

abstracts

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Música **and beyond**
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Experimentation and beyond in music – Abstracts¹

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Alfonso Benetti & Luís Bittencourt

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Keynote roundtable session

Moderator: John Rink (University of Cambridge)

John Rink is Professor of Musical Performance Studies at the University of Cambridge, and Director of the Cambridge Centre for Musical Performance Studies. He works in the fields of performance studies, Chopin studies, music analysis and digital musicology. His books include *The Practice of Performance* (1995), *Chopin: The Piano Concertos* (1997), *Musical Performance* (2002) and *Annotated Catalogue of Chopin's First Editions* (with Christophe Grabowski; 2010); he was also General Editor of an OUP series of books on musical performance, published in 2017–18. He directed the AHRC Research Centre for Musical Performance as Creative Practice, and the three projects at Chopin Online (www.chopinonline.ac.uk). He is also Editor in Chief of *The Complete Chopin – A New Critical Edition* (Edition Peters). He performs regularly as a pianist and lecture-recitalist, with a specialist interest in Pleyel pianos. He served on the jury of the International Fryderyk Chopin Piano Competition in Warsaw in 2015 and 2021.

Position paper abstracts

Re-positioning deep legacies in contemporary sonic experimentation

Sally Jane Norman, Victoria University of Wellington / Te Herenga Waka

Experimentation in music depends on specific contexts and conceptual frameworks, giving rise to highly diverse manifestations that are increasingly amplified by networked connectivity. This connectivity facilitates the emergence of new strands and/ or communities of practice. One such strand involves the use of digital technologies to explore and transform works employing Indigenous and so-called traditional instruments and practices. The re-positioning of these legacies to inspire contemporary sonic creations requires us to rethink experimental contexts, concepts and values, and raises critical questions:

- How can we enhance the resonance of longstanding instrumental practices and techniques in a digital and online world?
- How do computational processes and networks influence the mutual shaping of material and human agency that has always underpinned sonic cultures?

- How can analogue instruments and techniques inspire musicians and sound artists to get beyond the standardising power of digital resources?

Director of Te Kōkī, New Zealand School of Music, at Victoria University of Wellington, **Sally Jane Norman** is a performance scholar and sometime practitioner working on art and technology. As a New Zealand/French dual national, Docteur d'état (Paris III), she is engaged with a wide range of international research and cultural policy organisations. Institutions and infrastructure initiatives to which she has contributed include STEIM, Amsterdam; International Institute of Puppetry, Charleville-Mézières; Culture Lab, Newcastle University; Attenborough Centre for the Creative Arts; and Sussex Humanities Lab, University of Sussex. In Te Whanganui a Tara, Wellington, she ensures academic leadership of physical and programmatic planning for the National Music Centre that will link Te Kōkī and the New Zealand Symphony Orchestra in the distinctive setting of Aotearoa's capital city. Her publications address performance technologies, digital humanities, and the situated nature of cultural and artistic practices. <https://people.wgtn.ac.nz/sallyjane.norman>

The act of composing unveils, makes visible

Rui Penha, ESMAE / CESEM)

My position paper will address 'the role of technology, the ecology and ideological contents of its processes and outputs, and its intersection with artistic research'. More specifically, I will start by discussing how our technological worldview brings forth a sense of inexorability of progress and efficiency by inducing us to regard everything that exists as resources waiting to be optimised, in a reference to Heidegger's *The Question Concerning Technology* (1954). An experimental (in the artistic sense) approach to technology often tries to resist that worldview by diverging from the common/efficient/commodified use of technological devices such as musical instruments. There are, of course, myriad ways of doing that, and, e.g., both John Cage's *Sonatas and Interludes for prepared piano* and Philip Corner's *Piano Activity* actively negate the 'efficient' use of a grand piano. But there is, in my view, one crucial difference between these two examples: whilst the latter accomplishes that resistance by destroying the piano-as-an-instrument, the former unveils something about the piano-as-an-instrument. Both were possibilities that were, in a sense, already contained in the piano, but

only the former reveals something whose significance actively expands our relationship with the instrument. Together with other examples from the canon of experimental music (e.g. Steve Reich's Pendulum Music vs. Gordon Monahan's Theremin Pendulum), I believe that this can help to put forward the importance of the act of unveiling not only in experimental music, but in artistic research as a whole. As Rebecca Saunders, the current composer in residence at Casa da Música, writes in her programme notes to Void: 'Beneath the surface of silence lies a cacophony of sound and noise, an endless potential to reveal and make audible. The act of composing unveils, makes visible [...]':

Focal questions:

- In scientific research, we tend to focus on the methodologies to judge the soundness of the outcomes. Should we do the same in artistic research? Do we relate to an artwork primarily by what it reveals to us when it is presented, or do we ground our evaluation on the heuristics that went into its conception?
- How can an original artistic action be meaningful? What determines the limits of its intelligibility?

Composer, media artist and performer of electroacoustic music, **Rui Penha** was born in Porto in 1981. He completed his PhD in Music (Composition) at the University of Aveiro. His music is regularly recorded and played in festivals and concert halls around Europe and North America, by musicians such as Arditti Quartet, Peter Evans, Remix Ensemble and the Gulbenkian Orchestra. He was a founder and curator of Digitópia (Casa da Música, Porto) and has a deep interest in the relationship between music and its technology. His recent production includes interfaces for musical expression, sound spatialisation software, interactive installations, musical robots, autonomous improvisers and educational software. More recently, he has focused his attention on the problems of defining and guiding artistic research. He has taught at several Portuguese institutions – in music, art and engineering faculties – and is currently an assistant professor at ESMAE and researcher at CESEM. Further information can be found at <http://ruipenha.pt>.

Experimentation in and for artistic research

Paulo de Assis, Orpheus Institute

Experimentation is a key concept to operate a creative shift from representation to problematisation. It enables several experimental

approaches, such as 'experimental performance practices', 'experimental writing' and 'experimental thought', which all go beyond disciplinary, methodological and institutional boundaries. Inter-, trans-, meta-, or anti-disciplinary strategies are embraced not to deny specific existing disciplines, but rather to redefine every starting discipline anew, developing new tools and epistemic horizons. Such novelty-oriented goals lead to a break, a suspension and an overcoming of dominant aesthetic and conceptual practices. In this sense, artist-researchers emerge as 'operators', working within a field of aesthetico-epistemic experimentation: 'aesthetic' because the kind of performances we do can be assessed in aesthetic terms; 'epistemic' because our performances take part in a broader discourse that contributes to the production, discussion and transmission of knowledge; and, finally, 'experimental' because we embrace the creative exploration of inconsistencies in the materials we use. At the very foundation of such an experimental perspective, one arrives at the necessity of changing oneself, of continuously becoming something else, of not being reducible to an all-comforting 'I am' that undermines so many other possible selves. Referring to the fundamental multiplicity of the I as a source of inventiveness and creativity, Gilles Deleuze stated that 'experimentation on oneself is our only identity, our single chance for all the combinations which inhabit us', and Michel Foucault similarly defined himself as an experimenter, 'in the sense that I write in order to change myself and in order not to think the same thing as before'. What both Foucault and Deleuze propose is a practice of experimentation that encourages the productive fragmentation of the ego as an opportunity for new modes of expression. From this perspective, experimentation concerns the emergent fractality of the unconscious and the immanent plurality of the I. And it is in this sense that experimentation is so crucial, so fundamental and so promising for artistic research.

Focal questions:

- How does experimentation challenge dominant modes of performance?
- What is the relation between interpretation and experimentation?
- How can music and artistic experimentation contribute to the generation of knowledge?

Paulo de Assis is the principal investigator of the research group MetamusicX at the Orpheus Institute (Ghent, Belgium). Trained as a pianist,

with transdisciplinary interests in composition and philosophy, he has dedicated most of his musical practice to the definition and consolidation of artistic research as a creative and innovative field. His recent publications include 'Hypermusic: New Musical Practices at the Intersection of Music, Art and Philosophy' (Universidad de Valencia, 2022, in press), 'Experimental Performance Practices: Navigating Beethoven through Artistic Research' (Music & Practice, Oslo, 2021), and the book *Logic of Experimentation: Rethinking Music Performance through Artistic Research* (Leuven University Press, 2018) in which he developed a new approach to music performance, music ontology, research methodologies and ethics of performance. He is editor of the series 'Artistic Research' at Rowman & Littlefield (London, New York) and Vice-President of the evaluation panel Arts, Design, and Architecture at the Swiss National Research Foundation (SNF).

Individual presentations

Experimentation in Jorge Peixinho

António Aguiar, ESMAE / P. Porto

Jorge Peixinho's work as an experimental compositional language: The proposed piece, *Solo* (1976), for 5-string double bass, is presented as a set of sections/movements with characteristics that promote experimentation, both as regards the gesture notation and the concept of "Open Work", as developed by Umberto Eco (1968), or delegating decisions to the performer for the moment of the performance. This work fits into the set of typical compositions of the 1970s that promoted a closer relationship between the composer and the performer, and collaborative responsibility, more integrative and plural.

What is the relevance of this work in the artistic development of the performer? The poetics of the open work and aesthetics of reception are still important?

Analysis of Peixinho's writing, notation and musical language / The Mosaic Form, the choice of path and its consequence in the final form / The discovery or the experience of openness in the work *Solo*: non-traditional notation; lines and design of gesture; opening of repetitions, of path and form; interpretation of countless pauses, suspensions and breaths; contemporary language for strings; extended technics on double bass.

The open work implies a decision-making that causes an indeterminacy in the artist's practice, and a result that is always intended to be different.

Experimentation as a path that opens the door to a problem that transcends the traditional path of musical work forces the performer to make decisions and take risks, to play within the author's rules, catapulting him to a dimension of responsibility, making him a co-author of the work.

Improvisation as an experimental tool:

Solo awakens in the performer the need to take a stand before concepts of performance such as Experimentalism and Randomness, to distinguish differences between determinism/indeterminism, chance/randomness, luck/chance, rule/ruler, principle/prescription, form/formwork and composition/improvisation.

This research aims to promote the work *Solo* by Jorge Peixinho as a representative Portuguese "Open Work" that promotes

experimentation and improvisation, and develop experimentation as a tool in contemporary performative creation.

When working on this piece, both performers or students are invited to think “outside the box”, due to the need to choose and decipher not only contemporary musical writing, but also to interpret beyond notation, as a response to what Peixinho does not want to determine, as an appeal to collaborative creation between composer and instrumentalist, projecting, from this freedom, a more powerful and liberating result.

Experimentation has always existed. It is not new. What may be new is the possibility of discussing, at the highest level of music research, the consequences of this approach to music education.

Keywords: Experimentation; Open work; Indetermination; Improvisation; Contemporary notation; Extended techniques on double bass

The fluidity of materials nature: (Ir)rationality and (in)determinacy within Cage's *Solo for Piano*

Chia-Ling Peng, Newcastle University

Indeterminate music shows its indeterminacy and openness in the composer's design and the performers' realizations. It is not so surprising that one graphic score can produce over a thousand interpreting possibilities when free realizations are allowed by the composer. An interesting question has emerged: does freedom come only from the composer? When looking into the tripartite relationship between composer, performer and listeners, we can notice that the formation of music is based on poetic, neutral and aesthetic levels (Nattiez 1990; Clarke 2016). Through these levels, I found that the fluidity of materials is the crucial point of indeterminacy. Another interesting question occurred: does a fluid status mean that indeterminate music is unsystematic? Max Weber's theory of rationality may provide a potential possibility to investigate. Weber proposed a theory of rationality through his observation of Protestantism and suggested that rationality is derived from the individual expression of preferences, value standards, behaviours and purposes (Habermas 1984). He then applied rationality to

Western music to dissect music formation at notational, structural, instrumental and societal levels (Weber 1958).

Does free realization only come from the composer? Does fluidity of materials mean that indeterminate music is unsystematic? How can we discover structures within indeterminacy?

This research aims to extend the theory of rationality to indeterminate music and see how composing materials affect indeterminate music formation, to investigate the transformation of rationality from conventional to indeterminate music by comparing composing/musical materials in J. S. Bach's Prelude in C Major BWV 846 and Cage's *Solo for Piano*, and apply findings to research structures within indeterminacy.

Since this paper is interdisciplinary, first, I introduce Weber's rationality by explaining his original idea, and then compare rationality in J. S. Bach's Prelude with Cage's *Solo for Piano* to see how rationality can be different in conventional and indeterminate music. After this, I focus on Cage's composing approach, the graphic compositional system that he invented for *Solo for Piano* (Pritchett 1993), and a combination with Nattiez's fluidity of materials levels may be revealed. After this, I will use it to investigate structures within indeterminacy.

This paper shows how rationality in the composing materials of *Solo for Piano* will bring out a new viewpoint of musical analysis through the sociological standpoint and refine the theory of rationality from the musicological one. With these developments, more research possibilities of indeterminate music are provided; in the meantime, an intertwined relationship between two disciplines is revealed.

Keywords: John Cage; Indeterminacy; Max Weber; Rationality

This is not a pipe organ

Cláudio Pina, CESEM

Michael Praetorius (1571-1621), in *De Organographia*, the second volume of his treatise *Syntagma Musicum* (1614-1620) describes, among many other things, different styles of pipes of the contemporary organ of his time. Of special note is the description of the organ functioning in symmetry to the individual instruments that

already existed, mimicking their sound (i.e.: flutes, reeds and strings). One could assume, like Praetorius, that the organ builders would try to imitate the sound of the other contemporary instruments.

Unfortunately, nowadays one cannot assume the same. Why are there not organ sounds based on electronics, different kinds of synthesis or perhaps extended techniques of instruments to better serve nowadays contemporary music? Why does this tendency to have different sounds stopped? When and why did the evolution stop? Was it a technical difficulty? Do we not have enough technology in the present day to reformulate the organ? Or has the desire of the builders, composers, organists and the clergy dictated a dogmatic norm?

In fact, it is the sheer weight of the repertoire. In this sense, the organ behaves like Bentham and Foucault's *Panopticon*, with an all-seeing eye always watching the composers and organists. As an example, most organ competitions or recitals, when including new works, these sound exactly like Charles Widor's (1844-1937) organ symphonies; a pastiche of a pastiche and a clear intertextuality hidden behind the score. A special note could be said about the Early Music and other revivalism tendencies, but this is not the point of this presentation.

We can rearrange the repertoire into two tendencies, with a broader point of view: French and German. One can assume each to be led by Messiaen and Bach, but they did not require extended sounds or other technologies, and they were concerned with harmony, rhythm and other European notions. The experiments that each tendency conveyed was simply an athleticism. More and faster notes, with no concern whatsoever for the sound they produce. Hence, the organ remained basically the same throughout the ages.

Nevertheless, we will delve in other organ composers, the true purpose of this presentation: Ligeti, Kagel, Xenakis and Cage, among others from the avant-garde of the 1960s. This period sought vanguard in organ composition, exploring new sounds using all that organs have, pipes, just by changing the air flow. In a sense, these composer experiment on the instrument without changing it. One could consider these experiments akin to the extended techniques of wind instruments. These composers challenged the Apparatus, creating a new 'non-European' way of thinking. Did it make a genuine mark on the repertoire? In fact, excluding a brief chapter on "Music Notation in the Twentieth Century" (1980) by Kurt Stone (1911-1989), describing some notation and modern techniques, there is not

much more. Since there are many organs in Europe, especially Portugal with its long tradition of historical organs, why is there no experimentation in contemporary music?

Keywords: Pipe organ; Extended techniques; Contemporary music; Notation

Towards a non-computercentric performance: An augmented e-guitar proposal

Daniel Santos Rodríguez and Henrique Portovedo Marques,

Technical University of Madrid; Universidade de Aveiro / INET-md

Due to the potential of gestural, parametric, and interactive control of the computer as a sound medium, various interfaces have been created that externalize software and give it a more useful instrumental form for the performers, namely keyboards, pads, pedals, etc. (Bongers 2000). In the practice of an augmented instrument, herein the electric guitar, the need of gestural independence while using a computer is multiplied since most of the time the hands are playing the instrument, and the performer is focused on the musical discourse.

Several obstacles occur in performances that integrate a DAW (in this case Ableton live) and electric guitar (Berweck 2012), specifically in adjusting the live mix and the levels of certain effects. Given the closed nature of many sets and effects, these, once configured, are difficult to modify during live performance (Lähdeoja and Navarret 2010). Technical issues increase when the performer tries to control all the parameters of the augmentation with the feet, since they lack the sensitivity of the hands. In addition, the hands already have an integrated gesture because of the performer's embodied knowledge (Portovedo 2020).

To achieve this desired flexibility and expressivity, both in improvisation and in the interpretation of contemporary music for electric guitar and electronic media, a midi keyboard has been converted into a new interface adapted to the electric guitar, which allows a more organic control of the parameters. In the interface, one part is handled with the feet and another part is integrated into the guitar. In this way, processes such as live looping, change of set, or

sequencing of pre-recorded material are controlled with the feet, and other more delicate controls, such as adjusting levels on tracks and effects, with the hand, using the knobs installed on the guitar.

This presentation provides a theoretical framework for the intervention and flexibility of electronic devices (Diegert and Artacho 2018), applying a design perspective based on performance needs, trying to explain and extrapolate the process to provide DIY (Do-It-Yourself) information for building similar devices based on the same underlying principles. For example, to increase and modify the augmented e-guitar device, the functionalities designed for other performers (pianists, DJs, or electronic musicians) are used, employing its circuits in a modular way, and spatially relocating the components. Part of the interest of the process is its relationship to a cultural perspective of reuse, the customization of components adapted to specific needs and the simplification of the technical / technological process (Keller, Schiavoni, and Lazzarini 2019).

Finally, three reflections will address the issues that constitute the central axes of the project. The first analyses the factors that determine the instrumental specificity of an electronic device. The second addresses performance with the computer and an augmented instrument on stage, and how to prevent the computer from becoming the performer's focus of attention. Finally, a brief digression on the Do It Yourself counterculture (McKay 2017) and its ability to generate social value in the field of electronic music creation and augmented instruments is proposed.

Keywords: Augmented instruments; Embodied knowledge; Do-It-Yourself; Computer music

The 'Reconstructive Memory' as a model of a compositional process and the interlocking technique

Dimitri Papageorgiou, Department of Music Studies / Aristotle University of Thessaloniki

This lecture discusses how the mnemonic system and more specifically 'reconstructive memory' (Bartlett, 1932) can be a radical model of the compositional process.

In this context, the lecture is an introduction to the key theoretical and practical aspects of the Interlocking Technique, which I have invented and modelled in order to explore the above proposal. This technique is both a) a genetic process, a systematic way of constructing fluorescent patterns based on some simple initial fluorescent data, and b) a reconstructive process, a way of transforming these patterns through the creation of structural homologies, by means of algorithmic manipulations.

The development of the technique was based, to a significant extent, on the study of memory theories in neuropsychology, psychology, sociology, criminology, etc. Scientific evidence supports the fact that memories are not exact records, but rather reconstructions of past events. Memory stores only fragments of the past that serve later to reconstruct past events. Thus, remembering the past is a subjective and sensitive process, and the recall of memory is open to inaccuracies, distortions, and distortions of the information conveyed with each recollection, as well as to various selective and processing procedures.

Consequently, reconstructive memory has a highly creative function. My study of it has led me to a different view of the concept of repetition, insofar as the recall of an event is not a faithful repetition but a (to a lesser or greater extent) creation of new content. 'Reconstructive memory' functions, ultimately, as a metaphor and analogy for the construction of new versions of phlogistic complexes through cycles of repetitive processes and their dynamic (continuous or a-continuous) reconstruction, processing, and reconstruction in my music through a technique of enveloping imperfections and distortions that each recall of the pattern carries within it.

Keywords: Compositional process; Memory; Interlocking

The Electric Bass Revisited: A creative study about the harmonic potentialities of the instrument

Fausto Lessa Pizzo, Universidade de Aveiro / INET-md

This artistic investigation, a work in progress, aims to expand the possibilities of performance and musical creation for the electric

bass by developing a proposal for its harmonic use. Organologically classified as melodic, the instrument has tonal and ergonomic characteristics that enhance its use beyond this designation. In this perspective, an increasing number of bass players are looking to use the electric bass as a harmonic instrument; however, the lack of research on this approach hinders its development. Based on an alternative tonal system to consolidated practice, called LCCTO (Russell, 2001) and guided by a research design structured according to the concept of Affordances (Gibson, 1977) and on the theory called Perceptual Learning (Gibson & Pick, 2000), the investigation seeks, through experimentation, (i) the definition of a harmonic vocabulary for the electric bass and (ii) the creation of musical works from this vocabulary. The result of this work is intended to contribute to the construction of a new paradigm for the practice of the instrument, for the academic discussion about it and, consequently, will bring pedagogical implications.

The results achieved so far point positively to the potential of the electric bass for the development of a, here called, Harmonic Approach to the Electric Bass. The concluded experiments already provided a number of 1153 viable possibilities for playing chords on the instrument, which have been organized in the form of a dictionary, as well as extensive material resulting from the articulations (simultaneous execution) between these chords and the different scales proposed in the LCCTO. The material resulting from the experiments also included the “Creative Applications”, organized in the form of studies and that reflect, through composition, the musical use of the obtained contents.

Keywords: Artistic research; Affordances; Electric Bass; Experimentation; Harmonic approach; LCCTO; Perceptual learning

Slippery Singularity Studies: Multidimensional performance as creation

Henrique Portovedo, Michael Edwards and Luís Costa, Universidade de Aveiro / INET-md; Folkwang University; Independent Artist

The intertwining of computation with artistic environments leads to a state of permanent articulation and supports the development of

artistic creation. We are immersed in computation, living in a post-humanistic and post-digital world, in which it becomes fundamental to artistic practice, to artworks, and the aesthetic experience. Since the close of the twentieth century, there has been an outbreak of musical genres and musical expressions according to two principles: the integration of tradition and technological means; and the rupture of all the contexts that cannot be seen as directly deriving from the computer and digital technology. This means that the creation process trajectory goes from concrete realities towards an external space, based upon an understanding of the adaptation of the technical and technological realities to the needs of creation, while the creation process relies on an awareness of the technological potentialities as a means to attain an artistic result. *Slippery Singularity Studies* belongs to a series of pieces for multiple saxophones. These pieces were developed over the specialized algorithmic composition software named Slippery Chicken, which is written in and functions on the principles of the Common Lisp Object System (CLOS), the Common Lisp facility for object-oriented programming. These pieces for saxophone and electronics explore microtonal relations of tone pitches and layers of multiphonics permutations. The multiphonics were organised into layers of *tremoli*, producing timbral changes, and were selected through a process that uses two different methods and software. The first method was implemented through a patch named SaxMultis and allows the recording of all multiphonic timbral permutations and its cataloguing. It provides, as well, the possibility of random positions of key combinations for saxophone sounds. This software is organized in the following order: Selection of Key Position, Position of Tremolo, Indication of Dynamics, Creation of Buffer with positions code, Recording. The second method, MultizChord, is a software as well, which analyses the spectrum of each multiphonic permutation and translates it to musical notation using ZSA and BACH Max/MSP Libraries. Technology is moving faster than musical practices and we are taking some snapshots of techniques applied in musical composition and performance, techniques whose materialities will be quickly replaced by new ones, but whose embodied structures continue and become re-implemented in later technical objects as a recycling of skills. Understanding how emerging digital musical technologies trace their concepts, design and functionality to practices in the current cultural context will bring to light a study of new-media archaeology, conceptual epistles and performative

paradigms, directed, in other words, to the study of how the new technologies of mixed music-making trace their design to the practices of material, symbolic, signal inscription and how practice is transforming and leading to creation.

Keywords: Algorithmic composition; Multidimensionality; Performance as creation; Saxophone

The two traditions of 'Experimental Music': Implications for the later conceptual history

Ian Pace, London City University

There are two traditions of musical work which have laid claim to the term 'experimental music'. The first is today perhaps the most familiar, referring to the work of John Cage and other composers associated with the 'New York School', with precedents in the works of Charles Ives, Henry Cowell, and Harry Partch, then feeding into a range of other work in North America, Europe and further afield. Such a tradition refers to a new approach to compositional intention, the use of indeterminacy of various types, and a general rejection of a role for the composer which is said to date back to the European Renaissance. This tradition was given its clearest conceptual definition in Michael Nyman's 1974 book *Experimental Music: Cage and Beyond*, which consolidated a quite stark dichotomy between the 'experimental' and the 'avant-garde', which continues to inform a good deal of historiography of twentieth and twenty-first century music. The second derives from Pierre Schaeffers' lecture 'Vers un musique expérimentale' given in Paris in 1953, and refers to music produced in a laboratory or equivalent, especially involving electronics, tape or computers, used in various ways that can be compared to scientific experiments. It was taken up by figures such as Lejaren Hiller, Abraham Antoine Moles, Luigi Rognoni, and others, but also employed in writings of Herbert Eimert, Luciano Berio, Luigi Nono, Karlheinz Stockhausen and Henri Pousseur, and continued in continental Europe for several decades.

In this paper, I give a brief outline of these two conceptual histories, and consider how both have fed into more recent use of the terms 'experimental' and 'experimentation' in music. I argue for greater

terminological precision where possible, looking somewhat sceptically at some recent writings which have used such terms rather loosely, and also examine how they are embedded in concepts of practice-as-research and Artistic Research. In conclusion, I ask where the boundaries might lie concerning musical experimentation, which types of music might not be considered 'experimental', in order that the term is not so broad as to lose all meaning.

Keywords: Experimental music; Historiography; Artistic research; Practice-as-research

Learning to improvise as a Western classical musician

Jonathan Ayerst, Sheffield University

This research is an autoethnographic self-study of learning to improvise in classical styles. As a professional musician trained in interpretive performance, acquiring the skills of improvisation had been a long-term creative ambition; in addition, I was curious to investigate the reasons why I, as a trained classical musician, felt unable to improvise. Over a period of three years I recorded, analysed and reflected on my progress from novice to expert (marked by my first public improvisations in Baroque style), a process which provided me with detailed insights into the conscious experience of improvising at all stages of learning. Initially, I encountered cognitive and emotional barriers to improvising which I traced to attitudes of *Werktreue* fidelity to the score and a learned attention to every detail of a written score. Through creative strategies and increasing agency I discovered a new way of perceiving musical texture and form, these new perceptions being based on a conceptual impression of underlying structural principles and relationships which could be realised in many different ways. Generating my own music increasingly through these conceptual mental representations I gained a better control over the task, allowing me to improvise imaginatively but within rule-bound systems. As an autoethnographic study, this thesis offers a novel range of perspectives and insights into the cognitive processes of creative improvisation, while also articulating important cultural

issues arising from a classically-trained musician learning to improvise in a predominantly non-improvising musical practice.

Keywords: Improvisation; Autoethnography; Classical; Music; Cognitive; Cultural

Technology and timbre: An autoethnography on the influence of electronics on the composer's orchestration practice

Jorge Ramos, Royal College of Music London

This research explores new methods of orchestration, focusing on the influence of electronics on orchestration practice. By drawing upon electronic music composition techniques and timbral-shaping tools, this project challenges the boundaries of orchestration and explores processes that inform orchestration decisions. I will be using new approaches to timbral blend, spatialization and acoustics, real-time orchestration, computer-assisted orchestration and extending the timbral *palette* by rethinking the ideals of spectral composition. Through the resulting portfolio, this project aims to create new sound worlds and audience experiences while situating my distinctive approach in relation to other existing practices. Furthermore, a supporting commentary will illuminate the deep pre-compositional research that informs my orchestration practice by identifying the techniques and evaluating their application. To explore such concepts, it is vital to conduct practice-led autoethnographic research. This allows for full, creative exploration and application of site-specific and acoustic/electronic tools. This practice-led approach tackles a gap in current research where there is a lack of documentation focused on the musical aspects of orchestration in the computer era. To date psychoacoustic studies have been the driving force, but these overlook the creative application of electronic-informed timbral techniques.

Finally, by acknowledging the influence of electronics on my orchestration approach, mainly due to my career as a composer and electronics performer, I hope to uncover new findings in this area by combining electronic (computer-assisted orchestration) and non-

electronic systems (intuitive and/or traditional orchestration concepts) into what I consider to be my orchestration discourse.

Keywords: Orchestration; Electronics; Autoethnography

Using spatial audio techniques for composition and orchestration

Mantautas Krukauskas, Lithuanian Academy of Music and Theatre

Immersive and spatial sound technologies are gaining more widespread use, especially in electroacoustic music composition. Although spatial music is a relatively new field, its roots can be traced to much older times. Accessibility of new tools with intuitive interfaces widened the possibilities of composers to work with analysis and modelling of spatialization without a steep learning curve and deep specialised knowledge. This enabled us to shift our attention from technological challenges towards artistic ones. Existing research either concerns more technical aspects rather than the content itself or concentrates on abstract insights on conceptions of space in music. Studies which concern spatialization techniques, as well as application of discoveries in spatial audio to acoustic music and orchestration are quite lacking. Exciting know-how is being mostly held by experts, who work with implementation of spatial music projects and is shared mostly interpersonally. Working with assisting music composers and sound designers with spatialization since 2013, contributed towards acquiring expertise of diverse techniques of adapting and mixing sonic material in 3D space in various contexts. The scope of work included adapting regular stereophonic acoustic and electroacoustic material, remixing / encoding multitrack projects, exploring the use of sonic space as compositional parameter, working with music and sound in film and media contexts etc. This experience and experimentation provided enough evidence and knowledge to discover certain trends and directions in composing techniques for effective use of space in music.

This presentation focuses on exploration of artistic contexts for spatial sound application and describes spatialization techniques that lead towards effective artistic impact. I will also demonstrate some

models and experimentation in using relevant immersive sound architectonic principles for acoustic music composition and orchestration. Although the theme of the presentation is connected to the interdisciplinary field of music technology, I strongly believe that it is significant to all composers and musicians, as recent developments and discoveries in immersive sound and spatial audio can be applied also to acoustic music - through the synergy of art and technology.

Keywords: Spatial audio; Spatial music; Composition; Orchestration; Music technology

Geometries in sound: A transdisciplinary exploration of the perception of certain genres of contemporary art music

Riccardo Wanke, Universidade Nova de Lisboa / CESEM

The study of the perception of music mainly focuses on traditional Western classical, popular and world music repertoires (Huron 2006). Within this large group of studies on music perception, only a small number deal with the contemporary experimental scene (Deliège 1989). This lack seems paradoxical, as many genres of experimental music are themselves concerned with these very questions of sonic perception. While the consumption and appreciation of contemporary art music still largely follows general mechanisms that are dependent on familiarity, background, economy and market (Bourdieu 1979), this paper proposes that contemporary and experimental music practices are particularly well suited to being studied at the perceptual level. Recent advances in the field of cognitive sciences have led to the definition of new perspectives on the diverse mechanisms underlying our aural experience of sound and music. These perspectives include embodied music cognition, crossmodal and multimodal approaches, music neuroscience and neuroaesthetics, and *Gestalt*-based approaches, opening up to the transdisciplinary investigation of this research area (Bregman 1990). The idea behind this paper is that certain genres of contemporary art music possess specific sonic

features that have the potential to engage us on a different level than with more conventional music genres.

By studying the results of listening surveys, this paper aims to explore the nature of the connections between music and its mental representations and the potential for matching between music and visual images. In exploring how the formation of mental representations (image schemata) during listening is related to behavioural patterns (Johnson 1987), the goal of this study is to investigate how image-sound matching may function as a boost for listening and to strengthen a particular perceptual engagement of certain genres within contemporary art music.

The focus of some genres within contemporary and experimental music practices revolves around the creation of sonic textures and masses in motion organized within sound configurations (Solomos 2019). These genres – that encompass post-spectrality, minimalism, electroacoustic music, glitch-electronica, and various offshoots of IDM (dubstep, techno) – are often associated, during listening, with visual and tactile sensorial qualities and abstract geometries. The sound configurations of this music are perceived fundamentally as the results of acoustic-physical forces and energies and are organized according to *Gestalt* and kinaesthetic principles. Our early perception is fundamentally based on the construction of *Gestalt* structures (Koelsch 2005), and the unique characteristics of this music appear particularly capable of being decoded in a domain of perception as geometries, and of eliciting high-order recollections typical of an embodied engagement with the external world. The results of two listening surveys, exploring the crossmodal matching between music excerpts and visual drawings of geometries, reveal that the sense of this music concerns a set of geometries – lines, planes, degrees of density – in motion (ascension, overlapping, diffusion) that call in forces of physical world. The level of embodiment largely depends on the schema-driven associations, which draw on our experiential cognition of the external world: therefore, a descending *glissando* may simply elicit an abstract declining line or an embodied sense of falling.

In this way, the paper proposes an unprecedented outlook able to provide new pathways to access this kind of music. The ultimate outcome is in fact, on how this music – often regarded as an elitist form of culture that has little impact on society in general – works as a cognitive resource for creative, interpretive and didactic

endeavours and whether this study can provide new tools that can empower the listener to access this kind of music.

Keywords: Experimental music; Music perception and listening modes; Empirical surveys; Sound-Image Cross-modal experience; Embodied cognition and *Gestalt* psychology

Performing bodies in an experimental music practice

Tora Ferner Lange, Norwegian Academy of Music

The contemporary art music practice that experiments with physical, visual and theatrical elements has been given several names: The New Discipline, Music in the expanded field, and Extended performance practices among others. Composer Jennifer Walshe is often named as a leading representative of this practice. Walshe's description of her practice implies viewing music as a performative event, placing the performing body more in the centre of our perception of the musical performance. Does her claim that "the bodies playing the music are part of the music" change the framing of these music performances and thus the perception or conceptualization of the performing body in this practice?

The purpose of this paper is to ask how an inquiry into the performing musical body in the contemporary, expanded musical practice of Walshe and others might reveal a potential for the expansion of musicological thinking and theorizing around this kind of experimental practice. The aim is to bridge a performative understanding of the performing body with a more musical way of thinking about corporeal movement as "material" for composition or as representing the composer's intentions. This merging of a performative paradigm with the paradigm of representation in a Western art music tradition makes some paradoxes visible: The author function of the composer might collide with the creative agency of the performer and the performing body, and the notion of the "extra-musical" becomes irrelevant. Being aware of such paradoxes seems essential for practitioners who wants to evolve this practice of experimentation further, and still confine to a musical realm.

When using corporeality as compositional material, the physical bodies are not just empty screens, but human bodies that generate meanings connected to their materiality and context. There are several possible conceptualizations of the performing body in an extended music practice: The performing body could be viewed as presenting an identity/a persona, it could be seen as an executor of the composer's intentions, as material for composition, and as materiality with creative agency in the performance. How these conceptualizations work together with other concepts, and how the frames for understanding the performing body in this performance practice are constituted, are questions that needs to be investigated. But if these material and contextual perspectives are missed or effaced in the theorizing of music performance in an expanded composing- and music practice, the practice also risks missing out on central perspectives relevant for how it relates to social, contextual and material issues concerning the performing body.

Keywords: The performing body; Extended performance practice; Corporeality as material

Exploring new approaches towards Orlando di Lasso

Vasco Negreiros, Universidade de Aveiro / INET-md

During the last decades, a lot of research has been undertaken on the performance practices of Renaissance sacred music within its liturgical frame. This presentation, instead, wants to focus on the religious music of the same period composed for private usage in palaces, in the scope of what we designate *musica reservata*, an expression created as a description for the production of the composer we want to dwell on: Orlando di Lasso.

We know that Orlando di Lasso, besides being a cultured *homme de lettres* in several languages, gained recognition as a proficient actor of the *commedia dell'arte* that used to fill the long winter nights in the Court of Albert V of Baviera. His letters testify such rigor and language *acribia*, and it should not surprise us that he became a fundamental reference for the studies on *Musica Poetica* – pointing out the relationship between music and text – that began to arise

shortly after his death, in 1594, so that even a Lutheran Kantor like Joachim Burmeister, a pioneer on the new science, and Bach's predecessor on the Thomas Kirche in Leipzig, used Lasso's (Catholic) music as a main source of examples for his *Figurae*.

In his works written for small ensemble and for a few privileged listeners (*musica reservata*), the Word inhabits the centre and is alone the root of any musical invention, and Lasso proposed, in such contexts, a much stronger rhetoric audacity than in works composed for public celebrations.

How can we provide the performer with a deeper experience on the poetic intensity of the text he is about to sing, in a somehow similar way to the one we imagine that the composer himself experienced, since we know he was an excellent tenor, hired in Munich only as a performer?

In this paper we present several approaches that try to accomplish this goal, taking as a departure point the musical practice and notation of the 16th century, addressing the needs of a modern performer, providing the singers with means to develop their sensitivity towards the text, as well as clues for a homogeneous interpretation in homorhythmic passages, as well as in dense polyphony.

In order to demonstrate this approach, and not just present a row of speculations, we will discuss – using three cycles by Lasso (*Lectioes ex propheta Iob*, *Prophetiae Sibyllarum* and *Lagrimae di San Pietro*) – which different strategies were adopted, aiming to move the modern performers towards sensations we imagine that Lasso went through when reading these texts, even before the first note of each piece was written.

During the presentation these strategies will be illustrated, showing the materials which were created to address this idea, as well as recordings of some of its artistic outputs.

I will trace the origin of the composition in its centripetal force and will to exist, insofar as the vocal music of this time – at least, Lasso's work – does not claim to be an end by itself, but rather a privileged mean of expression and intensification of the Word.

Keywords: Vocal music; Orlando di Lasso; *Musica poetica*; Musical rhetoric; Rehearsal methodology

Art and Rigour: Designing experimenting processes for artistic research

Vittoria Ecclesia, Estonian Academy of Music and Theater

Artistic research is gaining more and more space in academia, but because of its relatively recent establishment in the academic environment, there is still a lack of standardized methodologies. The methodologies used in artistic practices can be creative, innovative, usually borrowed and adapted from other fields.

But performers and artists, in general, may struggle with ideating rigorous methodologies for their practices, and cannot find easily pre-made ones to apply, also due to the open and haphazard nature of artistic practice, contrasting with the rigour of research and experimentation. The advice to look towards other disciplines' qualitative methods and borrow them, although reasonable, is also vague and can be confusing for young researchers. In particular, the adaptation process can raise issues. How can methods from different disciplines be adapted to the needs of artistic research, without hindering the creative practice? What are the pros and the cons of such adaptations?

The significance of this work lays in it addressing the fruitful intersection between experimentation and arts, through the presentation of a case study. I will present my own use of three borrowed qualitative methodologies that I adapted from other disciplines. I used them to design an experimenting process to investigate differences and similarities in the musical affordances of a 13-keyed period clarinet and modern clarinet, and the benefits and the problematics that arose through such experimentation. The methodologies I will consider are autobiographical design, borrowed from Human Computer Interaction; thematic analysis, borrowed from psychology; and autoethnography, borrowed from social sciences. The use of Dynamic Research Sketching as a support during the initial phases of an artistic research will also be addressed. In the presentation, I will provide a brief outline of my research, presenting its background, the question and aim, the musical instruments I work with, and the type of experimenting process I wanted to design. Then I will discuss the three methodologies, presenting them in the order I integrated them in the research: autobiographical design, thematic analysis, and autoethnography. I will provide practical examples from my first year of experimenting, both on positive aspects and on the more problematic ones. After

presenting the three methodologies, I will show my use of Dynamic Research Sketching in creating a visual representation of the experimenting and creative process, and the relation between the methodologies in said process. In the end, I will provide musical examples on the spot, highlighting some of the musical affordances that I investigated through the experimenting process, how these affordances appeared in the process, what was the role of rigorous experimentation versus my regular unstructured artistic practice.

I aim at advocating for creativity and critical reflection when adapting methodologies for artistic practices, providing my work as an example while remaining open to dialogue and insights from other practitioners.

Keywords: Artistic research methods; Adaptation; Creative experiment; Autobiographical design; Thematic analysis; Autoethnography

Individual or short group
presentations including
performance

“Rewriting” as an inter-textual approach to contemporary composition: *Three Sketches for Two Violins* by Paolo Geminiani

Alessandro Cazzato¹, Paolo Geminiani² and Sharon Tomaselli¹,

¹Conservatorio di Musica "Nino Rota" di Monopoli; ²Conservatorio di Musica "Bruno Madena" di Cesena

The proposed artistic path addresses a past that leaves its traces through new sonorities, while new compositions are profoundly marked by the same past and musical echoes revive in contemporary violin writing. The *fil rouge* is the topic of rewriting. In other words, the stylistic and aesthetic cypher that is suitable for linking two different worlds, such as music by Johann Sebastian Bach or Niccolò Paganini and the new musical approach of contemporary violin music.

The Italian composer Paolo Geminiani [b.1960] guides us on his personal artistic research through three short pieces (or sketches) for two violins, inspired by J. S. Bach's Andante (from Sonata BWV 1003), the 6th *Caprice* by N. Paganini and an unpublished page by the philosopher / composer Giovanni Piana [1940-2019]. In his music, Paolo Geminiani aims at testing the timbre and the expressive potential of the violin in contemporary repertoire, while inspired by experimental Italian research (F. Donatoni, A. Corghi, A. Solbiati, A. Guarnieri) and by the fecund tribute of mathematical patterns to composition.

In this context, “rewriting” is a wish and a need to rethink tradition in the contemporary age, with the aim of creating new artistic values; it is also a sort of re-utilization of stylistic patterns from the past with the intention of proposing them again, deformed as they may appear, in the post-modern writing of the contemporary age. “Rewriting” represents a specific inter-textual practice, which originates from and within the comparison between musical texts, distanced in space and time. One text enlightens the other, bringing out a character or highlighting a difference. In all cases, it is always an interpretation, both when the composers emulate their predecessors by reminding the listener of ancient music through their remake and when they keep their distance.

[1] Paolo Geminiani, *Metonimie (Shadows of a Bach's Andante)*, 2015, for two violins. It embodies the composer's desire to “rewrite” the well-known Andante of the Violin Sonata No. 2, BWV 1003, composed by J. S. Bach, by combining short fragments of the original

piece with newly composed, more rarefied ones, suffused with sounds and patterns typical of contemporary music. The piece, therefore, results in a complex network of connections, a “substitution of terms” – or metonymies – of the traditional musical phrase. This goal is achieved by structurally reinterpreting some of the fundamental ideas of Bach’s music (namely the two-part structure, the recurrence of voice articulation, and the typically Baroque contrast of a stable zone and a dynamic evolution). The choice of compositional material favours certain stylistic elements, which are emphasized gradually during the performance of the piece. Hence, the most prominent features are repeated quavers over a chromatically / diatonically descending bass, a descending four-semiquaver pattern of the first riff with an emphatically expressive connotation, as well as excerpts of original musical material that return in more elaborate guises.

[2] Paolo Geminiani, *Allusions & Inferences (after Paganini)*, 2018, for two violins. The piece is inspired by the 6th *Capriccio* by Niccolò Paganini, a long and moving cantabile during which an incessant *tremolo* (of the left hand) sustains the melody. Paganinian echoes, references, interferences and short circuits come back to life here, this time through sundry interpolations almost deconstructed, with an explicit citation of the 16th *Capriccio* by Pietro Antonio Locatelli (1695-1764). In other words, the piece shows us the two faces of the Paganinian mood – cantabile and virtuosity – miraculously in balance.

[3] Paolo Geminiani, *Restitutio memoriae (remembering Giovanni Piana)*, 2021, for two violins. At the end of the path, the composer Paolo Geminiani is inspired by an unpublished page by Giovanni Piana (the *Dodecaphonic Duet* for two violins), reinterpreting the original twelve-tone series (proposed by Piana himself at the beginning of his piece) in absolute freedom, sometimes incomplete or deliberately repetitive. However, in *Restitutio memoriae*, the two violins are used in constant and reciprocal interaction, resorting to extended violin techniques, stratification of the double stops and different kinds of imitative passages (melodic, polyphonic, gestural, articulative).

Keywords: Violin performance; Re-writing; Music and philosophy

Deconstructing Ligeti

Alice Martins Belém Vieira and Felipe de Oliveira Amorim, Escola de Música da Universidade do Estado de Minas Gerais

This research investigates mixed artistic processes, aiming to perform an interdisciplinary concert in which interactions between music, other arts – video, literature, dance – and new sound technologies are explored. Another premise of the work is to explore the performance space. Finally, we aim to achieve new kinds of relationships with the audience, using interactive tools that allow a fusion of the roles of performer, listener and creator. The methodology is based on the writings of López-Cano (2014) on artistic research, especially on his description of experimentation as a valid procedure for investigations of this scope. Equally important as a foundation for this research is the investigation of poetics, artistic tendencies, creators and scholars who have studied interdisciplinarity, mixed medias and transversality during the 20th and 21st centuries (Schwab 2013; Zille and Amorim 2017). The work is in its early stage: so far, we have been conducting discussions and experimentations of elements that we intend to include before and during the concert. Before the beginning of the concert, at the concert-hall lobby, we intend to provide an interface for interactive creation, in which the audience members will be invited to choose the order of the musical excerpts. This brings them closer to the role of interpreters, which is usually limited to the performers. A similar idea is applied to the concert, as the musicians choose the order of the musical form. The experiments already realized were based on the Etudes for piano by György Ligeti. After selecting musical gestures from Ligeti's Etude no. 2 (*Cordes à Vide*), we created a set of samplers that interact with the live piano and video, resulting in a structured improvisation. The video features footage of someone writing an excerpt from Kafka's book *The Metamorphosis*. The sounds of pencil on paper are captured and transformed in real time into tempered electronic sounds based on harmonies from Ligeti's Etude. The images are projected onto a transparent fabric and interplay with acoustic and electronic sounds. The selection of

musical gestures was based on the interpretative analysis done by pianist Pierre-Laurent Aimard (2020), in which he identifies the basic material of the piece and shows how it is presented in various rhythmic, textural and expressive situations. From those structural elements, it was possible to develop the improvisation, establishing dialogues between piano and electronic sounds which have the potential to create new textural, rhythmic and harmonic combinations not present in Ligeti's original work. The music born from this improvisation, creates other "possibilities of combinations", "opens the imagination to new sound landscapes" and creates "a new musical fabric" (Aimard 2020). During the improvisation, we develop the concept of material transformations, which is in line with Kafka's idea of metamorphosis. At first, the structural elements of the Etude are presented, then they are recombined and transformed. The process is based on the concept of *simulacrum* developed by Deleuze (1998), which expands the Platonic idea of copy and model, suggesting that copying the copy of a copy, in a large spiral, generates a new product.

Keywords: Mixed artistic processes; Artistic research; György Ligeti piano works; New technologies

Comprovisation using Ableton Live

Bernardo Palmeirim, Universidade de Lisboa

In the 1960s, experimentation with technological breakthroughs turned the recording studio into an instrument in the compositional process (think of landmark Beatles' albums). This technological explosion, however, led to what Stephen Davies (2003) called ontologically 'thick' rock phonographic works — those which could not be performed except by relinquishing key sonic constituents. This impasse was, I believe, notoriously visible for a musician like Jimi Hendrix, who exhibited two very different aesthetics as a musician: his onstage performances were Dionysian in comparison to his studio persona, of Apollonian detailed sonic composition. Although he could engage in live experimentation by resorting to transportable FX pedals and amps, this technology was comparatively limited: he could not perform his 'ontologically-thick'

studio experimentations live. These only existed as recorded phenomena. Nowadays, however, as the American scholar Richard Dudas' concept of 'comprovisation' (2010) suggests, the distance between composition, performance and improvised experimentation is becoming increasingly narrow. Technology is now pushing for a second breakthrough that will surely dissolve Davies' performative gap, namely through a software that has become ubiquitous, encompassing an enormous community (yet mostly consisting of DJs and electronic-music producers), since its launch 20 years ago: Ableton Live. Live coalesces the editing power of the traditional studio DAW — the Digital Audio Workstation, which focuses mostly on editing, and hence is mostly equated with composition — and the real-time power of audio experimentation. Now one can add effects to recordings or performances in real-time, making Live a veritable improvisational powerhouse. Since Live allows musicians to performatively improvise not only with the sonic elements in a song but also with its very structure, it has merged composition and experimentation. Comprovisation thus comes to the fore. Because in Live we can immediately hear the changes we make to a musical piece, we do not run the risk of losing emotional attachment and flow even when 'editing' music. On the other hand, the improvisational scenario will require more or less prior preparation of the session environment — just as a painter sets up her palette before painting. American musician Dan Deacon is a good example of improvisation, namely in his combinatorial use — in the recording and live performance of albums such as *America* (2012) and *Glass Riffer* (2015) — of Live and 'real instruments' (e.g. a MIDI-driven acoustic piano). My current power trio band NOZ was born, to a large extent, during a residency in Barcelona in 2012 with the explicit aims of experimenting with Ableton Live's possibilities and of fusing acoustic, electric and digital creative landscapes. For a decade, I have worked on my guitar, vocal and MIDI set-ups to consistently employ Live to better improvisational use. I also use a programming plugin called Clyphx that helps me customize Live and program scenes for live performance. In my talk, I propose to explain how the way I have set up Live as a) an experimental laboratory for song-writing, and b) the platform for my shows has helped me consolidate experimentation as the foundation of my song-writing process. I will project my computer screen and show how I use my equipment during my talk. Time allowing, I could also briefly provide the contours of a recent project that was also based on a different

comprovisational usage of Live: a higher-education spoken-word pedagogy I developed in the University of Lisbon, which earned me the 2021 Cátedra Cascais Interartes grant and served as the basis for a forthcoming article called “The Spoken-word Song and Attuned Literary Interpretation: An interarts-based reading pedagogy”. I will conclude by performing 2 songs of mine, to complete the demonstration of how Ableton can be used to bring experimentation into song.

Keywords: Comprovisation; Ableton Live; Songwriting; Performance

Collaboration in new music creation: A case study on the making of a solo multipercussion work

Dimitris Andrikopoulos and Nuno Arosa, ESMAE-P.Porto / CESEM; Universidade de Aveiro / INET-md

This case study addresses current experimental contexts and practices as well as experimentation as a device in contemporary performative creation.

During the last decades we have witnessed a redefinition in the interaction between the performer and the composer, an interaction that led to the discovery of new paths of creative collaboration between them. This poses significant questions on important issues like exploration of new sound resources, research on new technical possibilities and extension of established ones, new materials and new instrumental means, as well as a higher order of questions like authorship and artistic identity in music creation. Besides the human interaction, another important factor, more and more present in contemporary music creation, is the use of technology. In this sense, a question arises: has technology become a third collaborator able to influence and redefine the final result and place itself as an equal partner in the above described relationship?

This presentation is the result of a study on the above problematics based on the creation of a solo work for multipercussion.

We aim to address, first, the collaborative process between the composer and the interpreter from the early stages of the creation of the work up to the moment of performance and recording of the piece. We address how this process and collaborative attitude

influenced basic parameters of the composition, such as the sonic identity of the piece and the research into instrumental sets that are moving away from the conventional/established instrumental setups. Second, we look into how this collaboration influenced the compositional process; the transformation of the abstractly created material into a viable technically musical text in its presentation format. As last, we address how the generation of compositional material through algorithmic processes formed a type of collaboration between the composer and the computer inside a Computer Assisted Composition environment.

All the issues above address an ever-growing reality in contemporary music creation, opening new areas of practical and academic research to both composers and performers. This presentation, through a case study, intends to be a contribution to this line of research.

Keywords: New music creation; Collaboration; Percussion; Composition; Unconventional instrumental resources; Computer assisted composition

Multidisciplinary approaches on New Music Theater

Fanis Gioles and Anna Syrianou, _mootpoint

Today, many composers are working beyond the traditional boundaries of music, expanding into other media and/or practices, often drawing from the visual fields
(Cicilliani 2015)

These words are taken from Marco Cicilliani's workshop 'Music in the expanded field' that took place in Darmstadt Ferien Kurse für neue Musik 2016, and describe the continuous effort of many composers and performers to introduce different disciplines in their practice. This desire to move beyond conventional pairings of artistic practices, and to extend musical principles visually, were already familiar themes in the 1960s music theatre, not least in works that made innovative use of mime and gesture.

Nowadays, in a context of rapidly developing new entertainment and media technologies, new music theatre increasingly incorporated visual and light projections, electronics, sound diffusion, and live or pre-recorded video.

But how does a performance benefits from the use of new technologies and is a multidisciplinary approach a necessity?

To answer the questions mentioned above, we will focus on *White on White*, a new music theatre piece by based on Samuel Beckett's *Ping. Ping*, written on 1963, is a text without a narrator nor dialogue, which consists of word-patterns organized only by full-stops. The persona articulating this monologue in the text is struggling between two undefined states. It strives through episodic memory sequences that do not follow a stable pattern to resonate a reality, while ignoring the past and the future - a vicious circle.

The aim was to benefit from the musical linguistic style of Beckett and create a new music theatre piece, *White on White*, for a solo performer and (live and pre-recorded) video projections in which sound and image are either interrelated or substitute words of the original text. Since the text allows multiple readings, the interpretation of places the text in a contemporary context of biopolitics and the Anthropocene. The performance is revolving around the topics of body, time and politics. As an alter ego of everyone in the audience, the creature on stage finds itself in a blank spot and effectively struggles to (re-)discover its body, existence and power over it.

The double-layer interaction, both visual and audible, allows the creation of a continually transforming perceptual space, forming the multidimensional reality that the text implies. Thus, it manages to communicate the complexities of socio-political issues in a way that allows the audience to experience multiple readings and contemplations, different stages of engagement, and initiates a dialogue not only between the artist and the audience but also - and most importantly - within the audience.

Keywords: Multidisciplinary; Multimedia; Performance; Memory

Performing expressively with *Crescente*

Henrique Ferreira and Filipe Lopes, FEUP / Universidade do Porto;
CIPEM / INET-md / uniMAD

This presentation will consist of an oral explanation about the development of *Crescente*, a new mixed musical instrument, followed by a short performance in which its current prototype will be played. Topics, on the one hand, will include technical and

technological aspects (e.g. sensors used, the *bela* platform, software used) and, on the other hand, the relationship between physical gesture and the concept of expressiveness in live music performance. The latter was the main research focus, which guided the creative process regarding the design of this instrument. During the performance, the first author will improvise, playing *Crescente*, showcasing its full extent of sonic and expressive capabilities. The main techniques and gestures will also be apparent during this improvisation. The second author will be accompanying this improvisation using conventional electronic instruments to produce textural sound layers and drones.

When experimenting with electronic music paraphernalia, one can quickly get lost in the vastness of possible sounds. This infinite possibility of timbres tends to present a slight problem for some musicians: generic musical interfaces are unable to provide a sole solution for the entire spectrum of every performer's need regarding a sound pallet. In addition to this, electronic and digital instruments can be quite indirect in their relation to physical gesture, one of the key factors on the perception of expressiveness from an audience perspective. The task of mapping digital music instrument parameters offers challenges regarding not only the relationship to gesture, but also how a musician can experience a learning curve that allows a further development of expressiveness.

These concerns, alongside a keen interest on the Do-It-Yourself scene and experimental music instruments, led to the practical research on how a mixed musical instrument could be prototyped, resulting on the instrument now called *Crescente*. Some of the core questions of this research directly influenced the decision-making, regarding many of the instrument's design choices. These questions address subjects such as: live computer / electronic music and the correlation to gesture; learning and adapting expressive gestures from conventional musical instruments; acknowledging standalone DMIs which can be expressive.

Considering a particular facet of "expressiveness", related to gesture, *Crescente* addresses particular features such as the need for a physical input to produce sound and the combination of digital, acoustic and electroacoustic elements under the same body. This specific mix of features allows the possibility to discover an original sense of expression for live music performance based on the identity of this particular instrument.

Keywords: New interfaces for musical expression; DMI; Performance; Expressiveness; Gesture

Structural parameters for the non-place in *Hermes, nove da noite*

João Quinteiro, Sinem Tas and Henrique Portovedo, FCSH, Universidade Nova de Lisboa / CESEM; FBA, Universidade de Lisboa; Universidade de Aveiro / INET-md

Hermes, nove da noite is a piece for tenor saxophone with live spatialisation and video by composer João Quinteiro. The piece was written in 2017, in collaboration with the saxophone player and, due to its level of technical exploration of the instrument, has been object of a work in progress, also with the collaboration of the saxophone player between 2017 and 2019, having reached its final version with video only in the beginning of 2022.

This piece integrates a group of ten satellites, tangential to the opera *Returning*, and takes the homonymous poem by José Mário Silva as starting point for its compositional structure through several processes of deterritorialisation that position the character Hermes in the non-place of an ambulance, after an accident.

As a deputed piece from an opera, *Hermes, nove da noite* keeps its autonomy by establishing a direct relationship with the original poetic text and its meta-layers of signification, more than with the scenic action of the libretto. The affirmation of the non-place happens in this piece through a compositional, visual and performative signification of limit states of the body by rupturing the possibility of projecting the assured past in the creation of a predictable future. In this scenario, the common function of the present as mediating element between the “from where to where”, transforms into a vortex that disrupts the linear perception of continuum and creates an absolute present

At the structural level, the piece articulates three distinct typologies of approaching the treatment of sound materials, having as its nuclear vectors: A) continuity and discontinuity / contemplative resistance to fixation - the absolute present - composed by the articulation between abstract and absolute durations, both with long notes / multiphonics and through long eight tone melismata that

achieve their final contour through a continuous dislocation across the sound space. This typology also integrates vocal sounds by the performer that result from a phonetical depuration of the original text, focused on emphasising guttural elements that portray the characters' present state; B) continuous sound flow of short and percussive sounds on an absolute pitch is of secondary order - the interrupted past - composed by an exploration of materials with and without the mouthpiece (tongue rams, key clicks, air against the neck, slaps, *alla tromba*, etc.). These materials occupy the space in a contrasting manner with A, placing in evidence a pointillist and contrapuntal contour between several points of the sound space. The saxophone player disappears as sound source, playing these materials behind a fibreglass structure. The sounding body is absolutely deterritorialized of its origins and is presented only as a "spatial synapses"; C) a profane melody, built upon a Greek *tonoi* with origin in the Peloponnese region of Mount Kyllini (birthplace of Hermes), which spreads eight tones along a two octave register. The rhythm of these sections is completely fixated and is a direct depuration of readings from the original poem, creating an interstice between the place of the melody and the place of the text. The materials in sections C are the only ones that are not spatialized, having as its singular sound source the saxophone player - the crystallisation of the future that will not become.

From a structural standpoint, the five A sections are fixated pillars of return, between which the performer defines the sequence of events by articulating six B material sections and six C material sections.

Despite its apparent univocity, materialised by the saxophone as a single sound source, *Hermes, nove da noite* is a chamber object, fundamental for the fluidity and character of the sound materials, both regarding the place they occupy in space with the live spatialisation and the articulation with the video, not in a co-dependent relation, but as simultaneously inferring elements in a shared performatic space.

The present deprived of continuity was, at the same time, a determinant agent in the process of relating *Hermes* with migrant communities, through collected statements and interviews, and a determining formal element for the conception of both the piece and the video.

Hermes, nove da noite acquires its artistic and expressive significance by simultaneously exploring the limits of the body and

the mechanisms that resist the crystallisation of perception, both of the audience and the interpreter[s].

Keywords: Corporeity; Multidisciplinarity; Spatial and temporal perception

QFT (Quantum Feelings Theory)

Jorge Forero, FEUP, Universidade do Porto, ITI - LARSyS

QFT (Quantum Feelings Theory) is an acousmatic musical piece and a live codework performance, composed with a fragment of a poem read by Richard Feynman as part of an address to the National Academy of Sciences.

Codework, also known as code poetry or net.writing, is a variant of digital poetry, a subgenre of electronic literature. Codework is an art that integrates computer code in its overall aesthetic. In its broadest sense, code-inspired visual art and some live-coding performances could feed under this category.

Livecoding emerged at the beginning of the 20th century to describe the activity of a group of practitioners and researchers who had begun developing new approaches to making computer music and video animation in real-time. It is defined as the interactive control of algorithmic processes through programming activity. The style of music is not fixed, which suggests that live coding is a performance method rather than a genre. A typical live-coding performance involves musicians / programmers writing / improvising code on stage, with their screens projected for the audience and their code dynamically interpreted to generate music and graphics. While there are several popular languages for live coding, such as Supercollider, Tidal Cycles, or SonicPi, among many others, *QFT* proposes his esoteric programming language to parse every sentence of the poem with an audio-visual function in the performance. *QFT* is built at the top of Pure Data programming language, implementing GLSL inside the graphical environment GEM. In addition to the possibilities of real-time codework interpretation, the project includes functions that can be adjusted according to the quantization rules of a quantum harmonic oscillator. So, the idea is to adjust Plank's constant to obtain diverse audio-visual constraints. An audio

extract from an interview of the scientist was also used to get loops and grains that were integrated into the acousmatic work.

The graphical counterpart proposes the continuous transition between different flower states, from when it is a seed to when it blooms, reflecting nature's diversity under quantized states.

The work is part of a series of projects for code poetry and was initially composed at the end of the year 2020. It has been performed at the Píksel Festival 2021 in Norway and the International Conference on Live Coding ICLC 2021 in Chile.

Keywords: Live-coding; Acousmatic music; Esoteric programming languages; Codework; Poetry; Richard Feynman

Muffled sounds on clarinet: Beyond microtonality and conventional timbre

Luís Costa and Frederic Cardoso, Independent Artists

In 2017, Luís Neto da Costa was challenged by Frederic Cardoso to compose a piece for solo clarinet. Since he studied clarinet, the composer began testing new possibilities that were not in direct line with the repertoire of the last decades.

After exploring unusual fingerings, he compiled 12 microtonal scales under B₃ to Bb₄. Most of them are practically eight-tone scales. In addition, they have a muffled sound and reveal very specific timbre behaviours, by adding keys and/or subtracting the thumb hole. In *E é sempre melhor o impreciso que embala do que o certo que basta*, a large part of the sound material are these scales, complemented with very high and multiphonic sounds, obtained with the same fingerings and others of free choice. The rhythm of the piece is based on a numerical series of five values. This rhythmic series could be permuted, partially presented, and undergo simple arithmetic operations. The composer used a table that records these operations and the series used in the different sections. A series obtained from twin primes serves as material for the structural division of the piece and for the choice of pitches within each muffled sounds scales. To obtain the resulted pitches and to assist the creative process, Luís Neto da Costa used tools from the BACH library in the Max/MSP software. The developed patch allows the

calculation of rhythmic operations, rhythmic quantification of values and to listen to eight-tone pitches. In the presentation, the composer will reflect on this method of computer-aided composition. Due to the complexity of the decimal numbers, rhythmic quantification made the reading difficult, and some changes were made in collaboration with the interpreter. Luís Neto da Costa kept most of the tuplets, acknowledging rhythmic rigor is an idealization and that irregularity offers fluidity, in contrast to what is written. This presentation also includes a contextualization about the use of the series obtained from twin primes in relation to the author's other works. As for the muffled sounds, examples with this type of material are scarce. This is the only work, known so far, that uses these scales as its main language and details all the eight-tones that occur. Finally, Frederic Cardoso will talk about how he studied the piece and his view concerning these sonorities.

Keywords: Muffled sounds; Eight-tone scales; Computer-aided composition; Clarinet

Expansion of musical gesture in the exploration of symbolism in Ferneyhough's *Cassandra's Dream Song*

Mafalda Carvalho, Universidade de Aveiro / INET-md

Cassandra's Dream Song by Brian Ferneyhough, for solo flute, was composed in 1970 and premiered only four years later by Pierre-Yves Artaud. It has the peculiarity of not having a fixed order for its various sections, spread over two pages, giving the performer the freedom to choose which line of the second page to intersperse between the lines of the first page. By indication of the composer, the order is to be decided spontaneously during the performance and not previously determined. In this lecture recital, I propose an interpretative approach based on the expansion of the musical gesture, which had as a reference the work of the flutist and researcher Ine Vanoeveren (2018), but which is mainly inspired by the myth of Cassandra in its most common version, namely the one that narrates that Apollo will have granted Cassandra the gift of prophecy in exchange for yielding to his sexual advances, but having

she did not yield. "Apollo, irritated, spat into her mouth [. ...] [casting a spell on her that caused her that] even if she prophesied accurately, no one would believe it." (Martínez, Galiano and Melero 1997). In this approach, I seek to mitigate the abstract relationship that the public tends to establish with performances of highly complex compositions that fall within a so-called erudite contemporary aesthetic. I propose to explore and recreate the symbolic charge of the works in order to intrigue and challenge the audience, to make them react more empathetically, and, therefore, to participate, also in their turn, in the creation of meaning. In a methodology based on laboratory experimentation focused on the expansion of the musical gesture, I simultaneously tried to prolong and bring more visibility to the musical gesture in terms of movement and scenic representation. In order to highlight the dramatic movement and the scenic intervention, it was fundamental to interpret each page as characters - Apollo and Cassandra - and to engage them in dialogue. I established that Apollo would be represented by the sections on the first page and Cassandra would be represented by the sections on the second page. However, echoing a feminist interpretation, I felt that the work should end with Cassandra's voice as the last word, so the last sections were assigned to Cassandra's character. The characterization of the characters expanded to all dimensions of the performance, defining specificities for each one in terms of sound (timbre, articulation, character), in terms of costume and make-up and in terms of movement and other scenic resources (lighting, projection, etc.). The laboratorial work of experimentation was refined with the critical feedback from specific audiences, selected in the scope of several 'try-outs' carried out for that purpose. The present submission includes a full performance of Brian Ferneyhough's *Cassandra's Dream Song* and an presentation that will focus on the creative process, the performative options and the relevance of the artistic intervention, as well as on the potential of this matrix for future interpretations / performances.

Keywords: Flute; Cassandra; Ferneyhough; Musical Gesture

Mediation and "object-specific" creative processes in experimental sound practices

Magno Caliman, Orpheus Institute

A musical practice rooted in critical engagement with DIY electronics and the embracing of programming languages as art-making devices has steered my interest, academically and artistically, towards technologically-mediated creative processes in experimental music, which is where this research situates itself. But if most art can be considered technologically-mediated on some level, my focus lies specifically on "aestheticized" technology (Rutsky 1999), i.e., technical apparatuses that are taken as places for poietic speculation, objects of inquiry in a creative process. Art that comes to be from and through technology, as opposed to just making use of it (Iazzetta 2009).

This mediation has consequences in two distinct areas, namely the creation process of a work, as well as the work's final form. For the work itself, one can think in terms of an enforced "technographical imprint" (*marca tecnográfica*) (Caesar 2009). A symbolic groove that a technical object (Simondon 1958) leaves on an art object by simply being part of its creation process. Examples range from early acousmatic music, where the length of loops were a direct consequence of the physical size of shellac disks available at the time, to the non-metric quality of most network performed music, as broadcasting latency makes it difficult for synchronicity between performers. Those are characteristics that are not present in the works as a reflection of the artist's will, but quite the opposite – they are imposed by the devices mediating the creative process.

From this observation, I propose an understanding of this condition in terms of a negotiation established between apparatus and artist along (and through) this mediation, in which the artist, by speculating creatively with a device, is presented with the terms in which that device accepts to operate. The creative act is moulded, adapted, redefined, according to the discovery of the affordances (Correia-Masu 2020, Magnusson 2006) present in the apparatus one speculates with. Technology then, when mediating art making, seems to show its boundaries and limits of operation.

Artists belonging to the conventionally called "American experimental music" from the second half of the 20th century are particularly illustrative, as they appeared to operate in great consonance to the rationale presented so far. Groups such as CIE - Composers Inside Electronics embraced mind-sets in which the exploration of technical devices "becomes the score" (Collins 2004). David Tudor mentions the instability of the electronic circuit as a factor that forced him to abandon a virtuoso control of the piano in favour of an improvisational practice (Iddon 2013), demonstrating how, in that context, what an artistic work is (i.e., its perceived sonic and/or material manifestation) and how it comes to be (i.e., its inquiry processes), is inseparable from the technical objects with which the work is produced.

Starting then from an unequivocal recognition that technology, when placed as mediator in art-making, becomes a defining / imposing entity, some questions emerge. What are the effects and consequences of this mediation for an artist's creative process? How much are artists in control of this negotiation? How much are we consciously aware of this condition, and how (if at all) that awareness impacts our craft? Are there unnegotiable terms in the interaction between sound artists and their technical devices? What are the conceptual and practical models (terminology, rationalization, experimental methods) artist-researches have in order to investigate this condition?

On the Experimental:

Here I am referring to experimental as "not a school or even an aesthetic, [but as] a position of inquiry, of uncertainty" (Gottschalk 2016). I am interested in investigating the notion of experimental as something that is intertwined with the bounds set by the technology at hand. Somewhat related to Flusser's "black box" analogy (Flusser 1984) and Simondon's definition of "invention" (Simondon 1965), which, through different terms, both deal with a closed system that gets navigated / saturated and the outcomes of interacting with said system.

But if a "subversive effect [requires] a stable order that is followed by a majority" (Weissenbrunner 2015), it seems beneficial to point out that experimental practices do not operate simply on the basis of a mere misuse of devices. One does not simply subvert the design of an apparatus in an aimless pursuit for happy accidents. A presentation of the practice in those terms reduces the discussion to a matter of semantics ("intended uses" vs. "possible uses"). If a

device exists in the word, and an artist uses it subverting its "stable order", why is that an unintended use? Simply on the account of it being used in an art context? Why is that not considered an expansion on the reason of being for that object in the world?

The EDP Wasp synthesizer had a filter design that abused and misused an integrated circuit not originally intended to be employed in audio filters. But it became a commercial product, one that was sought-after exactly because of its peculiar sounding filter. Being used in a commercial product was the *de facto* criteria for the revaluation of the collective agreement on the intended uses of that particular integrated circuit, a manifestation of how the purpose of an object can be subjected to its market value.

David Behrman, describing his work *Runthrough* (1970), states that "because there is neither a score nor directions, any sound which results from any combination of the switch and light positioning remains part of the 'piece'. (Whatever you do with a surfboard in the surf remains a part of surfboarding)" (Nyman 1974). Likewise, I would argue that whatever you do with an apparatus remains a part of "apparatusing".

So, not a reflection concerning the possible intended uses of an object, but a more nuanced (and to our purposes, more fitting) approach is to ask "what does this object allows me to do to it?" and in a last instance, "how much is that revealing back to me what my work and practice are?"

Can a compositional practice where the artist is permeable to the boundaries and impositions of technology, working with and not against them, be indicative of an experimental mind-set? Is it possible then to think experimental as a search and embracing of this place beyond-frame? It seems one can only grasp the shape of a border by acknowledging its limits.

Keywords: Technology; Mediation; DIY electronics; Creative coding

Infinite piano: An overview of my creative endeavors as a piano explorer

Mariana Miguel, Universidade Nova de Lisboa / LAMCI CESEM /
Companhia de Música Teatral

As an artist-researcher, my performative practices have been profoundly imbued with experimentation and a creative approach to the piano. This started when taking part in *Pianoscópio* (2016-present) - an itinerant laboratory of recycled pianos (turned into a new, unconventional and collective instrument) created by Companhia de Música Teatral, where workshops, performances and artistic residencies take place. From *Pianoscópio* onwards, three main projects stand out as creative experiments: *Become One* (2021), *Piano do Bairro* (2021) and *Vas Figuli Piano* (2022).

This presentation intends to trace a map between these projects, identifying their main characteristics and *modus operandi*, and raise some considerations concerning the instrument and its uses, in a way that can inspire and clarify other people.

Become One is a musical work for prepared piano and live electronics, created for a Masters' degree in Performance (Piano) at the Universidade de Évora. It is the main subject of my thesis "Experimental creative practice at the piano: a case study", in which the creative process involving the composition and performance of the piece is documented.

Piano do Bairro (*The neighborhood's piano*) is a project created for an open call of artistic and musical showcases in Oliveira do Bairro, a county in Aveiro, Portugal. The project's premise was to explore the county's local commerce and businesses and find objects that could potentially prepare the piano and improvise accordingly. The result was a video-performance, premiered online in May 2021, in which the music played accompanies my travels through the local market and shops. Thus, the audience follows the performer from the starting point – the purchase of materials –, through the exploration and preparation of the piano, up to the performance moment.

Vas Figuli Piano (*The potter's piano*) is a project that takes inspiration from both clay and ceramics artists' tradition and work onto the piano, culminating in the recording and launch of a series of compositions and improvisations in the form of a CD album. These works were both influences and influenced by video recordings and responsive visuals in which the piano takes the role of the potter's wheel – as an instrument with which the maker engages in the creation of an art piece, influenced by natural processes. This album will be premiered in April, in a multimedia presentation, followed by the adaptation to a live show.

By analysing these projects as case studies and using them as examples, I intend to approach the following topics: 1) community

engagement as part of the creative process; 2) practical uses of technology from an improviser and performer's point of view; 3) mixed-media outputs as products within a musical framework; 4) outsourcing inspiration from other crafts onto a creative approach to the instrument; 5) challenges and upsides of artistic multi-tasking. The presentation of these projects and their outputs is expected to generate a discussion around these topics, which is invaluable to both the author, researchers and performers alike.

Keywords: Prepared piano; Multidisciplinary creation; Creative experimentation; Exploration; Contemporary creation

tyger.lamb.blake.wesley

Marilyn Wyers and Kevin Miller, Chichester College; Independent Artist

Featuring a showing of our original short film for chamber orchestra and dancers, our presentation explores our personal and collective experiences of the aesthetic and technical challenges of remote collaborative creative experimentation in this time of an international pandemic crisis. We discuss the evolving nature of creating a live ballet for a mobile-platform and explore the processes involved in designing and bringing about a dance-poetry film based on William Blake's cautionary nature poem *The Tyger*. Through a Practice as Research approach, we consider how our artistic means and messages had to pivot to reflect the isolating limits placed upon us and magnified the increasingly relevant prescience of Blake's apocalyptic poem.

We consider the experimental processes that emerged amongst our team of composer, choreographer, filmmaker and dancers in the remote collaboration on this mobile-platform project connecting the journey to the idea that the gestalt of Coronavirus and the performers own spaces is the form and meaning of the piece. The format of our presentation will include a performative and interactive introduction, a screening of the final dance-poetry film followed by a discussion session with the composer, choreographer,

filmmaker (probably via Zoom) and possibly some of the dancers (also, via Zoom).

Keywords: Artistic creation and performance; Experimentation in remote collaborative settings; Performing arts and autoethnography

***Avec Picasso, ce matin...* (1984), by Constança Capdeville: A recreation exercise**

Mónica Chambel and Inês Lopes, Universidade de Aveiro / INET-md; Koninklijk Conservatorium Den Haag

The incorporation of transdisciplinary and mixed-media elements in musical works, during the second half of the 20th century, allowed new approaches to the sound dimension (Lehmann 2006), opening the way for new productions and mechanisms of reproduction. The need of grounded protocols for the preservation of electroacoustic music has been pointed out by researchers (Bari et al. 2001; Cuervo 2011). However, despite this awareness, a significant amount of the multimedia contents and materials of 20th-century musical works is now lost or in poor condition. The performance of these works is thus impossible in its original format, but can become a challenging and creative task for performers, as emphasized by researchers who link performance and mixed-music heritage (Boutard and Guastavino 2012; Bosma 2017).

In Portugal, affected outputs include mixed-music by composers mainly active in the second half of the 20th century who have developed experimental approaches to composition and performance, like Jorge Peixinho, Clotilde Rosa and Constança Capdeville.

Avec Picasso, ce matin... (1984), for piano, magnetic tape and lights, was premiered by Madalena Soveral and re-interpreted by Jorge Peixinho (1985, 1993). Existing documentation includes score, light script, program notes, magnetic tape, an audio recording of the performance and an audio file with drafts. The information contained in the materials presents gaps regarding the sequence and temporality of the performative actions, enhanced by the lack of recording of memories from the participants, which compromises their recreation. In order to fill these gaps, the proposed research

presents a collaboration between two students from different research areas (musicology and performance studies). The reinterpretation presented in this recital-conference combined an archaeological (Foucault 2002 [1969]) and ethnographic (Bayley 2011; Canonne 2018) approach with experimental methods (Assis 2015, 2018).

The research questions were: 1) how to systematize musicological contents regarding their integration in experimental performative contexts?; 2) how to establish aesthetic dialogues and artistic understanding starting from archival materials?; 3) how to create synergies between performers and musicologists for the expansion of collaborative performing practices?

The objectives of this investigation were: 1) to promote the preservation and dissemination of works representing the Portuguese musical context of the second half of the 20th century; 2) approach experimental and collaborative methodologies for the recreation of transdisciplinary works; 3) test performative and musicological inputs in collaborative performative practice. The methods applied included: archival research and materials organization; analysis and adaptation for performance of all materials; studio work, involving experimentation with the collected materials, in order to establish a repository of performative practices (fixed or improvisatory); registration and systematization of applied artistic, theoretical and experimental methods, and their results.

Keywords: Constança Capdeville; 20th-century Portuguese music; Collaborative performative practices; Recreation

Voice, experimentation, and meaning in non-semantic music: An analysis and performance of Georges Aperghis' *14 Récitations*

Stephanie Lamprea, Royal Conservatoire of Scotland

My artistic practice and research revolve around the modern classical voice - specifically, ways in which the voice can be utilized as a physical and dynamic instrument, experimenting with varieties of timbres, articulations, and extended techniques. Key questions my work asks time and time again are: How can the voice communicate

as an instrument within and beyond the bel canto technique? And how can the vocalist use direct experimentation of vocal timbres to interact with the broader material world? One lens through which I engage with these questions is that of non-semantic vocal music. Non-semantic vocal music - compositions in which the vocalist sings without traditional use of language - has revitalized modern classical repertoire, re-materialized the voice as a dynamic instrument, and challenged the role of the vocalist on stage. "Devoid of a semantic text and a classical Western vocal timbre," composer Erin Gee asks, "how do composers conceptualize the role or purpose of the voice? What is the role of these non-semantic vocal utterances once they have been removed from a semantic and cultural context?" I will analyse the classical voice in non-semantic music through Georges Aperghis' *14 Récitations*. A 45-minute avant-garde song cycle for unaccompanied voice, *14 Récitations* (1977-78) sets non-semantic text with atonality, extended vocal techniques, puzzles, and repetitions. Aperghis writes: "We see and hear a singer realizing a musical score, but at the same time we witness somebody who can't speak properly... That is the human dimension of this work. We see people in their daily life struggle, people who are not very healthy, people with trouble expressing themselves - elusive mental portraits en miniature."

In this analysed performance, I will show selected scores from the *14 Récitations*, I will talk about each score, and then I will perform each score after its respective analysis. Each movement of the *14 Récitations* is a unique ode to the dynamism of the voice and to what timbral and articulative experimentation can achieve. These scores include structured improvisations, timbral collages, complex and rapid combinations of phonemes and extended techniques, and graphic scores shaped as triangles. Throughout the *opus* are momentary slivers of translation which reveal a woman struggling to speak, but still communicating the meaning of her personal trauma. In studying linguistics, philosopher Mladen Dolar argues that "what singles out the voice against the vast oceans of sounds and noises, what defines the voice as special among the infinite array of acoustic phenomena, is its inner relationship with meaning... the voice has an intimate connection with meaning, it is a sound which appears to be endowed in itself with the will to 'say something,' with an inner intentionality." All utterances of the voice do truly "say something", and Aperghis excavates their inherent meaning in the creation of the *14 Récitations*, a composition that redefines how the modern

classical vocalist can communicate as a corporeal and transformative instrument.

Keywords: Vocal experimentation; Avant-garde; Georges Aperghis; Extended vocal techniques; Timbre; Improvisation; Unaccompanied voice; Voice

Collective session

Tales of Musicoplantophilia: A plant guided journey through the meaning of experimental

Filipe Lopes and Paulo Rodrigues, CIPEM / INET-md / uniMAD;
Universidade de Aveiro, INET-md

Today's popularity of plants within arts practice is certainly influenced by an awareness of our interconnectedness and dependence on nature, made more vivid by the climate crisis.

The artistic practice of four different persons / collectives within and related to nature, particularly to plants, is the seed of this Collective Session: over the recent years, each of these persons / collectives has developed experimental practices frequently exploring sonic and visual environments using elements such as our own body, soundscape sounds, computers, sound sculptures, physical computing, sound installations, and music performances. These have emerged from creative, transdisciplinary, and collaborative practices that are site-specific and deeply influenced by a sense of connection with nature and plants, somewhat led by the biophilia theory as suggested by Edward Wilson. This theory asserts the existence of a fundamental and genetically based human need and propensity to affiliate with life and lifelike processes. Becoming more aware and truly feeling the plants as living entities made us realize that, besides the possibility to use them as sources of information, data, or transducers in technologic assisted artistic experiments, we needed to include them as “companions” to help us in discovering the world, ourselves, and new ways to develop experimental artistic practices. This brings up the question of how to best approach and connect to plants to devise experimental artistic practices?

Our aim, thus, is to identify and grasp holistic ways which makes nature and plants active parts of the creative process which leads to experimental artistic scenarios, rather than elements that output biologic and physiologic data *per se*. To discuss this question during the Session, we will put our endeavours and research outcomes in a large historical and technological perspective, looking at what makes nowadays nature and plants important and appealing for artists all over the world, especially how it relates to the numerous voices expressing a state of “detunement” between humans, other living beings, and our planet. Afterwards, we will continue by presenting the artistic work of each person / collective and discuss the artistic and creative implications that form the basis of each artistic practice. Finally, to wrap up the panel, we will prepare an experimental

improvisation setup comprising online and in person elements, as well as videotaped and live performative events in the best possible way to represent our concerns, research, and experimental artistic practices. Some of the features comprising the performance include in-person performers playing a setup composed of digital musical instruments, human voice, robotic plants and conventional instruments, in addition to online human performers playing soundscapes, sonic objects and fixed materials such as audio-visual videos.

We believe that such endeavours could give rise to innovative artistic questions and artistic experiences that could be beneficial not only for the arts community but also for public awareness.

Keywords: Music performance; Biophilia; Human voice