the lip multiphonic notation used by Xenakis in *Keren* (1989) as a standard practice (ROTH, SVOBODA, 2017: 109). This representation consists of writing both notes in standard notation while putting the lower note in brackets. The interval indicates the execution and which valve combination is needed. Since this technique is similar on the trombone, notation consistency would be judicious. For more clarity, the valve combination may be noted as well. The example below displays this system (old bass clef notation).

Figure 6 - *Stadig, Fjernare, Bort. Fjernare og Stadig Nærmere* by Mathieu Lacroix (2021). Used with permission from Mathieu Lacroix.

## The Hand Horn Technique

### *A Source of Inspiration for Timbre Variations*

After 1750, horn players could play conjunct and chromatic passages in the medium and high register by combining different hand positions in the bell with different lip placements. Many more nuances than the usual three states between the open and stopped sounds (open, half-stopped and stopped) can be used (PIZKA, 1980: 46).

#### Zeichenerklärung/explanation of signs:

● = gedämpft und nachgelassen / muted & lowered	◊ = leicht gedämpft / light muted
● = gedämpft / muted	◊ = halb gedämpft / half muted
* = gestopft / stopped	× = getrieben / high tuned
○ = offen / open	× = weit offen, und getrieben / wide open, & / high tuned
○ = weit offen, re. Hand vom Becher entfernt / wide open, r. hand off the bell	

Figure 7 - Natural horn right-hand position and lip adjustments (PIZKA, 1980: 46)

Giacinto Scelsi used timbre variations in the following example.



Figure 8 - *Quattro Pezzi - I* by Giacinto Scelsi (1987). Used with permission from Editions Durand - Salabert - Eschig.

### *Pitch Bending: Not a Contemporary Technique After All*

A straightforward way to alter a pitch is by closing (downward bend) or opening (upward bend) the right hand in the bell. In *Step, Slide and Sustain* (2014) for cello, horn and piano, Alvin Lucier explores the interferences created by different instruments playing almost the same pitch. It is crucial for the horn player to find a way to make a very gradual and extremely slow glissando, just like it is possible on the cello.

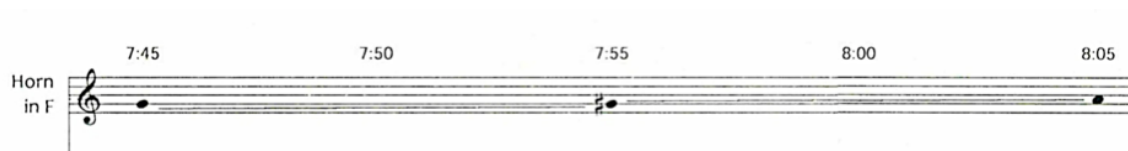


Figure 9 - *Step, Slide and Sustain* by Alvin Lucier (2014). Used with permission from Alvin Lucier and Material Press.

While it is possible to find some fingering allowing a smooth glissando between the pitches (see 2.2.4), using the hand is an excellent alternative. Timbre differences between open and half-stopped notes are hardly perceivable when the notes are played at a soft dynamic level.

On the natural horn, between written *C* and *f*, the player must use a technique called *falsetto*. “The horn player uses muscles of the embouchure [and the right hand for a wider effect] to bend the pitch down to notes outside the harmonic series.” (BRUMMITT, 2008: 41). This specific natural horn technique in contemporary music context can lead to a convenient way of performing smooth glissandi over larger intervals.



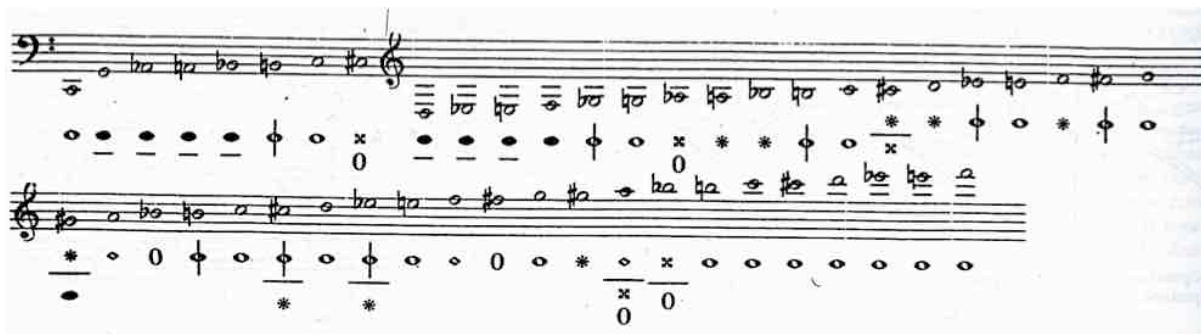


Figure 10 - Notes playable on the natural horn (PIZKA, 1980: 44)

Regarding the amplitude of the pitch bends done with the lips only, it is essential to note a few concepts from physics. Firstly, there is always more space to bend a note down than to bend it up. Secondly, not every note can be bent to the same extent. In the lower range, from *c* downwards, it is possible to bend down large intervals such as a fifth. The amplitude will gradually shrink as we get to the high range. Around *c'''*, the bending possibilities are restricted to small intervals such as semitones or quarter-tones.

### *Heterogeneous Sounds in Melodies*

For many decades after the discovery of the hand horn technique, it was taken for granted that notes played outside the harmonic series would have a different timbre. Only after the addition of pistons could horn players produce a homogeneous-sounding chromatic scale.

*I hear such a beautiful, sustained solo performed in a colorless monotone on a valve horn, and it seems to me as if the instrument is moaning: 'My love, I am a horn. Don't you recognize me any more [sic]? I admit that I am too severely constricted, I am somewhat uncentered and hoarse, my sweetness is gone, my tone sounds as if it has to go through a filter sack in which its power gets stuck' (REISSIGER, 1837: col. 610, translated in GROSS, 1989: 21).*

Pistons, or valves, created the possibility to change between different harmonic series instantly. At first, horn players kept using the hand horn technique. The pistons were only used to change the transposition (see the figure below, translated by the author). Using a different fingering on every note became the standard later.

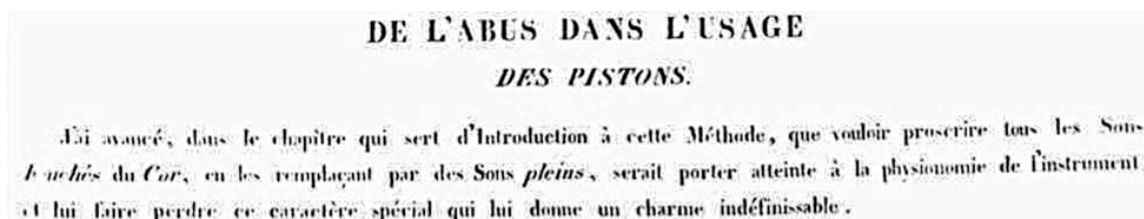


Figure 11 - The Abuse in the Use of Pistons (Meifred, 1840: 4)

*I wrote, in the introduction chapter of this Method, that forbidding all the stopped sounds of the horn, by replacing them with full sounds, would be an attack to the physiognomy of the instrument and would make it lose its special character which gives it its undefinable charm. (MEIFRED, 1840: 4)*

In his woodwind quintet *Ballancelled* (2014), the Norwegian composer Øyvind Mæland used the valves the way they were first intended to be used, which is to change quickly from one tonality to another. Simultaneously, the hand horn technique makes the notes outside the harmonic series playable and creates heterogeneous sounds in the melodies. In the example below, all pitches are written in F. The indication above the staff identify the harmonic series to be used.

Figure 12 - *Ballancelled* by Øyvind Mæland (2014). Used with permission from Øyvind Mæland.

### Microtonal possibilities

Saar Berger, the solo horn player of the Ensemble Modern, recommends another method: using the right hand to create microtonal intervals. Following this principle, I developed a fingering chart based on the traditional chromatic scale. I made the quarter-tones possible by bending down the notes slightly with the right hand. The ear should be the guide in reaching the correct intonation and timbre.

Figure 13 - Quarter-tone fingering chart using the hand horn technique.

The advantage of this technique is a relatively simple right-hand pattern associated with the usual fingerings of the chromatic scale across all the registers. The limit of the technique is a

slight residual difference in timbre. The quarter-tone notes will always sound muffled compared to the open notes. However, in the middle and low registers, it is possible to limit these differences by using as little hand movement as possible, compensating by bending down with the embouchure instead.

In stopped horn passages, intonation and agility become challenging because horn players must transpose and use alternative fingerings. The same logic applies to both the high and low ranges. Note that other preferred stopped fingerings can be used.

Legend  
 + Stopped  
 3/4 stopped

F2 F2 F0 F0 F12 F12 F1 F1 F2 F2 F0 F0  
 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4

13 F1 F1 F2 F2 F0 F0 F23 F23 F12 F12 F1 F1 F2  
 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4 + 3/4

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Figure 14 - Stopped quarter-tone fingering chart using the hand horn technique.

This method is convenient for quick passages (e.g., figure below).

Figure 15 - *Contour* by Vito Žuraj (2016). Used with permission from Edicije DSS publishing.

### The Natural Horn as an Instrument for Contemporary Music

Some composers have chosen to use the natural horn in contemporary music alongside modern instruments. For example, György Ligeti's *Hamburg Concerto* (1998-1999) requires a modern horn for the soloist but four natural horns in the orchestra. Jörg Widmann decided, in his piece *Echo-Fragmente* (2006), to write for solo clarinet accompanied by a complete modern orchestra playing at 443Hz and a complete early music orchestra playing on period instruments at 430Hz.

### The Natural Horn as a Visual Element

In the following example, the natural horn is used in a peculiar way as a visual element only.

Figure 16 – *Fantasie for Horns II* by Hildegard Westerkamp (1979). Used with permission from Canadian Music Center and Hildegard Westerkamp.

## Modern Horn Techniques

### Horn Mutes

#### *Straight Mute*

The straight mute is the most conventional mute to be used. It does not transpose the sound and usually consists of a wooden cone. Hill describes the sound effect as less resonant, lighter, and more brittle. (HILL, 1983: 14). Additionally, he suggests that one second is the absolute minimum to go from a muted passage to an open passage. However, there are exceptions in the repertoire where the mute state must change while playing (e.g., the fourth piece of *Quattro Pezzi* [1956] for horn solo by Giacinto Scelsi).

In this context, the best solution is to start the excerpt with the mute halfway in (placed at an angle) to lower the pitch just as the hand would typically do. This compromise allows for keeping an open sound with the proper intonation. Then, it is possible to switch directly to a muted sound when needed, as the mute is already more or less in place.

#### *Stopped Mute*

The stopped mute is an alternative to hand stopping. Usually, stopped notes are written in F, and the horn player must transpose half a step down to produce the desired pitch. For pieces requiring quick and long stopped passages (e.g., *Spinning Line* [2017] by Martin Matalon), a solution is to write a transposed part where the stopped notes are written half a step lower. Then, the player can use the regular F horn fingering associated with the note read without transposing (some exceptions in the fingerings may be required to provide a better intonation).

It is also possible to use the stopped mute to create wa-wa effects. Although it has a distinct colour that cannot replace the bass trombone wa-wa mute timbre that will be introduced later, it can be notated in an identical way (see 3.7.1).

Étude n° 5 (cors naturels et sourdine cor bouché avec effet waa-waa)  
 Cor 1 : même position que pour l'étude n° 4, pavillon vers l'avant, en l'air.  
 Cor 2 : même position que pour l'étude n° 4, pavillon vers l'avant, en l'air.

V

Marco Stroppa

Spericolato, avvinghiandosi  $\text{♩} = 144$

Figure 17 - *Gla-Dya - V* by Marco Stroppa (2007). Used with permission from Hal Leonard Europe Srl, Casa Ricordi Srl.

### Practice mute

The practice mute, also called whisper mute, is thought to be used for practical purposes such as practicing in a hotel room or to avoid disturbing neighbours. However, it can become handy in a concert situation to create exceptionally soft textures.

### Cup Mute

The horn cup mute exists but is rarely found in the repertoire (e.g., *Breath and Break* [2012] for brass trio and live electronics by Ivan Fedele). It may be complicated or expensive to find one. If there is a musical need, consider an alternative for players who do not own this mute (see 3.7.2). Also, it is essential to note that this mute takes time to handle. Extra time must be considered to insert or remove it.

### Bisbigliando

*Bisbigliando* is a technique that resembles a trill, but it is, in fact alternating between two fingerings, producing the same pitch.

Figure 18 - *Assonance IVB* by Michael Jarrell (2009). Used with permission from Editions Henry Lemoine, Paris.

## Half-Valve

Pressing halfway on one or several valve keys causes the airstream to split between two different tubing creating a change in the timbre. The resulting harmonic series is quite unstable, unpredictable and can vary depending on the brand or model of the horn.

## Valve Glissando

We have already seen a way to make a continuous trombone-like glissando using the hand horn technique (see 2.1.2.2.). A second method works by moving to another fingering slowly, going through the half-valve. Only some intervals and valve combinations will work smoothly. Composers should carefully explore the possibilities with performers.

## Ingressive Playing

It is possible to make the lips vibrate by inhaling air. A famous example is *Res/As/Ex/Inspirer* (1973) from Vinko Globokar (also cited in ROTH, SVOBODA, 2017: 119-120). The horn is featured as one of the instruments that can perform the piece. Globokar uses twelve different ways of using ingressive playing. Dynamics are limited because of the lack of projection, and the timbre is also altered. The technique is known to have caused health problems due to the risks of inhaling valve oil or residues. The composers should use it carefully, and the performer should prepare and clean the instrument adequately before performing the technique. (BURBA, HÜBNER, 2019: 91)

L'ordre des parties (B, F, C etc...) ainsi que la durée des aspirations ou des expirations sont libres. Chaque structure □ ne dure que la longueur d'une aspiration (ou d'une expiration). Jouer la pièce sans grande exactitude aspirations et expirations. Notés un chef de la  $\text{mf}$  mais tronçonnés à l'EP=15cm. Dans les structures répétées reproduire exactement le même résultat sonore dans les deux sens (← et →). Les indications d'intensité peuvent se pointer négatives.

ASPIRER	EXPIRER

Figure 19 - Laboratorium - # 18 *Res/As/Ex/Inspirer* by Vinko Globokar (1973, by Henry Litolf's Verlag). Used with permission from C. F. Peters Corporation.

## Exogenous playing techniques

### *Mouthpieces and Extensions*

#### Contrabassoon Reed

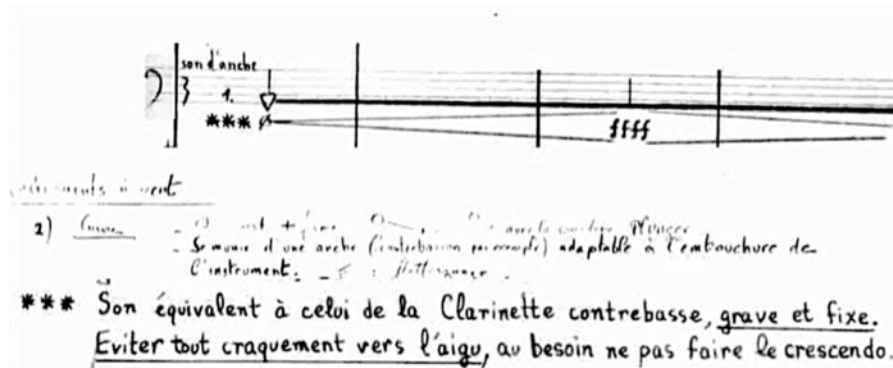


Figure 20 - *Partiels* by Gérard Grisey (1976). Used with permission from Hal Leonard Europe Srl, Casa Ricordi Srl.

A contrabassoon reed fits perfectly in the leadpipe, replacing the horn mouthpiece. Playing with this setup results in complex sounds similar to the sound of a multiphonic. Since horn players are not used to playing with a reed, achieving the proper sound production may require a certain adjustment period, especially to gain control over dynamics. Other double-reeds, such as the one used for the oboe and bassoon, may also work, but they may not fit precisely. Therefore the sound result can be different, as a stream of air will leak.

#### Balloon Adapter

An effect described by Mike Svoboda in the book *The Techniques of Trombone playing* is the use of a long straight balloon, which is cut to connect the mouthpiece to the leadpipe. This is also applicable to horn playing. Experiments with the composer Yongbom Lee led to other uses of the balloon, such as connecting it only to the mouthpiece and keeping the other end open. In both cases, the effects can be quite unpredictable, unstable, and variable depending on the length of the balloon. It is important to note that the balloon will lose its efficiency after some use. Before a performance it is recommended to use brand-new balloons.

#### **Articulations:**

#### Tongue Ram and Slap Tongue Compared

From my practical experience, I realized that there needs to be more clarity between slap tongue and tongue ram in many pieces from the contemporary repertoire. For the same sound result, some composers will name it a slap tongue while others say it is a tongue ram.



Figure 21 – *Glut* by Dieter Ammann (2016). Used with permission from Dieter Ammann and Bärenreiter-Verlag.

In *Glut* (2015-2016), Dieter Ammann asks for a tongue ram describing it as a tongue shock in the mouthpiece. This way of writing is clear and indicates the accurate way the sound is produced. The tongue cuts the air abruptly in the mouthpiece. This is precisely how it is described in the flute world where this technique is familiar: "Tongue stops, sometimes referred to by the accurate but unaesthetic term 'ht' and 'tongue-ram' are performed by placing the embouchure hole between the lips and quickly, forcefully stopping it with the tongue. [...] Tongue-stops is aided by a strong exhalation, which helps hurl the tongue towards the embouchure hole." (DICK, 1989: 139)

The slap tongue technique does exist, but the sound result is different. On the trumpet, Hübner describes it this way: "Slap effects [...] can be accomplished with a type of *tongue pizzicato*. The tongue is pressed on the front part of the palate and released in an explosive manner. [...] Usually, this effect is executed from the oral cavity." (BURBA, HÜBNER, 2019: 71)

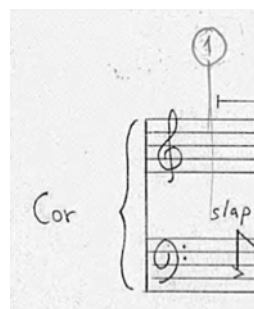


Figure 22 – *Nautilus* by Salvador Torr  (1986). Excerpt from a public domain score uploaded online by the composer on [imslp.org](http://imslp.org).

### Doodle-tonguing

"Doodle-tongue is a legato articulation and is used in rapid successions of notes, predominantly in jazz [trombone] but also in some other contexts" (ROTH, SVOBODA, 2017: 54). It consists of softer articulations (for example: "dou-la-la, dou-la-la") than usually required from double or triple tonguing (for example: "ta-ka-ta, ta-ka-ta"). The figure below shows an example of notation from a solo horn piece by Stefan Prins. The articulation needed is written in brackets [la la la la ...].



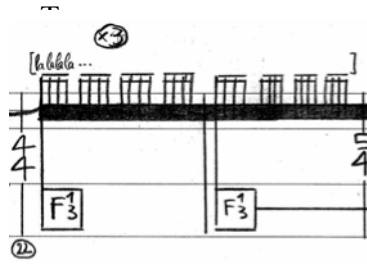


Figure 23 - *This Body Functions Effectively* by Stefan Prins (2019). Excerpt from an unpublished manuscript used with permission from Stefan Prins.

### Tongue Stop

A tongue stop is a technique used to end a note by moving the tongue upward toward the roof of the mouth, which abruptly blocks the airstream. In doing so, the note will suddenly stop very unrefinedly. The technique resembles the tongue ram (see 3.2.1).



Figure 24 - *Nautilus* by Salvador Torr  (1986). Excerpt from a public domain score uploaded online by the composer on imslp.org.

### Kiss Noise

The kiss noise is a moment of ingressive playing where the lips vibrate briefly due to air moving inwards through the lips. The following figure shows a creative and indicative way to notate this technique.



Figure 25 - *Quiet, Please* by Vito  uraj (2015). Used with permission from Edicije DSS publishing.

### Flutter-tonguing

A flutter-tongue may be produced by rolling the tip of the tongue, as you would when pronouncing the Spanish word "perro". It may also be produced at the back of the throat. Both techniques sound quite similar, but they have slightly different results. For example, rolling

the tip of the tongue is more efficient in the lower octave of the register below *c*. Flutter-tonguing can be used in all ranges and can be combined with other techniques (e.g., air sounds, mutes, or whacky whistle).

### Hand Slap

The image shows a musical score for three instruments: Tr.1 (Trumpet 1), Tr.2 (Trumpet 2), and Hn. (Horn). The score starts at measure 16, indicated by a box containing the number '16'. A box with a hand icon and the text '- hand slap' is positioned above the first measure. The music is written in 3/4 time, with a 4/4 time signature appearing later. Dynamics include *f* (forte) and *pp* (pianissimo). The notation features eighth and sixteenth notes, often beamed together, with some notes marked with a '3' and a slur, indicating triplets.

Figure 26 - *Quiet, Please* by Vito Žuraj (2015). Used with permission from Edicije DSS publishing.

Hitting the mouthpiece with the palm produces a hand slap. It can be done on the mouthpiece alone or on the mouthpiece placed in the leadpipe of the horn.

### Shake

The shake is a technique often heard on the trumpet. Its execution is also possible on the horn and sounds like an unrefined vibrato or trill produced by moving the instrument quickly. According to Hübner, it is a change between two adjacent overtones and occasionally between nonadjacent ones. (BURBA, HÜBNER, 2019: 39)

### Deconstruction:

#### Flute Technique on Reversed Mouthpiece and Tuning Slides

Whistle sounds can be produced on a reversed mouthpiece by blowing air like it is done on the flute. Using a thumb to completely block the open end where the mouthpiece rim is located helps the sound production of this technique.

The image shows a musical score for Hn. (Horn). It features a single measure with a dynamic marking of *f* (forte). A box with a hand icon and the text 'whistling or loud air-blowing' is positioned above the note. The notation includes a quarter note followed by a rest.

Figure 27 - *Quiet, Please* by Vito Žuraj. (2015) Used with permission from Edicije DSS publishing.

A similar effect can be achieved by blowing inside a slide removed from the horn. Since there are many slides of different lengths, it is possible to produce different pitches. However, the slide lengths may differ from one horn maker to another.

## Taking out Slides

By removing a slide completely, it is possible to produce a different timbre. The exact pitch may differ slightly depending on the horn model. Eventually, it can function as a trill or *bisbigliando* alternating from one open note to another note played on the fingering where one slide has been removed. The notation should be specific about which slide to take out.

for Gabriel Trottier

### Forest Spectres

for horn and electronics

Žaneta Rydzewska (2020/21)

calmly (♩=60)

without 1st slide of the F horn

oscillating glissando (very slow);  
amplitude: quarter tone higher/quarter tone  
lower from the indicated pitch

horn in F

electronics

Ableton Live 10  
Max for Live

convolution reverb pro

ppp <pp> ppp p pp p pp

a wobbling about a given pitch

Figure 28 - *Forest Spectres* by Žaneta Rydzewska (2021). Used with permission from Žaneta Rydzewska.

## Playing on the Mouthpiece Alone

The mouthpiece can be taken out of the horn leadpipe and used separately. It is possible to play definite pitches but also continuous glissandi. Dynamic range will be limited.

Hn. ♯

walking bass

mp

Figure 29 - *Quiet, Please* by Vito Žuraj (2015). Used with permission from Edicije DSS publishing.

## Singing and Playing Through the Instrument

Singing and playing simultaneously through the instrument produces more than one note on the horn, which is usually a monodic instrument. Apart from the two notes being physically produced, additional notes or frequencies will be perceived. This psychoacoustic phenomenon is called a combination tone. "The frequency of the combination tone is always equal to the difference between the frequencies of the directly produced tones of the interval." (HINDEMITH, 1945: 61). It is recommended to omit to notate the combination tones in the staff as it confuses the reading of the interval to be played/sung. When needed, an ossia should be planned to consider voices of all gender identities.

Figure 30 shows a musical score for a horn and electric guitar. The horn part begins at measure 112 with a tempo of 84. The tempo changes to 72 with a 'rit.' marking. The horn part includes dynamics of *mp*, *pp*, *mp*, and *pp*, and a 'frull.' marking. The electric guitar part is shown as a solid black bar.

Figure 30 - *Forest Spectres* by Żaneta Rydzewska (2021). Used with permission from Żaneta Rydzewska.

It is more practical for the performer to play from a score where the voice is also written in F. Writing both the horn part and the voice in F makes it easier to identify the correct interval at first sight. Also, it is easier to sing the correct pitch if the note that must be sung is played just before in the horn part. It is possible to have both actions on the same staff or add an extra staff for the voice.

## Singing Meditation

Figure 31 shows a musical score titled 'Glacial' by David Byrd-Marrow. It features a voice part and a horn part in F. The tempo is 38. The voice part is marked with a box '(in F)'. The horn part is marked with 'P'.

Figure 31 - *Singing Meditation* by David Byrd-Marrow (2021). Used with permission from David Byrd-Marrow.

## Advancements in Instrument Making

### Double Bell Horn

Christine Chapman and Gottfried Büchel developed a double bell horn. An additional thumb valve makes it possible to switch quickly between the two bells. Double bell horns allow for quick alternation between muted sound and spatialization of the sound. (LISAC, 2011)

While a double bell instrument might be challenging to rent or buy, an alternative is to modify a valve by removing a slide, then adding a plastic extension to the tubing and a plastic funnel at the end. While the sound quality will not be as authentic, it could still be used to spatialize the sound.

### Microtonal Horn

Around 1920, the instrument maker Carl Friedrich Schmidt completed the construction of a chromatic microtonal horn in sixteenth-tones, which consists of five valves and two additional

thumb valves. Mexican composer Julián Carrillo uses the instrument in *Capriccio* for horn and orchestra.

Another microtonal horn alternative that has been made is the modification of a standard Gebr. Alexander horn model 103 made in 2005 and customized in 2007 by Konrad Burri in Zimmerwald to add a quarter-tone valve. In 2014, Samuel Stoll gave a lecture at the Sibelius Academy of Music about how this instrument is operated, which is available online. (STOLL, 2014)

These prototypes of instruments have the advantage of pushing the limits of the horn technique further. However, they may not feel natural to play. A period of adaptation may be required to master their technicalities fully.

### Spat'Sonore

Since 2001, Nicolas Chedmail and the French collective Spat'Sonore have been developing an ensemble of spatialized instruments. A spatialized horn is a part of this project and consists of an instrument with several extensions. In total, there are four bells, including one at 2 meters to the right, one at two meters to the left and one above the head of the public in a "shower" orientation.

### ***Breathing***

#### Air Sounds

Different timbral variations can be created through exhaling (or inhaling). It should be taken into consideration when writing air sounds. There is no standard notation yet, but one of the most influential composers to go into detail with these sounds is Helmut Lachenmann. The following categories are mostly inspired by his work. All air sounds can be altered (e.g., articulations or dynamics).

#### *Blown Normally*

With the mouthpiece set in the leadpipe, the horn player blows air through the instrument keeping the lips in full contact with the mouthpiece. The air is not leaking in any way through the corners and is entirely directed into the instrument without vibrating the lips. Variations may include taking out tuning slides of the horn or blowing on the mouthpiece alone. Fingerings, or the length of the tubing, will influence the timbre.

#### *Blown Tonelessly*

According to Lachenmann, blowing tonelessly means possibly without a mouthpiece but directed directly into the leadpipe. It is a white noise without any tone colour. Again, the same variations are possible if some slides are taken out. There are other subcategories of toneless sounds.

#### Blown Indirectly

Like blowing tonelessly, it requires having a distance of a few centimetres between the lips and the opening (mouthpiece or leadpipe if there is no mouthpiece set on the horn). By doing

so on purpose, the airstream is partially directed into the instrument, causing the air sounds to be louder.

Louder results are achievable by reversing the mouthpiece and blowing into it with the lips around the shank while having the cup rest on the leadpipe with a slight angle.

#### Almost Into the Instrument

Lachenmann uses a fourth category which resembles the previous one (blown indirectly). The only difference is the smaller distance between the mouthpiece and the opening.

#### Movements

The Slovenian composer Vito Žuraj went further into the exploration of air sounds by adding movements. The technique can also be applied to any air sound blown indirectly.

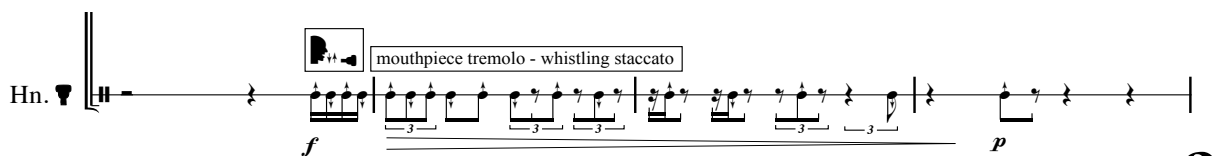


Figure 32 - *Quiet, Please* by Vito Žuraj (2015). Used with permission from Edicije DSS publishing.

#### Air Attacks and Ghost Notes

Air attacks consist of playing without using the tongue to start a note. Usually, the note will appear gradually with a slight delay. The notation used by Fausto Romitelli is quite common and can be considered standard.

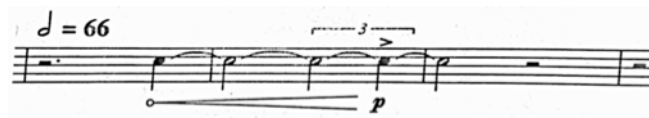


Figure 33 - *Mediterraneo I* by Fausto Romitelli (1992). Used with permission from Hal Leonard Europe Srl, Casa Ricordi Srl.

At the precise moment between the beginning of the air sound and the beginning of the actual note, the air sound becomes coloured with a tone. This is a ghost note, and it can only be performed at an incredibly soft dynamic. Here is an example in a piece from Victor Ortiz commissioned by Louis Aguirre and the Snow Mask Composer Group.

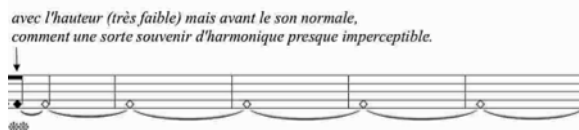


Figure 34 - *Monólogo III: ... En la Vastedad del Espacio y en la Inmensidad del Tiempo...* by Victor Ortiz (2017). Used with permission from Victor Ortiz.

## Onomatopoeias

Onomatopoeias and consonants made by the voice (e.g., "sh", "f", or "s") may colour any air sound regardless of the way it is played (e.g., with/without the mouthpiece, on/in the instrument).

## Circular Breathing (Didgeridoo Technique)

Circular breathing is an essential technique of didgeridoo playing. While it may not be considered a contemporary technique due to its ancestral tradition, it is an extended technique in horn literature as it is still quite unusual in its repertoire. The technique is transferable on the horn and allows an uninterrupted constant airflow where breathing in while exhaling becomes possible. It is divided into three steps, as described by Kersalé and Bartos (KERSALÉ, BARTOS, 1999: 30). I added a fourth step to complete the cycle.

1. Taking an abdominal breath.
2. Expulsing the air while storing air in the mouth (puffing the cheeks).
3. Before the lungs are empty, stop pushing on the diaphragm and start pushing the air out using the cheek muscles while taking air through the nose. During the inspiration, the back of the tongue will go up to close the throat.
4. Transiting into regular expiration and repeating from step 2.

Because of the movement of the tongue during step 3, there will always be a slight change in timbre. However, this change can become relatively discrete in soft dynamics and medium-high registers.

## **Mutes from Other Instruments and Experiments**

### Bass Trombone Wa-Wa Mute

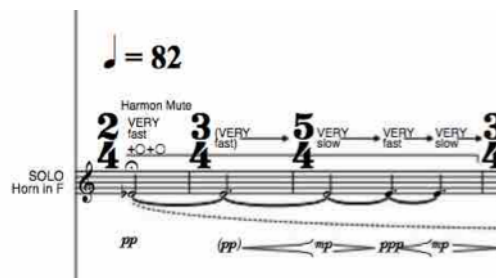


Figure 35 - Horn Concerto no. 2 by Dai Fujikura (2018). Used with permission from Hal Leonard Europe Srl, Casa Ricordi Srl.

The bass trombone wa-wa mute (or harmon mute) is becoming more popular in the horn repertoire. Since 2017, I have performed more than ten pieces requiring this mute. In this case, the symbols + and o relate to whether the right hand covers the opening or not. The right hand can move at different speeds independently from the tongue, the lips, and the fingerings.

## Hat Mute / Hat Mute + Straight Mute



Figure 36 - *Mediterraneo II* by Fausto Romitelli (1992-1993). Used with permission from Hal Leonard Europe Srl, Casa Ricordi Srl.

As of today, this is an exceedingly rare mute marking. While it may be hard to find a plunger mute that is large enough to cover the straight mute completely, this combination of mutes allows alternate between a closed and an open position while keeping a continuous straight-mute-coloured sound. It will sound like a cup mute when kept in a "closed" position

## Aluminum Foil

By wrapping the bell with aluminum foil, it is possible to create an acoustic distortion. If wrapped properly, the aluminum foil will vibrate, reacting to the sound production of the horn.

## Water Horn

In his piece *Air* (1968-1969), Helmut Lachenmann used what he calls 'water horns'. They are, in fact, normal horns in which water has been poured into the bell to produce a rattling, gurgling sound. Depending on the orchestration, amplification may be needed. In this case, it is recommended.

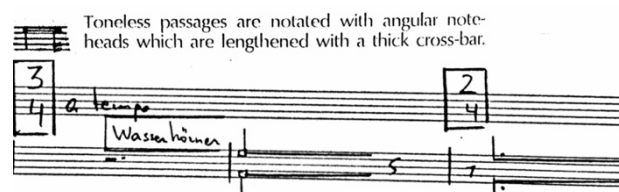


Figure 37 - *Air, PB 5110* by Helmut Lachenmann (1994). Used with permission from Breitkopf & Härtel, Wiesbaden.

## ***Using Additional Instruments***

### Sympathetic Resonance

Several instruments can be set into vibrations from the acoustic sound of a horn. (e.g., a piano, a snare drum, or a tam-tam)



Figure 38 - *Six Thèmes Solaires - Cor Jupiter* by Denis Gougeon (1990). Used with permission from Canadian Music Center and Denis Gougeon.

③: come una tenzone  
 Corno naturale sempre  
 1+2: padiglione in aria  
 Caisse claire: snares on  
 (sulla Caisse claire) F♯23 (♩=95, poco a poco accelerando -...)

Figure 39 - *Gla-Dya - III* by Marco Stroppa (2007). Used with permission from Hal Leonard Europe Srl, Casa Ricordi Srl.

Figure 40 - *Le Signe du Lion* by Gilles Tremblay (1983). Used with permission from Editions Durand - Salabert - Eschig.

### Playing Towards Another Horn Bell

Suppose two horn players play simultaneously, projecting their sound directly into each other's bell (a few centimetres apart). In that case, the results of an acoustic phenomenon known as beatings will be amplified because the two frequencies are forced to interact with each other. To achieve this effect, the hand must be taken out of the bell; therefore, the pitch must be lowered in another way to compensate. This can be done by putting the main tuning slide out or using lip bending.

### Using Plastic Toy Reed

The plastic toy reed is a replacement squeaker reed, for example, like those used in dog toys. Depending on the air speed, the result will be related to birthday whistle type of sounds or high-pitched squeaks. On this device, most tonguing techniques are possible, as well as circular breathing and some multiphonics.

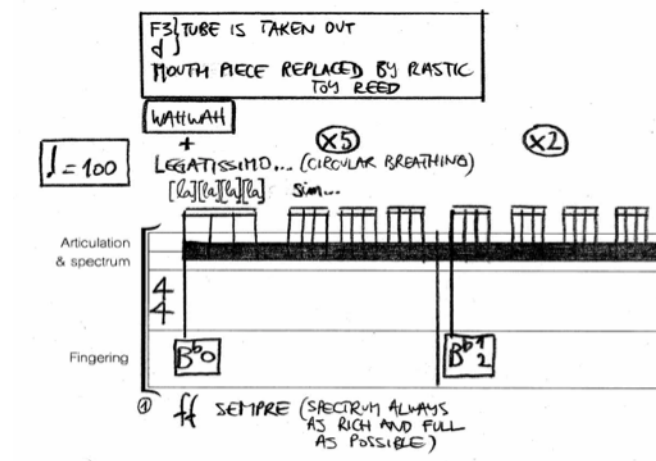


Figure 41 - *This Body Functions Effectively* by Stefan Prins (2019). Excerpt from an unpublished manuscript. Used with permission from Stefan Prins.

### Using a Whacky Whistle

The whacky whistle is a toy that is placed against the roof of the mouth and creates high pitch sounds that can, but not only, imitate animal sounds. Australian composer Liza Lim used this device in the piece: *Wild Winged-one* (2007) for solo trumpet. As well, this technique can effectively be transposed to the horn.

Liza Lim  
**Wild winged-one (2007)**  
 Aria for Trumpet in C (with wacky whistle)

*to Sydney Terracini*

5  $\text{♩} = 52$   
 4  
 mouthpiece off  
 wacky whistle - delicate trilling  
 (into trumpet)  
 mp

3k  
 4  
 tongue slap  
 (against whistle)  
 mp

6  
 4  
 wacky whistle  
 + whistle  
 mp

8  
 4  
 (place whistle under  
 tongue)  
 air  
 rise  
 (make valves to articulate  
 sound)  
 mp

7  
 4  
 whistle (into  
 trumpet)  
 inside  
 mp

6  
 4  
 tongue slap  
 (into trumpet)  
 mp

9  
 4  
 inside  
 mp

remove wacky whistle from mouth  
 replace mouthpiece

Figure 42 - *Wild Winged-one* by Liza Lim(2017). Used with permission from Hal Leonard Europe Srl, Casa Ricordi Srl.

## Postures and Movements

### Bell Up

Playing with the bell up is an acoustical and visual effect. It slightly increases the dynamic level and brings the listener's attention to the horn players. After an indication of bells up, it is important to write when the player must go back to the normal playing position. Since the moving may interfere with the playing, it is wise to do this on a comfortable note to play or during a rest.

$\text{♩} = 60$   
 pavillon en l'air  
 4:3  
 3  
 3  
 ( ^ )  
 position normale  
 (ord.)  
 fff  
 ff

Figure 43 - *Assonance IVB* by Michael Jarrell (2009). Used with permission from Editions Henry Lemoine, Paris.

### Doppler Effect

Moving the bell quickly sideways can reproduce the Doppler effect. The technique is used in *Jeux des Portraits* (1996) for ensemble by Ana Sokolović.

## Staging and Theatre

In 1772, Joseph Haydn wrote the symphony no. 45, known as the "Farewell" symphony, which ends with the members of the orchestra gradually exiting the stage. Nowadays, theatrical interventions, spoken texts, and acting may still be required. For notable composers, theatre and music are inseparable from their artistic vision (e.g., Mauricio Kagel or Heiner Goebbels).

50 **Put down the instrument and listen to the narration**

56 **Narration:** This is pre-recorded narration. **There are certain steps for the performance.**

60 **Walk into the stage with score, cellphone, F horn, harmon mute with stem** **Sit and make a warm-up noise with instrument.**

65 **(\*1st repetition)** Play the instrument from the beginning to bar 52. **(\*2nd repetition)** Listen to the narration, while waiting for the ringtone.

67 **(\*3rd repetition)** Answer the phone after the last ringtone. **x7**

Dynamics: *pp*, *p*, *pp*

Repetition markers: **2**, **3**, **x7**

Figure 44 - *Spoken Thoughts* by Yongbom Lee (2018). Used with permission from Yongbom Lee.

## Conclusion

At first glance, contemporary music may seem vastly different from traditional forms, often breaking many rules or creating new ones entirely. However, the development of contemporary music is inherently linked to the more typical canon of Western orchestral music and other styles (e.g., world music or jazz). Furthermore, composers keep testing and developing innovative ideas, making it important to provide the latest knowledge to practitioners. Therefore, as contemporary music continues to evolve, it is becoming increasingly important to document and consolidate all these changes into the larger developmental timeline within classical music. In this historical context, the horn repertoire of the 20th and 21st centuries exemplifies the unbreakable link between tradition and innovation. This is because a combination of both endogenous and exogenous techniques is required to convey the musical ideas of this period. In this article, I discussed several of these performance tools for the horn, which imply the importance of maintaining an open attitude toward innovative ideas. With these concepts, I believe that practitioners will be able to understand better how to compose and perform contemporary music.

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### **Annex**

The identification of the octaves in the preceding text follows the system proposed by the *New Harvard Dictionary of Music* (fig. 45).

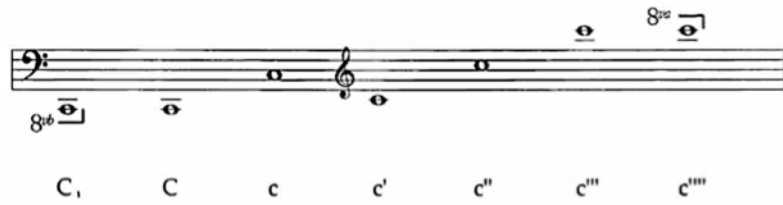


Figure 45 - Identification of the octaves (Randel, 1986: 640)

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