

1<sup>st</sup> International  
Conference on Sound  
and Image in Art &  
Design '22

# Multimodus '22

1<sup>st</sup> International  
Conference on Sound  
and Image in Art & Design

Polytechnic Institute of Portalegre

HYBRID | Onsite-Online

## Book of Abstracts





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Ao Politécnico de Portalegre um muito obrigado por todo o apoio prestado no processo de organização do evento.



## Introduction | Apresentação

*My hand is the extension of the thinking process - the creative process.*  
Tadao Ando (Japanese architect)

No *feed* do telemóvel assistimos à guerra em direto, na televisão confirmamos os últimos números da COVID 19 e no *tablet* aprendemos a cozinhar com um vídeo do nosso chef preferido. À medida que a vida acontece, uma força centrípeta parece deslocar a mediação audiovisual para o âmago do nosso quotidiano, impregnando-o de sons e imagens que nos informam, ensinam, emocionam e inspiram.

A MULTIMODUS surge da vontade de interpelar - criativa e cientificamente - a multidimensionalidade da experiência audiovisual circunscrita ao panorama das artes e do design, e da urgência em descentralizar a celebração do conhecimento e da cultura em território nacional. Duas premissas suficientemente fortes para que da vontade se passasse à ação, e assim nascesse a primeira edição da MULTIMODUS | Conferência Internacional sobre Som e Imagem em Arte e Design.

“O processo criativo: reflexões sobre a criatividade contemporânea” foi o tema escolhido para o arranque. O que significa ser-se criativo nos dias de hoje? É a criatividade um dom ou pode ser adquirida e melhorada? O que é um processo criativo? São algumas das questões que deverão ser abordadas ao longo dos dois dias de conferência, onde oradores convidados, artistas, investigadores, educadores, alunos e demais interessados se reunirão em diálogo e confraternização.

Organizada pelo Departamento de Artes, Design e Animação da Escola Superior de Tecnologia e Gestão do Politécnico de Portalegre, esta iniciativa académica tem como principal objetivo promover o conhecimento pela partilha de diversas abordagens teóricas e práticas emergentes que contribuem ricamente para os diálogos entre a imagem visual e a imagem sonora no contexto atual das artes e do design. Destinada a estudantes, educadores, investigadores, empreendedores, criativos e técnicos de todo o mundo, esta atividade, que se espera repleta de participantes, acontece nos dias 7 e 8 de junho de 2022, na cidade de Portalegre. Ainda no rescaldo da pandemia, optou-se por um modelo híbrido, com participação física e virtual dos intervenientes; uma escolha que trouxe à Comissão Organizadora garantias de concretização e contribuiu, simultaneamente, para abrir o leque de participações.

Neste evento inclui-se um conjunto vasto de formas de expressão: do design da imagem e do som às artes visuais e audiovisuais, incidindo especificamente ao nível dos domínios artístico, científico e tecnológico, onde coabitam o analógico e o digital, abrangendo desde perspetivas puramente artísticas até empreendimentos voltados para o desenvolvimento da indústria.

Os oradores convidados são profissionais experientes, responsáveis por projetos científicos e atividades artísticas de reconhecido mérito nacional e internacional. Conta-se ainda com a participação, em cinco painéis temáticos, de designers, artistas, realizadores, animadores, ilustradores, produtores, técnicos de som, músicos, compositores e pesquisadores que investigam relações e posições teóricas e práticas que combinam (ou sugerem) de diferentes formas as linguagens visual e sonora.

Este ano, o programa da MULTIMODUS, além das palestras abertas ao público, integra ainda a realização de dois workshops, uma masterclasse, exposições e um concerto.

É nosso desejo que esta iniciativa contribua positivamente para o desenvolvimento do panorama artístico e científico, a nível local e internacional, e que possibilite a criação de pontes interinstitucionais em futuras iterações.

A Comissão Organizadora

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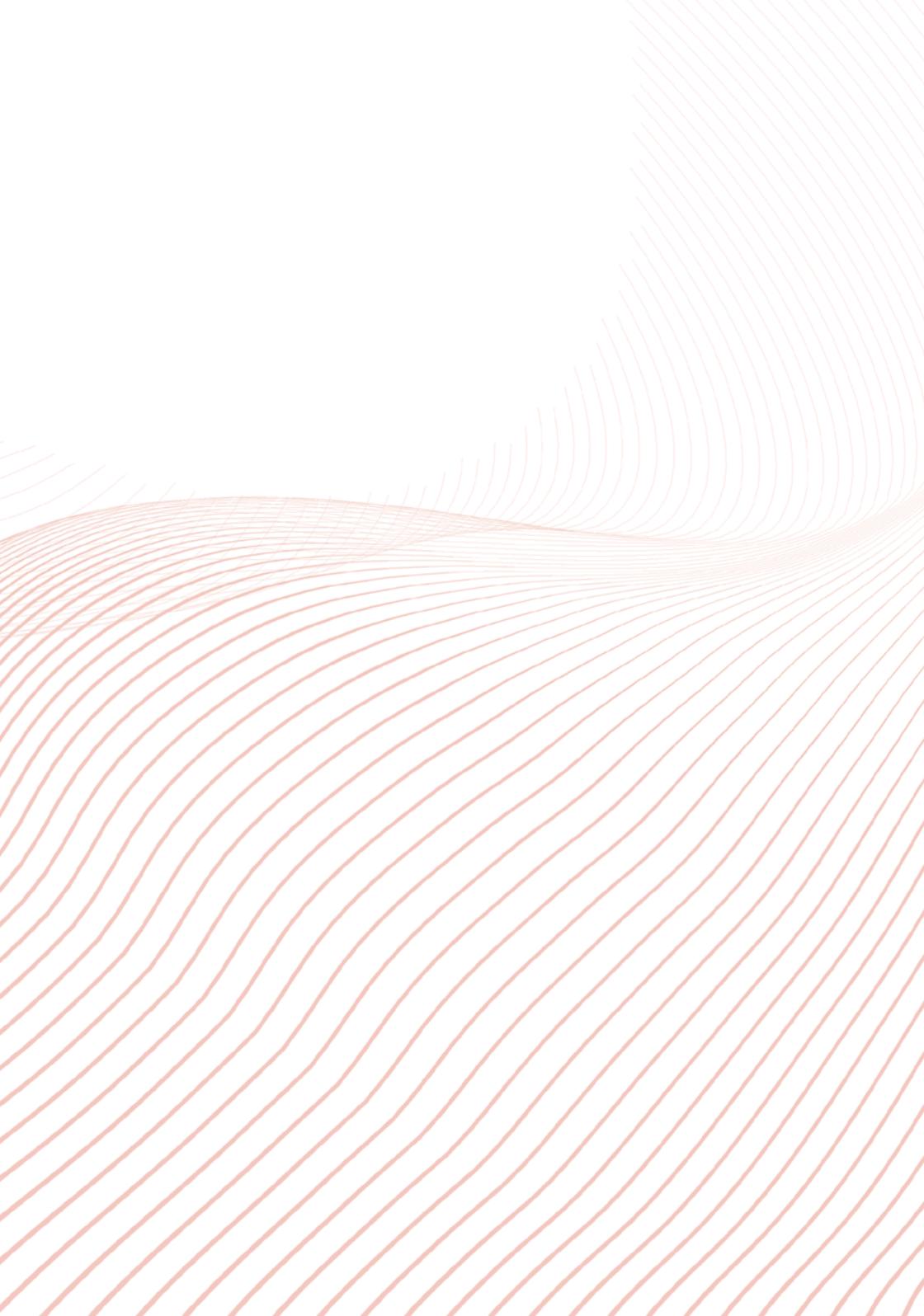


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**PUNTO y RAYA FESTIVAL**







KEYNOTE SPEAKERS | ORADORES PRINCIPAIS

## **Miguel Pires de Matos**

Film director at Praça Filmes

Board member and programmer of MONSTRA Festival

**Biography |** Graduated in Architecture from the Faculty of Architecture of the University of Lisbon in 1991, completed the Piano Course at the Instituto Gregoriano de Lisboa and is currently attending the PhD in Arts at the University of Lisbon and Polytechnic Institute of Lisbon with the theme abstraction in animated film. Developed a professional activity as an architect between 1989 and 2013. He currently dedicates most of his time to animated cinema, being a director at Praça Filmes and a member of the direction and programming team of the MONSTRA Festival. In 2018 he received the António Gaio award at Cinanima for the film 4 States of Matter.

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### **4 States of Matter**

4 States of Matter is an abstract animation film whose main theme is “matter”. It is developed in four different acts/movements, each one with a distinct graphic and sound universe, globally constituting a journey through the four major states of matter: solid, liquid, gas and plasma. In each of these parts three conceptual dimensions coexist, corresponding to three different areas of human knowledge: science, art and religion. These three sub-themes are the sources of inspiration for abstract shapes and sounds as well as movements and rhythms that form the animated sequences of the film.

The aim of this presentation is to unfold some of the creative process of the film, explaining the strategies and artistic operations that led to the creation of the final abstract images, sounds and movements. This is a film about inorganic matter that involved the rejection of all anthropomorphic movement. Thus, the achievement of abstraction did not come from inner emotional moods or impulses but was the result of creative rational thought in every aspect of the film, establishing an intricate set of structural relationships between the parts and the whole. Despite the complex script, the intention was not to obtain a heavy visual and sound ambience for the spectator, but instead, to work with very simple

constituents, justified by deeper levels of thought.

The film includes 3 simultaneous abstract narratives, one inspired in scientific concepts about reality, other in artistic ideas from specific works of art and the last on religious symbolism from different traditions. This means that in each moment, in each part or in the film as a whole, there is always a triple fictional justification for what happens. Almost nothing remains unexplainable, and every aspect of the film is structurally anchored to others, even if this is not visible for the spectator. The glue for all this complexity is performed, on one side by the existence of a visual structure based on the molecular configurations of the 4 main states of matter and on the other by the original music by Carlos Caires, a composer and professor at the Escola Superior de Música de Lisboa specialized in electronic and mixed music.

4 States of Matter was constructed with different animation techniques which include stop-motion as well as 2D and 3D computer animation. The presentation will explain some of the artistic operations used to build the film, contextualizing it under a reflection on the term abstraction and different philosophical notions of reality. Being music often considered the most abstract form of art, the relation of visuals with sound will also be addressed under this domain, explaining some of the main concepts and processes used by the composer to articulate and integrate his ideas with animation.

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## **Raquel Castro**

Centre for Research in Applied Communication, Culture, and New Technologies (CICANT), Lusófona University

**Biography |** Raquel Castro is a soundscape researcher, filmmaker and curator, founder and director of Lisboa Soa festival and the International Symposium Invisible Places. She holds a PhD in Communication and Arts and is an Integrated Researcher at Cicant/Universidade Lusófona. As a director, she highlights the films Soundwalkers (2008) and Soa (2020), where interviews, sound art and sonic ambiances combine to raise awareness of sound. Currently, she curates the exhibition Sound Art in Public Spaces to be presented in Belgium, Netherlands, Denmark, Greece and Norway.

### **Sound Art and Public Awareness**

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The term sound art emerged from the need to name the sonic activities that take place outside auditoriums and music rooms. Eventually, the term “sound” is added to “art”, emphasizing the audible and giving it a prominent place. When Max Neuhaus proposed the concept of “sound installation” he was referring to a type of art that could intersect with people’s daily lives and transform everyday spaces. Contemporary sound art has proved, over decades, to be an insightful commentary on the everyday, the social, the environmental or the political. It contributes to the democratization of space, allowing citizens to become more aware of their context. It is no longer just about noise, but about sound as a resource to understand the world around us and the place we occupy in it.

Listening becomes essentially a political act.

## Stephanie Taylor

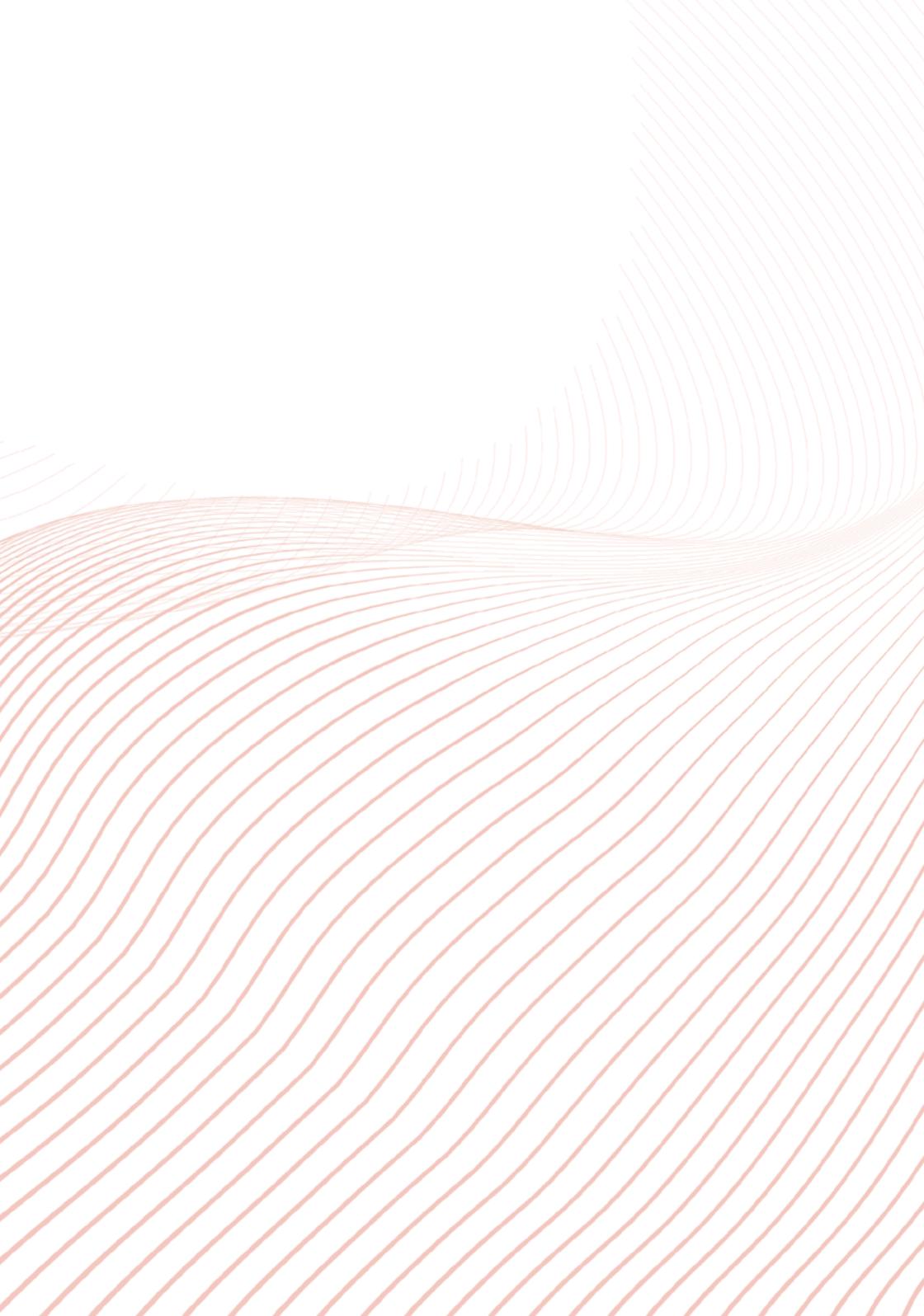
School of Psychology & Counselling, The Open University, UK

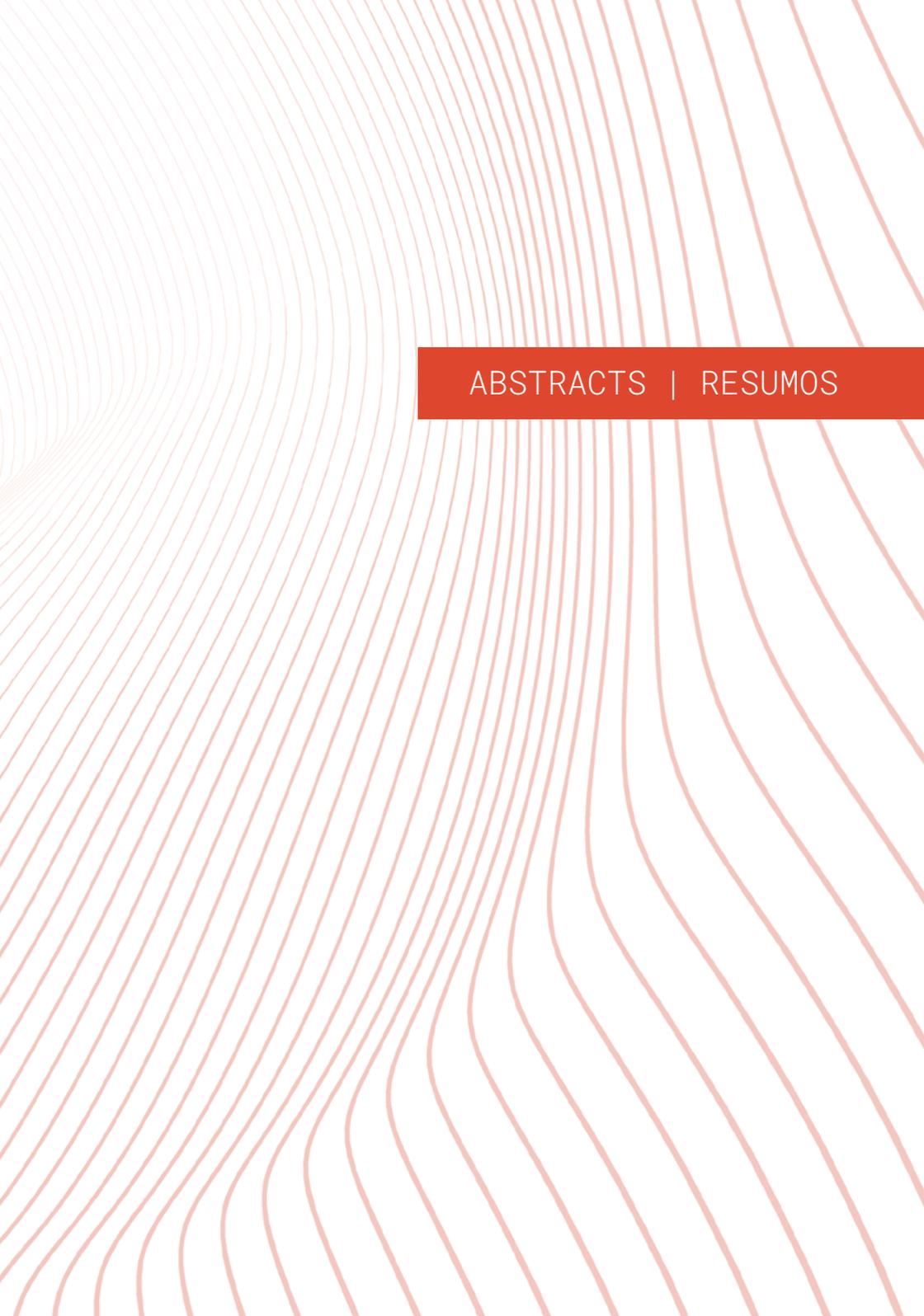
**Biography |** Stephanie Taylor is Professor of Social Psychology at the Open University, UK. Her research investigates creative subjectivities from a critical discursive perspective. She is currently writing about the affective practices around creativity. She is co-author of the monograph *Contemporary Identities of Creativity and Creative Work* (2012) and co-editor of the collections *Gender and Creative Labour* (2015), *The New Normal of Working Lives* (2018) and *Pathways into Creative Working Lives* (2020), and the Palgrave book series *Creative Working Lives*.

### **Creative affect: Experiences of feeling and emotion in the creative process**

As a social psychologist, I'm interested in the meanings and associations of creativity and creative practice that circulate in our culture, and shape our understandings of ourselves and other people as creative. I define 'culture' in a wide sense, as the interactive context in which shared ideas and images circulate, available to us to interpret our worlds and ourselves, to be variously taken up, revised, reinforced, amplified or challenged in new situations and encounters. In my research I approach a participant's account of their own creative practice less as a personal testimony than as an insight into those cultural resources, needing to be compared with other accounts for confirmation but potentially offering social, not individual evidence. This is not to deny or discount individual experience. My interest is the starting points of that experience. Although this approach is not novel, it is often resisted because it can appear to undervalue personal expression, and also to depend on a play of words that denies the experience of feeling and emotion, overemphasising logical connections and rational analysis. In this lecture I will challenge the last point, using a theoretical approach from critical discursive psychology to tease out the feelings and emotions entangled with the meanings of creativity and a creative practice.

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ABSTRACTS | RESUMOS

## **Applied Interactive Mindfulness: a virtual reality grave mourning user experience in the Chapel of St. Michael in Macao**

**Ka Man Ng**

University of Saint Joseph, Macau | ng.ka.man@usj.edu.mo

**Carlos Sena Caires**

University of Saint Joseph, Macau | carlos.caires@usj.edu.mo

**Keywords** | Interactive mindfulness; virtual reality; user experience; immersion; interactivity

### **Abstract**

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It has been proven in numerous research that mindfulness can be helpful to reduce stress and chronic pain (Hall, 2014; Lindström, n.d.; Tong et al., 2015). While interactive mindfulness has been one of the focuses in the recent mobile applications market, usually tackling three essential human senses: audio, visual, and touch, each mobile application has quite some different approaches in terms of interactivity. Some focus on the touch and visual, and some on audio (environmental sounds or instructing meditation). Immersing oneself in virtual reality (VR) creates a constant stream of interactivity. Nonetheless, what are the conditions for an (in)tangible virtual reality to be more effective?

Under the COVID-19 pandemic and lockdown since the end of 2019, Macao has been facing a social concern that we cannot travel easily to visit our decedents' graves abroad, let alone the existing concerns of expensive burial services, lack of space, and alternative burial options. Also, taking into consideration that standard funeral service in Macao is often too brief, and getting briefer, thus lacking the opportunity to properly farewell the decedent, this research is proposing a virtual reality 3D model construction of the Chapel of St. Michael, located in St. Michael the Archangel Cemetery in Macao, to be streamed on a 360 virtual tour platform, Kuula.co. By immersing in this virtual reality, the participant is to have a single user experience for mindfulness with the decedent.

To ensure valid and reliable results that address the research aims and objectives, a single-user experiment is going to be set up with multiple electronic devices, namely, the smartphone iPhone X with cardboard VR, the tablet iPad Pro, and the Oculus Quest 2. The methodology to collect the data will be using observation and simulation. The experiment will be started with an introduction to the project and conducted with no instruction, allowing users to explore and examine all features in this immersive experience. Along with a post-experience survey (interview + questionnaire), we seek its conditions and impacts on Macao residents in terms of interactive mindfulness and participants' expectation of testing, for the first time in Macao, a virtual reality grave mourning experience.

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## A Ilustração em Diálogo(s)

### Helena Major

Departamento de Artes, Design e Animação. Politécnico de Portalegre, Portugal | hmajor@ipportalegre.pt

### Magda Cordas

Departamento de Artes, Design e Animação. Politécnico de Portalegre, Portugal | mcordas@ipportalegre.pt

**Palavras-Chave** | Projeto de Ilustração; Prática Artística; Processo criativo; Exposição; Expressões Artísticas

### Resumo

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O projeto apresentado teve como ponto de partida a criação de um Itinerário Literário com base na vida e obra de José Régio, figura proeminente da cultura portuguesa, que viveu em Portalegre no início do século XX. Neste âmbito, num primeiro momento, foram realizadas um total de 21 ilustrações entre os formatos A5 e A2, que tinham como objetivo transportar o leitor para lugares e vivências da época do autor. Importa salientar que apesar da resposta gráfica que configurou o objeto editorial ser uma interpretação figurativa dos espaços propostos no Itinerário, as ilustrações criadas não sendo literais, revelam uma expressão criativa, intensa e de traço livre, construídas a tinta-da-china e colagem.

Dando continuidade ao projeto, numa segunda fase, foi desenvolvido um conjunto de 32 peças intitulado “De Antigas Gentes e Traças”, o qual constitui o foco principal desta reflexão. Nesta abordagem, transitou-se dos espaços físicos da cidade de Portalegre, retratados inicialmente no Itinerário para a exploração visual das “gentes” que habitaram esses lugares, figuras centrais na realidade social e afetiva de Régio tantas vezes referenciadas subtilmente na sua obra.



**Figura 1.** Cartaz da exposição (à esquerda); Espaço expositivo e performance (ao centro e direita)

Com esta comunicação, pretende-se assim apresentar o processo criativo e expositivo deste trabalho. A partir da análise desta experiência e da identificação dos conceitos que a orientaram, reflete-se sobre a evolução da prática criativa das autoras.

Ao nível da metodologia, construiu-se uma recriação visual a partir do universo de Régio sobre a temática “personagens”. Procurou-se na conceção destas figuras, cada qual singular no seu retrato físico e psicológico, estabelecer a substância da alma de uma época, viva e dinâmica. Para tal foi efetuada uma pesquisa ao nível de imagens fotográficas e textos que serviram de referência ao desenvolvimento do trabalho artístico.

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Nos bastidores do processo criativo, numa dimensão assumidamente experimental, recorreu-se à recolha, transformação e montagem de diferentes materiais. A exploração visual com base na técnica da colagem, facilitou um processo de criação mais intuitivo do que racional. Esta prática artística coaduna-se com a seguinte linha de pensamento de Eurico Gonçalves:

“A atividade criativa implica o prazer de fazer, a curiosidade, o estudo e uma predisposição natural para experimentar o que ainda não se sabe. Experimentação activa e directa, que alterna com momentos de pausa para reflectir sobre o resultado a que se vai chegando. É a partir do que se pensa sobre o que se faz que se constituem os vectores de uma motivação interior. Ao sonhar e imaginar, há que deixar “vaguear o espírito”, acalentando sensações e articulando ideias, antes de formular juízos de valor.” (1991: 25)

Na dinâmica do processo de trabalho, destacou-se o facto de as criadoras, sem uma preocupação ao nível da autoria das obras realizadas por cada uma, colaborarem em espírito de interação construindo objetos imaginativos que transitaram da superfície plana e estática para um espaço tridimensional e sugestivo de movimento. Como evidencia o mesmo

autor: “A criatividade pode cultivar-se individualmente e em grupo, através de experiências que estimulem o pensamento divergente que, ao contrário do pensamento convergente, em vez de uma única solução, aceita várias soluções possíveis, vários modos de resolver o mesmo problema.” (1991: 23).

Finalizado o trabalho visual, a sua apresentação pública foi dinamizada através de um momento de dramatização. As obras, visando a ampliação do seu processo comunicativo, foram interpretadas por uma atriz, que estabeleceu uma ponte onde a obra, as autoras e o espectador se intersectaram.

Como conclusão, ressalta-se a aprendizagem que um processo criativo e exploratório proporciona ao abrir novas perspectivas estéticas e comunicativas, onde novas leituras e associações entre formas, texturas e cores, sobrevivem. Este processo, ao nível da sua construção subjetiva, permite que as obras ganhem voz própria, suscitando o diálogo e interpelando as autoras. Este modo de fazer gera espaços férteis à criatividade e reflexão, e tem impulsionado a interseção das artes visuais com outras formas de expressão, nomeadamente, a dramática. Em suma, todo o processo de trabalho visual e o ato de dramatizar como recurso de extensão de sentidos, caracterizam-se por não serem rígidos ou fechados em si mesmo, mas sensíveis ao próprio momento e contexto. A prática de interação entre as investigadoras tem representado uma mais-valia do ponto de vista intelectual e artístico, originando um constante desafio e crescimento mútuo. Com base nesta experiência enriquecedora, pretende-se futuramente desenvolver um projeto que potencie a relação entre diferentes géneros artísticos, desconstruindo fronteiras, convenções e preconceitos, de modo a conduzir o indivíduo – criança, adulto ou idoso – a uma condição de liberdade criativa e autodescoberta.

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Gonçalves, E. (1991). *A Arte Descobre a Criança*. Amadora: Raiz Editora

## **A Importância da Iconografia nas Imagens Fotográficas, para a Sensibilização Ambiental: um estudo em contexto académico**

**Luís Vintém**

Instituto Politécnico de Portalegre | lvintem@ipportalegre.pt

**Josélia Pedro**

Instituto Politécnico de Portalegre | joselia@ipportalegre.pt

**Palavras-chave** | fotografia; sustentabilidade; ambiente; fotografia social

### **Resumo**

As imagens fotográficas têm sido um importante veículo para a consciencialização da problemática ambiental e social, e têm, em simultâneo, tido um importante contributo para denunciar os problemas sociais e ambientais que afetam populações e o ambiente [2]; [3]; [4]. São exemplo disso os trabalhos fotográficos de de W. Eugene Smith, em “Minamata” [5], ou as várias imagens fotográficas que documentam o fenómeno “Dust Bowl”[4], entre outros. Observou-se a importância que algumas imagens fotográficas relativas a estas problemáticas, conseguem alcançar, disseminando-se mais facilmente, e chegando por vezes a tornar-se referências iconográficas da cultura popular, de como é exemplo, “Migrant mother”, da fotógrafa americana Dorothea Lange [1]. Ao constatar-se esta realidade, partiu-se para a formulação da questão: “que características iconográficas possuem as imagens que provocam maior impacto visual e que por esse motivo podem ter maior potencial de consciencialização ambiental e social?”. Para além de se pretender conhecer melhor estas características, o estudo tem também como intenção final, estudar a possibilidade de replicar estas características nos trabalhos académicos e artísticos por forma a aumentar o seu potencial de empatia com os públicos, e de assertividade em relação aos temas ambientais e sociais.

No presente estudo, numa primeira fase verificou-se o estado da arte e fez-se um levantamento de imagens fotográficas que abordam as temáticas em causa, com maior ou menor impacto iconográfico na cultura popular.

Para a seleção das imagens, determinou-se como pertinente diferenciar as fotografias a partir da sua iconografia, divididas por grupos. As imagens pertencentes ao grupo a), relacionam-se com os efeitos que os problemas ambientais podem provocar sobre as pessoas/populações; o grupo b) integra imagens cuja iconografia se relaciona com os efeitos nocivos sobre o património material; e o grupo c) constitui-se por imagens fotográficas que apresentam os efeitos nocivos sobre o próprio ambiente.

Numa primeira fase metodológica, as imagens fotográficas apresentadas por grupos, serão estudadas através de grupos de foco, e numa segunda fase realizar-se-ão inquéritos à comunidade académica de modo a aferir o potencial do impacto iconográfico das imagens em estudo de forma mais detalhada.

No final desta fase realizar-se-ão imagens fotográficas a partir dos resultados obtidos, e as imagens serão expostas de maneira a permitirem estudos de observação não participada.

Espera-se que a análise dos resultados obtidos possa trazer maior evidência na criação de imagens fotográficas que pretendam alcançar objetivos de consciencialização ambiental e social.

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## **A Method to the Madness: modeling the creative process of new media artists through the analysis of knowledge exchanges**

**Huoston Rodrigues Batista**

University of Applied Sciences Upper Austria, Hagenberg Campus |  
huoston.rodrigues@fh-hagenberg.at

**Juergen Hagler**

University of Applied Sciences Upper Austria, Hagenberg Campus |  
juergen.hagler@fh-hagenberg.at

**Keywords** | creative process mapping, new media art, knowledge mapping, tacit knowledge, explicit knowledge

### **Abstract**

In recent years, a number of scholars have endeavored to model the cognitive, emotional, behavioral, and environmental elements related with the creation of a piece of art (Anzures & Marques, 2022; Botella & Lubart, 2016; Briskman, 1980; Lubart, 2001). All with the goal of comprehending the creative process of producing art. Simultaneously, technical breakthroughs that have a direct influence on the development process of a work of art have never been so fast, and in some circumstances, so extraordinary (Cetinic & She, 2022; Hong & Curran, 2019). Technologies such as Artificial Intelligence not only make the creation of art richer, but also enable new forms of expression, interaction, and media. Some forms of expression have never been so data-driven, made possible by algorithms and Machine Learning techniques. (Wu et al., 2021). The computer is no longer just a tool to help human creators but a creative entity by excellence. This novel perspective has given rise to a new subfield of Artificial Intelligence known as Computational Creativity (Colton & Wiggins, 2012).

However, the creative process is often confused by technicalities and methods that go far beyond the conceptualization of the artwork itself. There are not many works dedicated to understanding and describing what artists actually do during the process of creating an artwork

massively based on computational technologies and algorithms. Furthermore, the intrinsic interaction of the numerous disciplines poses constant learning challenges for artists, as it requires a continuous acquisition and reconfiguration of knowledge. Therefore, this study aims to investigate the creative process of artists whose artworks are developed by algorithms having as main approach the knowledge generated and involved in the process. This work seeks to understand to what extent the processes of knowledge creation, transfer and adoption contribute to the creative results of new media artists, investigating: i) explicit and tacit knowledge flows of new media artists; ii) strategies of knowledge creation, transfer and adoption; iii) contexts in which these processes occur.

To this end, this research will employ an exploratory qualitative approach to unearth processes and understand workflows, capturing key nuances in the creation and reflection of knowledge, particularly tacit knowledge. In this way, artists' attitudes, values, and opinions as well as their interpretations of experiences, events, and understandings can be studied in relation to knowledge exchange.

New media art is an area in which artistic, scientific, and technical study intersect to build a specific form of reflection, and such research are inextricably tied to learning, which spans various types of knowledge flows (Quaranta, 2014; Tribe et al., 2006). The conditions for knowledge generation, transmission, and acceptance in the context of new media art are diverse, and explicit and tacit knowledge are interconnected (Robins, 1999). Interdisciplinarity defines the artistic activities of new media artists since they are driven by curiosity and openness to other fields. However, this makes technical analysis of artistic creation as difficult as the output itself, which motivates even greater effort in attempting to comprehend the creative processes involved in artistic production. This study also aims to provide some reflections on the knowledge exchanges involved in the creative process of new media artists.

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## **Co-Created Media and Online Communities: participatory features of romanian pandemic-themed memes**

**Daniel Ungureanu**

George Enescu National University of Arts | dxungureanu@gmail.com

**Keywords** | digital culture; internet meme; participatory culture; prosumer; remix

### **Abstract**

Since the new coronavirus spread around the world, unconsciously following the paths of globalization, and especially during the lockdowns, we all began to have higher digital connectivity rates. With improved data management and mobile broadband accessibility, Web 3.0 encourages the emergence of various digital co-productions. In turn, internet users (IUs) establish social connections and participating environments in which artistic expression and civic engagement are geared towards innovation and sharing. In this complex digital landscape, in which the user fulfills the dual role of consumer and content creator, the meme – a cultural artifact of modern interpersonal and public communication systems, emerges due to processes of selection, annotation, approximation, editing and/or remixing.

Focused on the memetic pandemic imaginary in the Romanian webspace, the presentation investigates the interactive collaboration of IUs and the participatory features visible in the structural development of memes. Considering that Facebook was the most popular platform in the country in the last years with over 90% of IUs owning an account, the data was collected from popular Romanian meme pages hosted by it. The selection criteria for the pages were given by the number of followers (+20K) and the study interval covers the first year of the COVID-19 pandemic (January – December 2020).

The research method is a qualitative one based on primary data. The selection criterion was the transformations undertaken by memes due to interactions and exchanges with internet users. The results suggest

that in the pandemic period the meme creators actively participated in the creation of a pandemic imaginary and that in Romania there is a community with common interests focused on the production of digital content through collective participation.

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## Collaborative Practices in Art and Design and Social Creativity

**Ana Nolasco**

IADE/UNIDCOM | analascosapopt@gmail.com

**Keywords |** Neve Insular; Collaborative practices in art and Design; social creativity; sustainability

### Abstract

34 Taking as a starting point the transdisciplinary project “Neve Insular” by Rita Rainho and Vanessa Monteiro, I propose a reflection on creativity in the context of collaborative practices in art and design fostering sustainability. Drawing on interviews conducted during trips to the Cape Verde archipelago, I adopt, as definition of sustainability, a practice that aims at the system itself, contemplating its human, cultural, economic and ecological implications, without compromising “the possibility of humans and other forms of life flourishing forever on earth” (Ehrenfeld, 2008, p. 49). In the face of the new problems facing humanity, related to the environmental crisis, creativity and innovation are needed to create solutions capable of changing the framework of the system and not just the symptom. The collaborative practices of art and design are, in this context, currently relevant because, due to a metadisciplinary perspective (Klein, 2000) that creates links to other fields, they foster divergent thinking and creativity.

The “Neve Insular” project started in Mindelo Island, Cape Verde, in 2018, combining the strands of agroecology, education, design and relational art (Bourriaud, 2001), from the implementation of the cotton cycle and within the framework of the preservation of the material and immaterial cultural heritage linked to the Cape Verdean panú di téra. The project began, in a symbolic way, with a cotton planting in partnership with the Madeiral and Calhau Agricultural

Association - which provided the land - held in conjunction with the public at the Neve Insular exhibition at the URDI - Craft and Design Fair of Cape Verde. Subsequently, Neve Insular gained autonomy and organised

a series of agro- ecology workshops with farmers, with the collaboration of some schools, which had participants of different generations. Carding and spinning workshops were also held. In addition to a training space, this project has also contemplates artistic residencies, bringing together artisans, designers and artists.



**Figure 1.** Cotton harvesting – one of the project stages

Through training and the rehabilitation of artisanal knowledge linked to cotton, the “Neve Insular” project contributes to what Manzini calls the “third wave of innovation for distributed systems”, which is characterised by “the rediscovery of traditional craftsmanship (...)” (Manzini, 2013), providing the emergence of what he calls the SLOC (Small, Local, Open, Connected) scenario, in order to develop collaborative platforms to trigger and support social innovation.

The intergenerational workshops and artistic residencies held within the scope of Cape Verde’s tangible and intangible cultural heritage foster sharing networks and affectional ties. This bonds trigger social creativity and are, in turn, strengthened by it thus constituting a dynamic process. I argue here that the birth of ideas is a collective process because, while it takes place in a certain timeless flow through the contamination of

diverse knowledge, it is also informed by the historical-social context (Csikszentmihalyi, 1996), not only because this pre-exists it, but because it is situated in a continuum, feeding on a socially constructed memory and prolonging itself in its reactions/recreations that always manifest themselves in the context of public interaction, whether in the exchange of objects, words, texts or images. The collaborative practices of art and design are thus a paradigmatic example of social creativity because, in a way, they make the creative process more easily visible as a world heritage.

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# Collaborative Proximity Television: the case of La Última Trinchera

**Álvaro Blanco Morett**<sup>1 2</sup>

Universidad de Málaga/Universidad de Extremadura | alvarobm@uma.es

**Alex Iván Arévalo Salinas**

Universidad de Extremadura | alexarevalo@unex.es

**José Luis Valhondo Crego**

Universidad de Extremadura | jlvalcre@unex.es

**Keywords** | collaborative television; citizen media; participatory methodologies; local culture; alternative media

## Abstract

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During the years 2020 and 2021, the culture and entertainment sector was seriously affected by the global health emergency. The concert and theater halls limited their capacity, the cultural agendas of the cities reduced their activities and the social fabric was weakened. A set of mobilizations<sup>3</sup> various cities in the Spanish State made visible the precariousness that the sector was suffering. In this context, different initiatives arise with the aim of keeping cultural agendas active and recovering the social fabric.

This communication presents the experience of La Última Trinchera, a local non-profit collaborative television project. This experience was born

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<sup>3</sup> Red Alert was called the sectoral unification movement of the entertainment and events industry. Protest march was held in Madrid, Barcelona, Valencia, Seville, Malaga, Valencia, Zaragoza, Valladolid, Bilbao, Cadiz, Granada, Alicante, Murcia, among other municipalities.

More information at: <https://alertarojaeventos.com/>

from the concern of a group of artists and audiovisual technicians from the city of Malaga (Spain) to make local culture visible and dynamic, as well as provide entertainment to the population of Malaga. This initiative was carried out in a concert hall in the city of Malaga and had twenty collaborating participants. The project consisted of a late-night television format, with four programs broadcast live at internet streaming platforms and with an audience in the room. Each program was made up of three sections with different collaborators, the broadcast of a pre-recorded neighborhood report and live music throughout the broadcast. In each program, an outstanding artist from music, urban art and cinema was received.

From a theoretical perspective, various conceptualizations have been developed in order to define this type of communicative practice. Due to its characteristics, the experience described is close to the concept of citizen media (Rodríguez, 2001) and radical media (Downing, 2000), however, social and political transformation has not been the main driving objective of the project, although there is a cultural dispute.

The concept that best frames this initiative is the alternative media (Atton, 2001). This initiative could be defined as alternative proximity television or as a variant within participatory video (Vilar & Muñoz 2021). Within the alternative framework, special attention is paid to the processes (Barranquero & Treré, 2021), which is where the transformative potential resides.

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The research strategy applied to this communication is a case study in which a theoretical review is used to identify the experience and a characterization of the creative and production process is carried out. Likewise, the results of the internal questionnaire answered by the project team were analyzed.

The experience provided various learnings both in production and at the organizational level. In this type of projects of a collaborative nature, the figure of the promoter or the dynamization group stands out above a managerial figure. The work scheme opens up the possibility for local groups to convert concert halls or similar spaces into local television sets.

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## Contemporary Art and Sound-Music Creativity in the Teaching-Learning Process

**Susana Maia Porto**

Instituto Politécnico de Portalegre | s.porto@ipportalegre.pt

**Keywords** | creativity; creative music teaching; contemporary aesthetics; musical construction/composition; artistic projects

### Abstract

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In addition to the polysemy of co-existing aesthetic principles, which are inherent to artistic manifestations, contemporary artistic creation merges the arts in such a way that it is possible to connect different artistic expressions and unify them in a single work. We highlight as an example the sound representation in contemporary music that crosses two-dimensional artwork, it means that the representation of sound is done through draws and unconventional musical symbols, since many of the sounds are not convertible into musical notes. Other examples are the art performances where the several expressions inhabit the same space and time - such as dramatization, dance, poetry, multimedia composition, among others - and sound art installations. Therefore, sound and visual images promote the creation and fruition and are interconnected in their own artistic construction/composition.

Established on a holistic view on the creation and construction of art, our purpose is to present projects of an artistic nature - mainly multimedia projects - carried out by students of the Polytechnic Institute of Portalegre in laboratory curricular units. Those projects are based on sound experimentation/exploration, multidisciplinary and transdisciplinarity, graphic representation of sound, musical creation through randomness and musical creation under the principles of electroacoustic music.

The main goal is to reflect on the grounds of contemporary art and how we can promote creativity in the teaching-learning process. In the context of contemporary art we find a new aesthetic concept of Beauty, given that what characterizes a work of art is the intention it entails,

not always perceptible by the general public. In other words, there is an inherent beauty in the act of creation and its intentionality, often considered in the contemporary world as the rupture of all forms and pre-established ideas about art. Embracing contemporary art premises, such as Authenticity and Intentionality, the presented projects are the result of contemporary approaches in musical expression/education, which reflect a thought-provoking, reflective and creative teaching around new aesthetic trends.

## **Creative Processes in the Crooked Hillary Memes: from digital entertainment to memetic warfare**

**Daniel Ungureanu**

George Enescu National University of Arts | dxungureanu@gmail.com

**Keywords** | internet memes; digital entertainment; digital humor; memetic warfare; political campaign

### **Abstract**

Described as a competition over narrative, ideas and social control in a social-media battlefield, or a deliberate and systematic production and spread of memes to influence the target audience, memetic warfare has been studied in recent years as a concept directly linked to information warfare. In this context, digital media theorists Milner and Shifman perceive memes as humorous expressions that criticize current political and social events. Nonetheless, their growing presence in digital spaces constantly promotes passive support for the political systems as they react to major events, adapt to situations and weaponize.

This presentation examines creative production processes of images through a multilayered study of the 2016 U.S. presidential campaign memes with Hillary Clinton. The period studied, from mid-April 2015 to early November 2016, includes key moments of Clinton's campaign such as the presidential run announcement (April 12, 2015), the admission of guilt for using a private email server for official public communications (September 8, 2015), the Benghazi hearing (October 22, 2015), the FBI's statement and recommendations for persecution (July, 2016), the acceptance speech at the Democratic National Convention in Philadelphia (July 28, 2016), the pneumonia diagnosis (September, 2016), the first presidential debate (September 26, 2016), the WikiLeaks emails, the second and last presidential debate (October 2016). The memes were collected from the databases of social media sites (Facebook, Instagram, Twitter) or of content distribution platforms (4chan, Tumblr, Reddit).

The main purpose of the presentation is to determine how and if the meme

production creative process as forms of support of political campaigns eased the transition from digital entertainment to memetic warfare. Thereby, we will follow the roots of the development of digital humor, positioning it on the border between TV entertainment, pamphlets and political caricatures (1). Then, by analyzing the evolution of the “Crooked Hillary” memes, we will explore the visual landmarks that may have designed the internet user’s private experience with digital content (2).



**Figure 1.** "Crooked Hillary" meme example.

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## **Desafios Autorregulamentados no Âmbito da Prática e Criação Artística Contemporâneas: o lugar subjacente da criatividade**

**Daniela F. Pinheiro**

Faculdade de Belas Artes, Universidade do Porto; i2ADS; Vicarte pinheiro.  
daniela@hotmail.com

**Teresa Almeida**

Faculdade de Belas Artes, Universidade do Porto; i2ADS; Vicarte  
talmeida.fbaup@gmail.com

**Domingos Loureiro**

Faculdade de Belas Artes, Universidade do Porto; i2ADS; Vicarte |  
dloureiro@fba.up.pt

**Palavras-chave** | criação e prática artística; criatividade; auto-constrangimentos; imprevisibilidade do acontecimento

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### **Resumo**

Como iniciar uma prática e criação artística diferenciada e criativa? Poderá a definição auto deliberada de um conjunto de regras e limites operacionais repetitivos fazer parte desse início? Como fomentar resultados diferenciais, quando a base criativa para a implementação de uma prática artística é a repetição? Poderão processos regulares invocar resultados inovadores e diferenciais, aos olhos de quem cria? A partir de uma aproximação a estudos no âmbito da criatividade em arte e a práticas artísticas contemporâneas, propomos uma reflexão sobre o modo como a criatividade e a repetição se relacionam com a implementação de desafios autorregulamentados e a obtenção de resultados diferenciais no seio de processos plásticos aparentemente repetitivos.

No estudo “Behind the Scenes of Artistic Creativity” (Chemi et al., 2014), Tatiana Chemi refere que raramente os artistas se detêm em reflexões sobre o papel da criatividade na sua prática artística. Constatando, a partir de um conjunto de entrevistas realizadas em várias áreas e campos da criação, que a maioria dos artistas não questiona a validade criativa do

seu trabalho, Tatiana Chemi refere que as preocupações dos próprios se dirigem antes para o processo de formulação e criação das suas propostas. Ainda assim, apesar dos processos artísticos não incluírem exclusivamente dinâmicas e resultados criativos, o contexto e o meio envolvente esperam habitualmente por atos de novidade, criatividade e adequação, por parte daqueles que se envolvem com a atividade artística. Como resultado, a criatividade permanece associada a atos de criação, composição ou interpretação artísticas (Chemi et al., 2014), mesmo quando o seu autor adota uma atitude ou um procedimento repetitivo como *modus operandi* (Amandi, 2010).

A cineasta Annette K. Olesen (n.1965) entende a criatividade como resultado de uma necessidade de se expressar. Essa necessidade leva-a, por conseguinte, a procurar e a encontrar as respostas e ferramentas necessárias para a questão/problema que se atravessa à sua frente (Chemi et al., 2014). Segundo Marina (1993), os artistas lidam com aquilo que os especialistas em Inteligência Artificial intitulam de problemas mal-estruturados. Patricia D. Stokes (2006) reitera este posicionamento, referindo que a criatividade apenas é possível a partir de problemas mal-estruturados, uma vez que não sendo totalmente definidos e pré-determinados, salvaguardam um espaço para a imprevisibilidade e a im-possibilidade diferencial do acontecimento (Derrida, 2012), neste caso, do ato repetitivo.

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Sob este posicionamento, parece-nos que a definição de desafios e/ou problemas autorregulamentados, associados à motivação e à atividade de um autor, pode estar na base da sustentabilidade de uma prática artística simultaneamente repetitiva e diferencial. Através de uma análise à obra e às práticas artísticas de Cláudia Amandi (n.1968) – abordando o gesto repetitivo e acumulativo como metodologia criativa no espaço do desenho –, Javier Pividal (n.1971) – analisando o conjunto de regras formais e elementos gráficos criados pelo artista, como forma de construir as suas diferentes propostas no campo da pintura, escultura e instalação – e Anoka Faruqee (n.1972) – abordando a repetição a partir da ideia de cópia no espaço da criação pictórica – tentamos perceber como a implementação de desafios autorregulamentados por parte destes artistas, lhes permite, simultaneamente, contrabalançar uma estabilidade processual e laboratorial com a imprevisibilidade e incerteza especulativa próprias da criação artística.

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## Design Process of Augmented Instruments

**Daniel Santos Rodríguez**

Technical University of Madrid | danitaetsu@gmail.com

**Henrique Portovedo Marques**

University of Aveiro | henriqueportovedo@gmail.com

**Keywords** | Augmented Instruments; Computer Music; Contemporary Music

### Abstract

Augmented instruments (instruments expanded through their placement in a sound chain, the use of sensors and software tools) use advances in electronic and computational technology to develop new forms of expressiveness in musical performance, sonic possibilities, and compositional languages, widening the frontiers of musical art and its staging.

This article focuses on describing the design process behind a series of case studies of hyper instruments: The augmented violin developed at IRCAM (Frédéric et al. 2006), the Hybrid Augmented Saxophone of Gestural Control (HASGS) (Portovedo, Lopes, and Mendes 2018), the augmented concert harp (Sullivan et al. 2018) and the sets used by Yaron Deutsch for the performance of contemporary electric guitar works.

One of the aims pursued by studying these examples is to categorize the augmented instruments according to several parameters: types of sensors and hardware, mapping, need for computers and kind of software, type of gesture control (Newton and Marshall 2011), graphical user interface (Portovedo, Lopes, and Mendes 2018) and need for a musical assistant (Perrotta, Menezes, and Martins 2014). These parameters can be defined as present or absent (mapping, graphical interface, musical assistance, use of computers), specific data (sensor name, software name) or two values parameters (applicable to gesture) (Jansenius, Wanderley, and Godøy 2009). The data is analyzed for each case study and plotted in tables. Another aim is to characterize non-measurable aspects such as

the importance of the performer and his involvement in the design of the instrument considering the relationship of the new instrument with the base instrument and the connection among the composition, the performance of the instrument and its theoretical and technological design. Finally, the flexibility of augmentation, that is, the possible appearance of new uses for which the instrument was not originally conceived, is also discussed.

The case studies range from Deutsch's proposal, where the performer designs the different hardware connections, no software is used and each set is defined based on the work to be performed, to the concert harp, where technological analysis prevails, the performers test the operation, mathematical and mapping models are of utmost importance and there is a graphical software interface for the user. Like this case is the augmented violin of IRCAM, without a graphical interface in its description, but with a much closer collaboration of the composers. Finally, the HASGS approaches the versatility of the Deutsch sets and is designed from the interpretation and its needs, but places special emphasis on the composition of several specific works for the instrument and on the importance of the graphical user interface.

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From the analysis of collected data, criteria are established to describe the augmentation process and the different organological typologies, making it possible to organize the family of augmented instruments under a logical classification that allows delving deeper into their repercussion and possibilities. The additional description about the “non-mensurable” offers an image of the background and artistic framework in which the instrument is inscribed.

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## “Eternar a Natureza” - A Espiritualidade na Arte

**Ana Gaspar**

ESTG / Instituto Politécnico de Portalegre | apaulag@ipportalegre.pt

**Palavras-chave** | arte; círculo; natureza; repetição; movimento

### Resumo

O tempo e o espaço são representações exclusivas do ser humano. É neste contexto uma necessidade unicamente humana, em que as imagens criadas visam a eternidade desse momento único de apropriação do espaço e do tempo, imortalizados no campo do visível. Uma imagem é um resultado numa representação, na qual e em cuja associação de conceitos se visa demonstrar um processo de interiorização e de transformação. Esta possibilidade atinge a sua visibilidade a partir da observação do mundo que nos rodeia e num acto, cuja importância se deve exclusivamente ao impulso de viver e de prolongar este instante numa perspectiva artística humanizada.

Este artigo visa questionar do ponto de vista científico e artístico, bem como e através de um olhar atento, uma problemática da necessidade de criar. Neste contexto e a partir de um projeto artístico designado por “Eternar a Natureza” e realizado no espaço e no tempo, entre janeiro e novembro do ano de 2020, que se propõe uma aproximação ao processo de criação na obra de arte contemporânea e à necessidade de uma teorização da mesma.

A partir do projeto desenvolvido e através da sua representação de carácter naturalista, visamos uma resposta à necessidade de criação do círculo, uma forma que parte de uma base histórica e antropológica, cujo enquadramento espiritual para a sua existência e significado associado nos remete para os ancestrais e repetidos ciclos da Natureza. Deste modo, a transferência de um conjunto de associações no campo artístico tem o seu contributo para uma panóplia de reproduções de carácter visual ao longo de milhões de anos, tendo como fonte de inspiração a Natureza.



**Figura 1.** Foto exemplificativa do projeto “Eternar a Arte”

E, é exactamente no campo da contemplação, e a partir do natural, ou “Do Tirar Polo Natural” como Francisco de Holanda escreveu acerca da representação a partir da observação do mundo natural, em pleno período do Renascimento, e ainda influenciado pelo célebre Leon Battista Alberti, pintor, músico e cientista, que nos propomos questionar método científico e método artístico.

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Neste enquadramento o ser humano tem procurado encontrar um modo de representar o visível, e é estimulado por este mundo contemplado, sentindo uma necessidade de o registar. A partir deste sentimento surgem campos de conhecimento transversal ao registo, a pura realidade e a transferência desta em processos criativos, cuja espiritualidade e emoção se revestem numa forte contribuição ao desenvolvimento do conhecimento no campo das artes.

Contudo, cada indivíduo tem na sua origem um percurso de observação e de criação. É neste contexto que colocamos a seguinte questão: qual a necessidade de explicação para um processo criativo no campo artístico.

Tratam-se de desafios colocados no campo do pensamento humano, e desenvolvidos a partir do entendimento do mundo que nos rodeia. Contudo, “atenção à necessidade interior, como um caminho para expressar a necessidade mística”, frase célebre de Kandinsky, que nos demonstra a importância da vida espiritual, à qual a arte também pertence, sendo um dos seus mais poderosos agentes, cuja tradução se faz num movimento complexo mas límpido no campo da criação artística.

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## Experience the Past in the Present with Immersive Technologies

**Tin Lan Chang**

University of Saint Joseph | 391876324@qq.com

**Filipa Martins de Abreu**

University of Saint Joseph | filipa.martins@usj.edu.mo

**Keywords** | Virtual Reality; Immersive Experiences; User Interfaces; Historical Reproduction; Storytelling.

### Abstract

Countless historical sites worldwide have become unrecognisable based on their historical context. Many are cultural heritage structures with significant historical and aesthetic importance. The majority have not been well preserved; worse, some were demolished (Stenning, 2015). Furthermore, structures are part of a dynamic and changing environment, and their location within the original landscape is not always clear. People have gradually forgotten cultural traditions as environments where historical stories took place, and the look and feel have been corrupted.

Immersive Virtual Reality (V.R.) allows us to relive and explore the past. However, in the Pearl River Delta Region, specifically Macau S.A.R., V.R. is still in its infancy and is not frequently used for reproducing historical sceneries.

Our research focuses on reproducing heritage structures and scenery based on scarce historical information. It shows how to incorporate facts and memories into the design and create engaging, immersive experiences in V.R. scenery that takes place, both inside and outside of a cultural heritage site that has lost its original appearance. Following this, a prototype was created with specific parameters relating to past and present sceneries. We partially reproduced an existing building complex currently being used for creative and commercial purposes, but it was a shelter for the poor and a house for old ladies to live in. There were not enough facts or images linked to the inner space in the past. Inadequate information allows audiovisual scene creators to be more imaginative.

The prototype focuses on a functional design that integrates cultural traits tied to local industries.

The researcher used image processing software, and web 3D tools (A-Frame 1.1.0). Users can navigate by virtually “walking” and starting the visual tour; simultaneously, the story unfolds as the timeline progresses. After entering, the users jump from the present to a specific era in the past. With audio guidance, users enter the private space, shared areas, working space, etc. Users can interact with objects from the virtual scenes while the interface displays relevant audiovisual introductions. Users could utilise the virtual system to learn how the old ladies led their daily lives in the Pearl River Delta Region and grasp the local single ladies’ group lifestyle at a specific time in the past (Kwong, 2020). The interactive experience enhances the users’ interest; additionally, the users become more familiar with the region’s traditional customs.

With this approach, we can create old stories using modern technology. A-Frame provides users with great convenience and can be used by any Internet browser without relying on professional V.R. devices. The content from this usage provides a greater understanding of our heritage buildings and their historical context to the wider community. This could be used in other heritage sites worldwide to reproduce and maintain structural qualities over time. This immersive experience could be a means to navigate the past while in the present. This application could benefit exhibition developers, and visitors, notably in exhibition guided tours, virtual tours inside museums, or educational assisted historical storytelling.

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## Information Visualization for Explaining Artificial Intelligence: exploring the Perceptron

**Marco Heleno**

NOVA LINCS & Faculdade de Ciências e Tecnologia, Universidade NOVA de Lisboa [mjheleno@gmail.com](mailto:mjheleno@gmail.com)

**Miguel Carvalhais**

INESC TEC / Faculdade de Belas Artes, Universidade do Porto | [miguel@carvalhais.org](mailto:miguel@carvalhais.org)

**Nuno Correia**

Universidade NOVA de Lisboa | [nmc@fct.unl.pt](mailto:nmc@fct.unl.pt)

**Keywords** | Information Visualization, Explainable Artificial Intelligence, Perceptron, Decision-making, Black-box

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### Abstract

This work is part of a doctoral research that aims to study how Information Visualization can contribute to the explainability of Artificial Intelligence (AI), through a practice-based and critical exploration of the inner workings of Artificial Neural Networks (ANN). The expected outcomes are visualizations that explain (Ehsan & Riedl, 2020) and accommodate exploration possibilities (Dörk et al., 2013), without requiring specific knowledge for its interpretation, but allowing the development of critical thinking (Obrist, 2019), on the inner workings of ANNs. These visualizations are developed to be accessed in physical or digital exhibition environments.

Researchers and software engineers have been developing increasingly complex ANNs by altering architectures and adding data processing units. These changes add capabilities to these systems, but also increase the number of calculations involved. This accretion creates an emerging statistical complexity that turns these systems into black-boxes (Samek & Müller, 2019). This opacity combined with the ubiquity of these AI systems has led researchers to emphasize the urgency of their explainability to provide reliable interactions (Ehsan & Riedl, 2020; Obrist, 2019).

This problem gave rise to the recent field of Explainable Artificial Intelligence (XAI), which aims at providing perceptible explanations of the inner workings of AI systems. Allowing a human to see beyond the system's decision is to provide an explanation of the reasoning behind that decision. XAI is focused on explaining the decision-making process rather than the decision itself (Samek & Müller, 2019).

Because Information Visualization has shown to be an effective way of explaining dense incomprehensible digital information structures (Dörk et al., 2013), this research starts from the hypothesis that Information Visualization can be equally useful to reveal the referred black-boxes.

ANNs are networks of artificial neurons inspired on the biological neuronal structure. The first artificial neuron model was introduced by Warren S. McCulloch and Walter Pitts in 1943, when they described a system that takes inputs, processes those inputs, and returns an output. In 1958, Frank Rosenblatt, inspired by their work, developed a computational extended version of the original artificial neuron: the Perceptron (Rosenblatt, 1958). Although the Perceptron may seem contemporaneously simple, it presents challenges for the non-expert user's understanding. This system also left procedural legacies that are transversally present in contemporary ANNs.

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During this ongoing research, six visualizations were developed. These aimed to understand and reveal the inner workings of the Perceptron. They were performed iteratively, but at the same time, with different approaches, in order to test and inform a last visualization of the Perceptron (under development), which will contextualize and guide the non-expert user to an explanation of the system's decision-making process. During this research, it was possible to decompose and graphically represent: 1) the decision iterations, 2) the causality present in these artificial decisions and 3) the transformations that occur in the Perceptron weights, in addition to enabling their manipulation.

The referred visualizations, presented in development order, are the: Perceptron v.1<sup>1</sup> ; Explorable Perceptron v.2<sup>2</sup> ; TransparentPerceptron v.3<sup>3</sup> ; Perceptron Explinator v.4<sup>4</sup> ; Perceptron Explainer v.5<sup>5</sup> ; Perceptron Decision Explainer v.6<sup>6</sup> .

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1 <https://marcohelena.gitlab.io/projects/perceptron/>

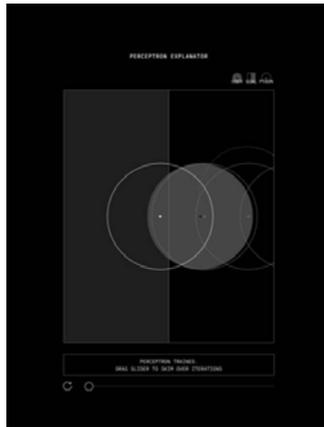
2 [https://marcohelena.gitlab.io/projects/interactive\\_perceptron/](https://marcohelena.gitlab.io/projects/interactive_perceptron/)

3 <https://marcohelena.gitlab.io/projects/transparentperceptron/>

4 <https://marcohelena.gitlab.io/projects/perceptronexplanator/>

5 <https://marcohelena.gitlab.io/projects/perceptrondecisionexplainer/>

6 <https://marcohelena.gitlab.io/projects/perceptrondecisionexplainerv6/>



**Figure 1.** Perceptron Explainer v.4

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## Innovative Design Based on “Toilet Revolution”

**Guang Yong Liang**

Guangzhou City University of Technology | 519954614@qq.com

**Tin Lan Chang**

University of Saint Joseph | 391876324@qq.com

**Keywords** | architectural form; revolution; regional culture; public toilet; functional design

### Abstract

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The traditional way of design has inherited constrained lines. Thus, architects and designers are trapped in such difficulties as inherent templates. On the one hand, a design needs to solve practical problems. On the other hand, the design could be full of creativity, unexpected, and flexible in appearance. Across Guangdong Province in South China Region (Guangdong), small-scaled and inconspicuous buildings have become the impression of public toilets. Many old public toilets are dirty and messy, which cannot accord with the city’s image and hygiene requirements and do not match the level of economic and social development. Being the primary development method, renovation such as the reform of public toilet design is imperative. (Cheang, 2017)

This article puts forward design suggestions and creative attempts based on the practical analysis of the public toilet. In most urban areas in Guangdong, there are several issues with toilet design, such as the insufficiency of “ladies’ room”, the lack of consideration for the disabled, the shortage of equipped services for infants and children, moreover, the scarcity of regional characteristics design.

In our case, the architect solved the common difficulties and achieved several objectives. Firstly, the above problems have been worked out in terms of practical uses. The inner space is equipped with an extra unisex toilet that rarely exists in the city, sufficient auxiliary facilities for the disabled, instructive devices for the children, and capacious, comfortable

waiting spaces for all the users. Secondly, the design concept has adopted a streamlined shape in order to give the structure a unique architectural personality. In detail, the design has extracted representative plant forms combined with local cultural elements and modern techniques. The building was designed to be a “budding flower” above the artificial lake’s surface within the square, showing the city’s symbolic flower features.



**Figure 1.** Budding Flower Building – 3D render

Furthermore, perfect lighting for interior space has been achieved by adopting crystal clear “dewdrops” from the exterior “petals”. It not only reflects the regional culture but also improves the ceiling’s functions. Eventually, the architectural form does not exist in a traditional sense. It is reminiscent of public buildings such as theatres, concert halls, libraries and so on. This project is a brave endeavour to lead a revolution of designing a building that does not look like “what it is” traditionally.

In conclusion, as public building in the city, the public toilet is a mirror which can reflect the civilization of a city. (Yan et al., 2021) The actual completion of this project demonstrates the improvement of design cognition among the government and the public. Implementing the “toilet revolution” can improve people’s living environments and renew their cities. It can also trigger more thinking from architects about other functional designs.

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## **Lista de Verificação de Design de Rótulos e Embalagens para a Sustentabilidade: uma ferramenta para a sustentabilidade de projetos académicos, com potencial para aplicação em contexto profissional**

**Josélia Pedro**

Instituto Politécnico de Portalegre | joselia@ipportalegre.pt

**Vanda Correia**

ICNOVA- Instituto de Comunicação da NOVA , Instituto Politécnico de Portalegre vcorreia@ipportalegre.pt

**Pedro Matos**

CIAUD F. Arquitetura, UL; VALORIZA C. Investigação Valorização Recursos Endógenos; Instituto Politécnico de Portalegre | pmatos@ipportalegre.pt

**Palavras-chave** | design, sustentabilidade, embalagens, rótulos, educação

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### **Resumo**

A investigação teve por base a necessidade de conduzir os projetos de design de comunicação para práticas mais sustentáveis, e de interligar as diferentes fases do projeto de design de forma consequente, sob o ponto de vista da sustentabilidade. Pretendeu-se também clarificar os contributos do design para as metas a alcançar nos Objetivos de Desenvolvimento Sustentável 2030.

O estudo iniciou-se em três unidades curriculares do terceiro do ano do curso de Design de Comunicação, de acordo com as fases de um projeto: Design Sustentável; Design de Comunicação V e Produção Gráfica, tendo por base a ideia de que a partilha do projeto de design entre várias unidades curriculares do curso permite fomentar o ensino e curricula para a sustentabilidade, disseminando práticas para a sustentabilidade nas unidades curriculares que não possuem estes conteúdos.

Escolheu-se o design de embalagens e rótulos como projeto para aplicar as medidas de sustentabilidade e para experimentação do método, por ser

transversal às várias dimensões a explorar, a ambiental, a social e a económica; e por ser significativo no contexto dos produtos regionais endógenos.

De entre a literatura considerou-se que as “listas de verificação” são ferramentas úteis e que permitem a flexibilidade necessária para que se desenvolva um projeto partilhado entre várias unidades curriculares, e em simultâneo permitem guiar o projeto para a sustentabilidade nas suas diferentes fases, facilitando, igualmente, a futura adaptação da ferramenta ao meio profissional.

A Lista de Verificação de Design de Rótulos e Embalagens para a Sustentabilidade (LVDRES), foi construída a partir de exemplos de referência, com predominância das metodologias apresentadas no Delft Design Guide (2020), de como é exemplo a Ecodesign Checklist e na Lista de Design de Ciclo de Vida de Frazão et al (2006); complementadas com a lista de Delfino et al (2015), destinada a embalagens.

A Lista de Verificação subdividiu-se em três fases relacionadas com o desenvolvimento do projeto e aplicou-se nos anos letivos entre 2020 e 2022, conduzindo a dezasseis projetos de design de rótulos e embalagens, potencialmente mais sustentáveis. Após a primeira aplicação da ferramenta foram realizados inquéritos aos estudantes que participaram no estudo, e foram realizados grupos de foco com alguns dos estudantes que constituíram os grupos de trabalho de modo a envolver os estudantes na condução dos trabalhos e na importância da mudança para a sustentabilidade. Conclui-se que a ferramenta foi útil na condução dos projetos entre as três unidades curriculares e na verificação da sustentabilidade dos projetos, e que foi, em casos particulares, utilizada pelos estudantes noutros contextos projetuais. A partir da avaliação e das apreciações realizadas pelos estudantes, e a partir das sugestões recebidas após a apresentação da LVDRES em conferências sobre a temática, realizou-se uma reestruturação quanto à forma e clarificaram-se conteúdos. A Lista de Verificação foi aplicada pela segunda vez, dividida em três grupos: Grupo A- Embalagem e Rótulo/ Materiais; Grupo B- Rótulo/ Grafismo; Grupo C- Produção. Possui atualmente 77 tópicos entre as dimensões ambiental, social e económica, e possui ainda um campo adicional com notas explicativas e indicações para pesquisa mais detalhada sobre assuntos específicos, onde os estudantes assinalaram algumas dificuldades quer no entendimento do assunto tratado, quer de pesquisa auxiliar à prática de projeto.

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# **Macao Soundscape as an Analysis Tool for Sound Quality Assessment**

**Pedro Pestana**

Universidade Aberta | pedro.duarte.pestana@gmail.com

**Álvaro Barbosa**

University of Saint Joseph | abarbosa@usj.edu.mo

**Gerald Estadieu**

University of Saint Joseph | gestadieu@usj.edu.mo

**Keywords** | soundscape; soundwalk; sound mapping, acoustical analysis

## **Abstract**

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Macao SAR, China is one of the more densely-populated territories in the world, and as such necessarily struggles with Soundscape quality. Nonetheless, the territory has already been identified as a unique location for to function as a Soundscape living lab (Cordeiro et al., 2014), since it has a very small manageable area that includes many types of geographical varieties, from extremely high density urban areas to natural environments with dense vegetation highland or varied water front typologies. In addition, Macao has extremely wide multicultural population with a broad range of subjects that have diverse cultural perceptions and thresholds in regards to sonic cognition. The potential impact of this diversity has already been noticed in both tourism (To & Chung, 2019) and research (Chung et al., 2016).

The concept of Soundscape itself is garnering increased awareness as a viable alternative to assess the quality of the sonic environment, of use to policy management and legislation, shown not only by the increasing numbers of scientific articles on the subject (Moscoso et al., 2018), but also by recent international standardisation efforts in measuring it (ISO, 2018).

In this talk we shall give a preliminary description and illustration of the

Soundscape in a territory that is rich in diversity and has huge potential for citizen participation. This includes approaches like noise mapping, sound mapping, Soundwalks, grounded theory efforts for detailed descriptions of the environment and use of alternative objective metrics. We will describe how to use the richness of this gathered data in developing artificial-intelligence algorithms to autonomously assess and predict the evaluation of a given Soundscape based on recordings alone. This goal will alleviate the intense human effort in subjective assessment, and may prove to be an effective and substantial diagnostics tool in planning the soundscape for prospective built environments, functioning not only as an analysis and diagnostics tool, but as a design strategy for a sustainable sonic future.

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## Mobile Production of Sound and Image

**Simon Order**

Hidden Shoal Recordings | liminaldrifter@gmail.com

**Stuart Medley**

Edith Cowan University | s.medley@ecu.edu.au

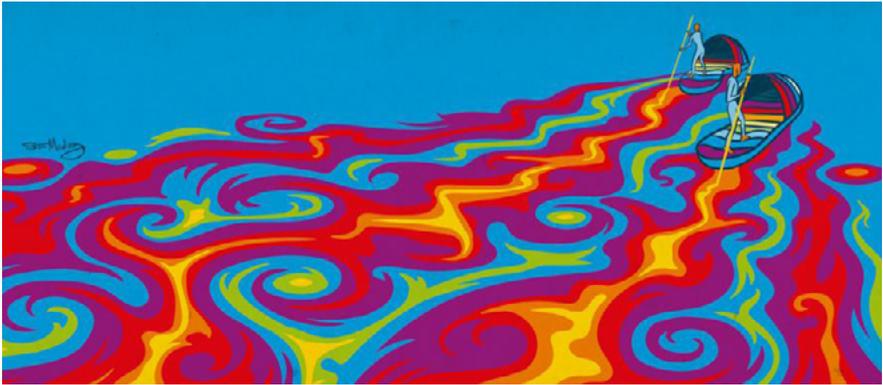
**Keywords** | mobility; portable production; creativity; autoethnography

### Abstract

Space and environment are cognitive stimuli, as per Mel Rhodes' work on creativity. Rhodes used the term 'press' for the multi-factorial influence of experience on creativity (Rhodes, 1961, Abraham, 2022). This paper theorises a multi-sensorial approach in which geographic mobility and virtual connection enhance creativity in the production of sound and image equally.

The dramatic anthropological shifts in sound and image production practices in the post-analogue paradigm are driven by the increasing functionality of digital audio technologies on the musical side of the equation, and open source design tools for tablets on the graphics side. A recent trend for both disciplines is a move towards the mobile tablet computer as a production tool, freeing up creators in music and graphic design to create while travelling.

This paper arises from the practice-led research of two makers: a musician and an illustrator. The musician working in sound, the illustrator designing visuals for the album art of that musician. Many of the musician's compositions evolved on hand-held mobile devices, away from the studio, while travelling or visiting new places. This sense of contemplative, exploratory rootlessness imbues his work with the wistfulness and open narrative often associated with travel. Similarly, dream-type design imagery is enabled by being somewhere geographically different, and the art for the packaging of these recordings was likewise developed on a tablet while the illustrator was travelling, away from his usual studio.



**Figure 1.** Album cover art by Stuart Medley for Liminal Drifter's (Simon Order's) *The Dreams* album on Hidden Shoal Recordings

Employing the practice of evocative autoethnography, both creators diarised their work. Unfamiliar environments create positive friction with personal history, revealing mobility as a boon to creativity. We explain, through the use of the Double Diamond design model of expanding and contracting ideation and development, a case study of our collaborative work.

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We ask whether a theorisation of mobile production practice be articulated that accounts for creativity in both the sound and image spheres, and what commonalities were experienced in creating on portable devices. This presentation will include the music and design developed through a fruitful, five-year working partnership between these creators, to demonstrate the creativity enabled in what the musician describes as a liminal space between the geographical and the virtual.

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# O Som do Silêncio, em Tempos de Pandemia: sonoridades fotográficas

**Mário Mesquita**

University of Porto | mmesquita@arq.up.pt

**Keywords |** som; silêncio; território; urbanidade; natureza

## Resumo

Entre os meses de Março e Maio de 2020, Portugal esteve sujeito a um Estado de Emergência motivado pela pandemia (Covid-19). Nesse período de distanciamento social, a maior parte das ruas das cidades perderam substancialmente as suas dinâmicas urbanas que as transformavam em espaços sonoros, ressonantes do ser humano e das suas actividades quotidianas.

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Dessa situação resultou uma novidade em termos ambientais com as repercussões sonoras que se tornaram, com o passar dos dias, mais evidentes aos ouvidos mais atentos: os pássaros voltaram e dominaram o contexto de sonoridades produzidas à escala da cidade, requalificando as suas paisagens acústicas e criando territórios novos entre a estridência e o silêncio, naturalmente amplificados pelo vazio humano que dominava.

Nesse sentido, o som do silêncio ocupou espaços outrora ruidosos e, alternando com os sons dos pássaros, recompôs completamente a sinfonia da urbanidade, aproximando-a de uma ambiente de aldeia. É um silêncio incomum, de invisibilidades e de vazios. É um silêncio que ensurdece. Mas também é um silêncio que desperta as consciências para a necessidade de se reponderar a forma de ocupação das cidades, tão impositiva por parte dos seres humanos, tão condicionante dos sons dos outros seres.

O som do silêncio em tempos de pandemia é também um alerta a partir da Arte, num produto híbrido entre a fotografia e a acústica, para as sociedades contemporâneas relativamente ao facto de ser imperativo repensar os tempos e os modos de ocupação do território, respeitando a natureza e os sons dos outros seres, julgando-se, através desta comu-

nicação, ajudar a reflectir sobre as sonoridades presentes nos territórios que, muitas vezes, pela aceleração da vida actual, são remetidas para graus muito distantes de invisibilidades, criando insonoridades urbanas que nos afastam.

O som pode constituir um instrumento de conexão e de mediação para o equilíbrio do planeta, e estes tempos de distanciamento social permitem-nos pensar que é vital para a sobrevivência do ser urbano.

## On Scale: ontological variations in photography

**Miguel Santos**

LIDA, ESAD.CR; IP Leiria | miguel.f.santos@ipleiria.pt

**Keywords** | scale; photography; ontology; subjectivity; nonhuman

### Abstract

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The concept of scale refers to complex phenomena that vary within space, time, or other dimensions in the real world. Scale underlines the connection between a representation and its referent while using finite and discrete measurements to render infinite narratives and meanings. The concept of scale can be as familiar as undefined, having a variety of meanings depending on its operational context and disciplinary perspective. (Wells, 2013) In the specific context of lens-based arts, i.e., photography, the various approaches and implications of scale remain largely unanswered.

The photograph of a landscape or a bacterium is unlikely to be materialized in their real scale, its size would be, either, too big or too small for standardized observation. Scale anthropomorphises size, compressing physical and cultural geographies to pocket size, bringing distant perceptions to arm's length. As a concept, scale places humans at the centre of their own discourses while reinforcing human-centred taxonomies. Nonetheless, scalar variations are ontological to the photographic medium (Crowther, 2009), and have significant implications in the formation of individual narratives and political discourses, which are often made invisible or ignored. (Grau, 2003; Klein, 2004)

This presentation attempts to uncover some of its problematics and its overall impact in the interpretation and formation of the work of art. Its primary focus is on photography while considering other artistic practices in a nondisciplinary convergent approach to scalar variations of size.

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## **Place and Memory: between sound and image. Digital Interactive Performance in São Luís, Odemira**

**André Araújo**

Universidade de Aveiro, DeCA | araujo.andre@ua.pt

**Nuno Sousa**

NIAM, Núcleo de Investigação em Arte e Multimédia do ISCE Douro | nunombsousa25@gmail.com

**Graça Magalhães**

Universidade de Aveiro, DeCA | gracamag@ua.pt

**Keywords** | Performance art; intersensory experience; audiovisual interactions; archive; concept of place

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### **Abstract**

Memory, as a fragmented entity, emerges in refracted structures whose reconfigurations are vehicle for experiences that affect the most diverse mythopoetic frameworks (Farge, 1993). Thus, the intrinsic nature of digital generative structures - which so often leave us situated and besieged - however explored, live beyond us, exist outside our contemplation and even our control, action or interaction. These latent spaces allow us to look at the reminiscences of the past and perceive the limits of our interactions and genuine wanderings that feed myths and concern dynamics of standardization and invention in the contexts of new media art (Manovich, 2002).

This paper discusses the creation of a performance that, through the exploration of digital interactions between sound and image, generates an immersive and intersensory environment, that is, where visual and sound perceptions do not appear as delimited entities, but rather felt in a single gesture, in a “cross-modal sense” (Whitelaw, 2008). The performance entitled *Os nossos seres são iguais* was performed in a context of artistic residence in São Luís, in Odemira, and had as a starting point the discovery of a place through memory, namely through the use of the

audiovisual archive for contemporary artistic creation and its implications at both theoretical and practical levels.



André Araújo & Nuno Sousa, *Os nossos seres são iguais*, 27.03.2022, Sound and Image Performance, São Luís, Odemira

Methodologically, the work in residence was based on the practice of research-creation, since the constructions and researches about the place - in contacts with the populations, collection of archive images and in photographic records or sound recordings made in the place - contributed to the assimilation of the sense of place and, consequently, were the basis for the construction of the performance (Jackson, 1995) (Benjamin, 2010). Never as illustration of place (as if landscape painting) but as materialization of the perceptions of the artist's contact with the place. The crossing between the perceptions of the territory worked as a script for the performance moment that reflected the immersion in an unknown territory, based on a dialectic relationship between images from the past and the present, mediated by sound.

The treatment of the images, through the construction of the performance itself, stands out by the way the digital interactions between sound and image take

place in a register of improvisation, reflecting the aesthetic tensions that arise from the crossing of several temporal spaces; from the contact of the self with the territory; from the meanings of working the territory nowadays; of the impacts of exploring it artistically through archive

images; of the methods of exploring the empathic contact with territory - through “discovery routes” - and with the region’s archive; and even of the concept of territory itself, encompassing the contact with people in the constructions of perceptions of the place.

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## Refletir em Ação: a crítica de processo no contexto do design contemporâneo

**Camila Mangueira**

FBAUP | camilamangueira@gmail.com

**Fabrcio Fava**

i2ADS/FBAUP | fabriciofava@gmail.com

**Palavras-chave** | criatividade; design; crítica de processo; semiótica

### Resumo

O avanço das tecnologias da inteligência e do design digital tem provocado uma aceleração dos fluxos informacionais e despertado a importância do pensamento processual no campo do design. Atualmente, percebe-se um movimento de mudança no sentido da adoção de uma perspectiva de pensamento cuja postura criativa desloca o foco do problema para o contexto e do produto para o processo. Essa postura de ação tem contribuído para o reposicionamento do próprio campo do design ao fazer do processo um novo tipo de projeto — ou meta-projeto. Nesse contexto, quais são as posturas criativas que caracterizam esse pensamento processual? Que aspectos emergem desse processo de reflexão em ação? A presente comunicação propõe uma aproximação entre o exercício da crítica de processo e o pensamento do design a partir de uma perspectiva semiótica e sistêmica. Para isso, a estratégia metodológica explora manifestações teóricas nos campos da crítica de processo e do design contemporâneo e desdobra-se em duas abordagens: i) discussão da presença constitutiva dos fenômenos da criatividade na prática do design e nas ações e condutas da investigação processual; e ii) reflexão sobre como essas manifestações são interpretadas a partir da noção de rede em construção. Por fim, destacamos a figura do crítico de processo como um agente extensivo ao pensamento processual.

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## Testing the Fragmentation of Videogames into Different Aesthetic Units

### João Pedro Ribeiro

up201601392@up.pt, Portugal, DEI – Faculdade de Engenharia da Universidade do Porto, <https://jpsribeiro.wordpress.com/>

### Miguel Carvalhais

miguel@carvalhais.org, Portugal, i2ADS / Faculdade de Belas Artes da Universidade do Porto, <http://www.carvalhais.org>

### Pedro Cardoso

pedrocardoso@ua.pt, Portugal, Universidade de Aveiro / DigiMedia, <https://pcardoso.tumblr.com/>

**Keywords |** videogame fragmentation; game units; design analysis

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### Abstract

This paper addresses the fragmentation of videogames according to the mise-en-jeu framework.

The mise-en-jeu framework focuses on the scarcity of design grammar in videogames by offering specialists tools for examining aesthetics in videogames' mediated space. The mediated space is the multimodal space through which videogames are shown to players. It comprises the visual, sonic, and haptic output (Nitsche, 2008). It is the formal space where the negotiation results between player and machine are expressed.

The framework is built on an analysis of the main characteristics of the cinematic mise-en-scène. Some vital components have been identified, but the framework is unfinished. More variables and data sources are required.

We hypothesise that a game can be fragmented into different mise-en-jeu units when the values of the variables of the framework change. The mise-en-jeu is typically ever-changing. The values of its variables fluctuate in time. These fluctuations let us distinguish different moments

– or fragments – of videogames. Variations in the values of the variables dictate the start and the end of new events in a game. Player interaction can trigger value variation, or it can occur regardless of interaction.

We are conducting workshops to collect data on participants' views on the framework and the idea of *mise-en-jeu-bound* game units. Participants are game design students with different skills. Still, all are familiarised with game design and game studies. Their views will allow us to identify variables absent in the framework. We are also collecting information on the framework's legibility and applicability whilst collecting data to group variables into eventual macro clusters. Clusters enable us to distinguish variables according to their modes.

Participants are asked to choose a videogame from a culturally or technologically relevant pool of games. We defined relevance by researching its impact on the medium and popular culture by resorting to the Encyclopedia of Video Games (Wolf, 2021) and Story Mode (Strunk, 2021).

These workshops are cooperative activities, promoting participants' reciprocal correlations and shared challenge deciphering. We encourage participants to act for their enjoyment instead of extraneous incentives.

Each group analyses a game during a fixed period. We have a balanced distribution of aptitudes in each group. While this distribution does not contemplate directly comparing results on a game between groups, all proposals will be debated with the whole class. Results will exhibit proof of broader viewpoints.

We demonstrated to participants how alterations could be verified when one variable changed values or when previously unobserved variables appeared. Changes are significant when they far alter the *mise-en-jeu*. We are verifying participants' opinions on the number of changes necessary for a change of moment. We are also attesting which combinations of changes of values of the *mise-en-jeu* variables are significant enough to initiate a new moment. However, we acknowledge that it may be dictated by a change in number and not by a specific combination of variables.

### **Acknowledgements:**

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# The Discipline of Motion Design: experiences, teaching approaches, perspectives

**Carlo Turri**

IADE – Lisbon | carlo\_turri@hotmail.com

**Keywords** | motion design; education learning models

## Abstract

Motion Design is an area that stands at the intersection between film-making, animation, and graphic design. Defining and implementing satisfactory learning processes involves multiple aspects as it poses some challenges: this article describes the recent work of bringing such rich and interdisciplinary culture into Communication Design university courses.

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After having outlined the context and the extent of these experiences, the adopted teaching approach is unfolded: a flexible formula that combines sheer and necessary technical training, a set of disciplinary foundations and key-theoretical principles, a series of project-based learning activities designed to foster both creative and problem-solving attitudes.

Each aspect underpinning the proposed teaching architecture is defined in terms of learning objectives, methodology, references, and processes. At the same time, such models are also tackled in their own intrinsic problematic nature: what is necessary to focus on, why such importance and, most notably, how to compromise between ideal goals and a variety of constraints.

Considering the tight interdependences between practices, contexts and technologies, the Motion Design discipline is expected to rapidly evolve.

Whereas some learning components are likely to remain valid in the future (e.g., the massive heritage derived from decades of cinematic art forms), other aspects will likely be dismissed or at least to be remodelled by incorporating new tools and workflows.

The last part of this essay addresses what could be the most prominent trends worthy to be explored today (video-game look development and augmented reality in particular), as well as stressing the point that, in front of such unpredictability, the necessity to prepare young designers in facing unknown scenarios is indeed a crucial factor to consider.

Conveying the knowledge and sensitivity required to conceive and execute moving image-based ideas is perhaps more complex than in other areas within Communication Design's domain: the more this complexity is highlighted and openly debated, the more appropriate will be the answers to the tomorrow's numerous exciting challenges.

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## Tipografia Contemporânea: som e movimento na apresentação de um novo tipo de letra

**Vanda Correia**

Instituto Politécnico de Portalegre – ESTG | vcorreia@ipportalegre.pt

**Palavras-chave** | design gráfico; design tipográfico; motion graphics

### Resumo

Uma revisão breve da história do desenho das letras e da tipografia mostra uma evolução compassada, sempre ligada à evolução das técnicas e tecnologias de produção e dos meios de comunicação. O predomínio das tecnologias e dos meios digitais na criação de objetos de comunicação afeta também a criação e distribuição de novos tipos de letra. O crescimento do universo dos tipos de letra tem acontecido tanto em quantidade (múltiplos tipos novos, múltiplas variações de estilos em cada novo tipo, múltiplos canais e modelos de distribuição das fontes tipográficas), quanto em qualidade (com novas características formais, umas aproximadas às já existentes e reconhecidas e categorizáveis, outras mais afastadas e difíceis de categorizar). Este crescimento e multiplicidade, por um lado mostra um meio muito vivo e dinâmico, mas por outro pode dificultar o reconhecimento e a afirmação de tipos de letra novos. Também parece haver um predomínio de uma visão mais operante sobre o desenho das letras de um alfabeto, que será sempre incontornável enquanto forma de representação de uma linguagem, mas que parece funcionar em detrimento do reconhecimento do valor estético das especificidades de cada tipo de letra, da sua identidade própria, das suas formas gráficas e características expressivas únicas. Acresce ainda que a observação dos procedimentos de concepção e de desenho de um novo tipo de letra mostra como se trata de um processo sempre exigente, muito detalhado e moroso – tanto pelas questões técnicas quanto pelas questões estéticas – e ainda que agora os processos pareçam facilitados pelas tecnologias digitais, quando comparado com os procedimentos anteriores, não deixam de ser igualmente exigentes e complexos – e como tal merecedores de visibilidade e reconhecimento. Numa abordagem que se pretende exploratória, com apontamentos breves sobre a história do

desenho dos tipos, cruzados com a exposição de alguns exemplos de referência atuais, o propósito desta comunicação é expor a relevância do movimento e do som, quando associados às letras, usualmente vistas como formas gráficas estáticas, principalmente no momento da apresentação de um tipo de letra novo, e com o objectivo de valorizar tanto os tipos em si mesmos, pelas suas características formais e estética específicas, quanto o design de tipos como uma forma de expressão visual importante.

## “(Un)Directed Reading”, an Interactive Kiosk to Encourage Writing and Reading

**Gerald Estadieu**

University of Saint Joseph, Faculty of Arts and Humanities | [gestadieu@usj.edu.mo](mailto:gestadieu@usj.edu.mo)

**Ka Man Ng**

University of Saint Joseph, Faculty of Arts and Humanities | [sandra.ng@usj.edu.mo](mailto:sandra.ng@usj.edu.mo)

**Daniel Farinha**

University of Saint Joseph, Faculty of Arts and Humanities | [daniel.farina@usj.edu.mo](mailto:daniel.farina@usj.edu.mo)

**Keywords** | learning opportunities; creative writing; reading; open technology

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### Abstract

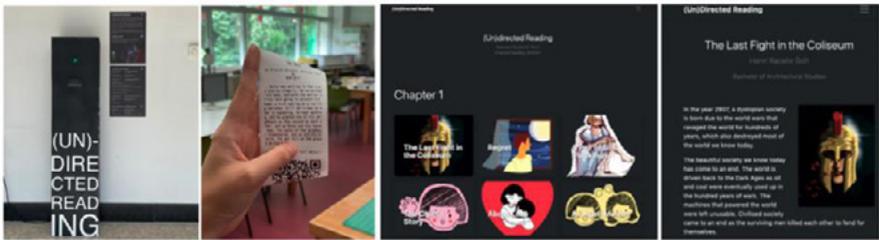
(Un)Directed Reading is an interactive installation (Edmonds, 2010) initially derived from the “Directed Reading” course, which all undergraduate students at the University must take during their final year. In this course, students are assigned different writing exercises and research assignments to open their creative and constructive minds in writing (Edwards-Groves, 2012; McVey, 2008). Every year, at the end of the course and after a selection process, a collection of stories is uploaded to a database of original stories.

We then developed an open-source application to print a receipt ticket from a thermal printer with a randomly picked story every time a user pushes a button. An arcade game-style button is installed on a kiosk designed in collaboration with students and set on the university's campus (left photo). The printed receipt presents a short extract of one of the stories and a QR code that links to the full story decorated with illustrations.

In a modern society where most of our interactions are audiovisual-based, young generations are less and less encouraged to read and even less to

write. By offering a simple kiosk installation with short stories and graphical illustrations, we propose a new interactive interface that can easily engage passers-by to eventually stimulate their reading and creativity. By reading these stories, students, professors, staff, and visitors can be surprised by the talent of our students, as it stimulates students to write new pieces to be selected.

The interactive kiosk was accessible to all for a period of 3 months with 23 stories during which we automatically collected some data to use in quantitative analysis. In this first run, we focused on data from the user's interactions such as story printed, story read, date and time. It allowed us to see the ratio between the printed receipt and the actual online reading of a story and more.



**Figure 1.** Images of the installation

Although the initial version of this installation focuses on a specific set of stories and is a standalone application, we plan to develop it further in terms of user experience, type of content, data analytics and locations - not only on the university campus but in the city as well. We envision this kiosk as a sustainable installation to transform traditional printing media into blended media, combining and mixing digital and conventional technologies. This presentation proposes a comprehensive understanding of the concept, shares some data analysis, and offers perspectives for future research and development.

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## Volumetric Storytelling, Filmmaking and Compositions

**Simon Quiroz**

UT Austin | simquiroz@utexas.edu

**Keywords |** VR; AR; Virtual Production; Stereoscopic; 3D; Storytelling; Filmmaking

### Abstract

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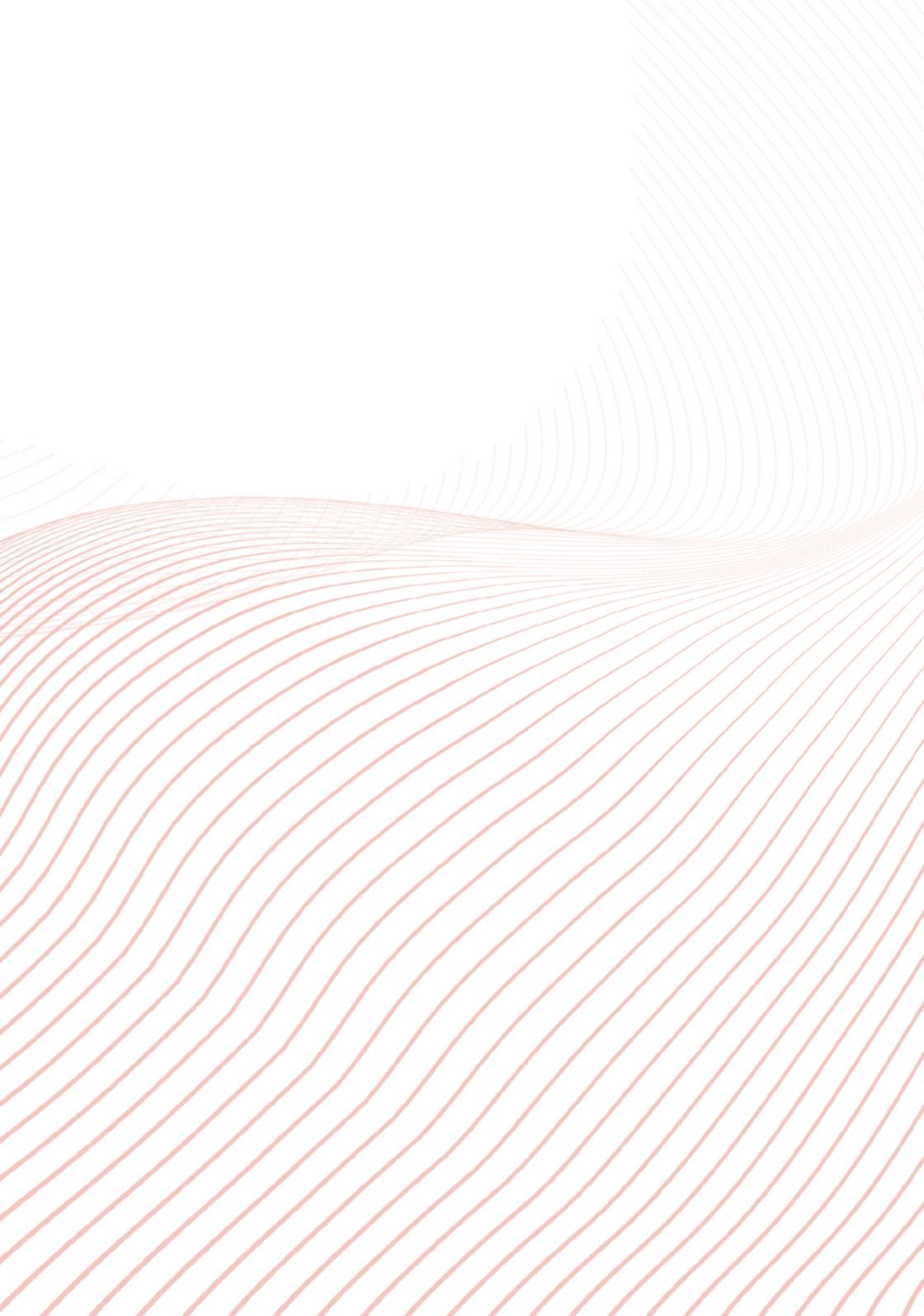
When we watch a film, as audiences, we are accustomed to a system of expectations that have been predefined by the language of traditional 2D cinema. Take any of your favorite classical Hollywood films for example, and without much effort we can situate ourselves within the story. We can understand what the filmmaker is trying to tell us, the plot of the story and the character's progression by the use of cinematic techniques and conventions that are ingrained into our collective unconscious. From these conventions, we derive our sense of empathy and immersion into the story. With the advent of relatively new technologies that depart from traditional two dimensional (X,Y) compositions such as VR, AR, and stereoscopic 3D media, many of these conventional techniques can be challenged and redefined. In fact, some of these conventions do not necessarily work as one would expect in s3d media, VR or AR.

Take for instance, when watching the opening scene of Alfonso Cuarón's *Gravity* in stereoscopic 3D, our experience is different than if we watch the same scene in a two-dimensional screen. In s3D the scene becomes more impactful, our sense of empathy is enhanced, and we get a broader sense of space and immersion. Whereas in 2D cinema the viewer keeps its distance to the screen, in s3D the viewer can become part of the environment. There are similar scenarios like that in other films such as James Cameron's *Avatar*, Wim Wender's *Pina* or even older films, such as *House of Wax* or Hitchcock's *Dial M for Murder*. More recent examples in newly adopted technology, such as the works of Felix and Paul in 360 stereoscopic video made for VR headsets, stand out because of their intentional compositions that take into consideration space and depth in mind.

These ideas and redefinition of 2D conventions when applied to three dimensional compositions for volumetric mediums is what I refer to

as Volumetric Filmmaking, Storytelling and Compositions. Volumetric compositions offer an opportunity for filmmakers and storytellers to enhance their audiences' expectations and sense of immersion not only in more recently adopted technologies (s3D, AR, VR) but can also be applied to traditional 2D cinema as well. By thinking spatially, we can make conscious decisions in terms of depth to affect our audiences' perception and to supplement their empathy towards our characters. In a volumetric filmmaking and storytelling approach our main focus is to think spatially in a three-dimensional volumetric space. This can be accomplished using a variety of approaches. One idea is to think about the use of the z-axis when placing the camera in relationship to a subject. Another approach is in the way we edit a piece: instead of using fast editing, it emphasizes in the use of long takes. It insists on a strong production design approach, the use of complex textures in backgrounds, sculptural art, volumetric particles, and movement of camera (when necessary) rather than cutting. Moreover, space is not reduced only to what we see but what we hear as well by making use of spatial sound to tell a story.

To expand on these ideas, this presentation takes as a point of departure my own experience with my short film "The Reaper 3D" and other works using VR, stereoscopic 360 video and AR thinking and applying volumetric filmmaking techniques in those. By comparing my own experience to work of more established filmmakers in volumetric technologies, I aim to suggest an approach to filmmaking that should serve as a good foundation for creators to think spatially not only in traditional 2D compositions but in other technologies such as s3D, VR, AR.





WORKSHOPS | OFICINAS

## Field Recordings & Visual Composition

by Hugo Olim

**Synopsis** | The aim of this workshop is guided in parallel and simultaneously with the sound workshop. It aims to raise awareness and develop the participants' creative skills as visual creators, in their close connection with the audiovisual element. The workshop works as a discovery of the creative potential of each participant in a journey aimed at self-confidence, self-discovery and relationship with the group.

We seek to discover creative possibilities through careful observation and visual capture of images (still or moving) to be carried out in Parque de S. Mamede, with the aim of serving as editing and post-production processing material.

Collections can range from small to large scale, from macro-observation to tele observation, from small insects to large trees, passing through atmospheric phenomena such as wind, rain, or even the brushing of foliage at the mercy of the breeze at the end of afternoon. In this way, it is intended to create a database of images that will work as a library for the creation to be carried out in the studio.

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Documentaries about different authors may punctuate the development of the work by introducing aspects of historical and technical reference in order to increase the sensitivity and knowledge of the participants.

**Biography** | Hugo Olim was born in Madeira Island (1978). He develops work in the field of visual arts, film, video, photography and installation. The aim of his practice focuses especially on exploring the very nature of the image and its close relationship with sound, time, space and technology. Hugo has developed live visuals work with several national and international creators and is a regular contributor to Vitor Joaquim in audiovisual performances. He was a professor at the University of Madeira and holds a PhD in Fine Arts (audiovisual) from the University of Lisbon.

## Field Recordings & Sound Composition

by Vitor Joaquim

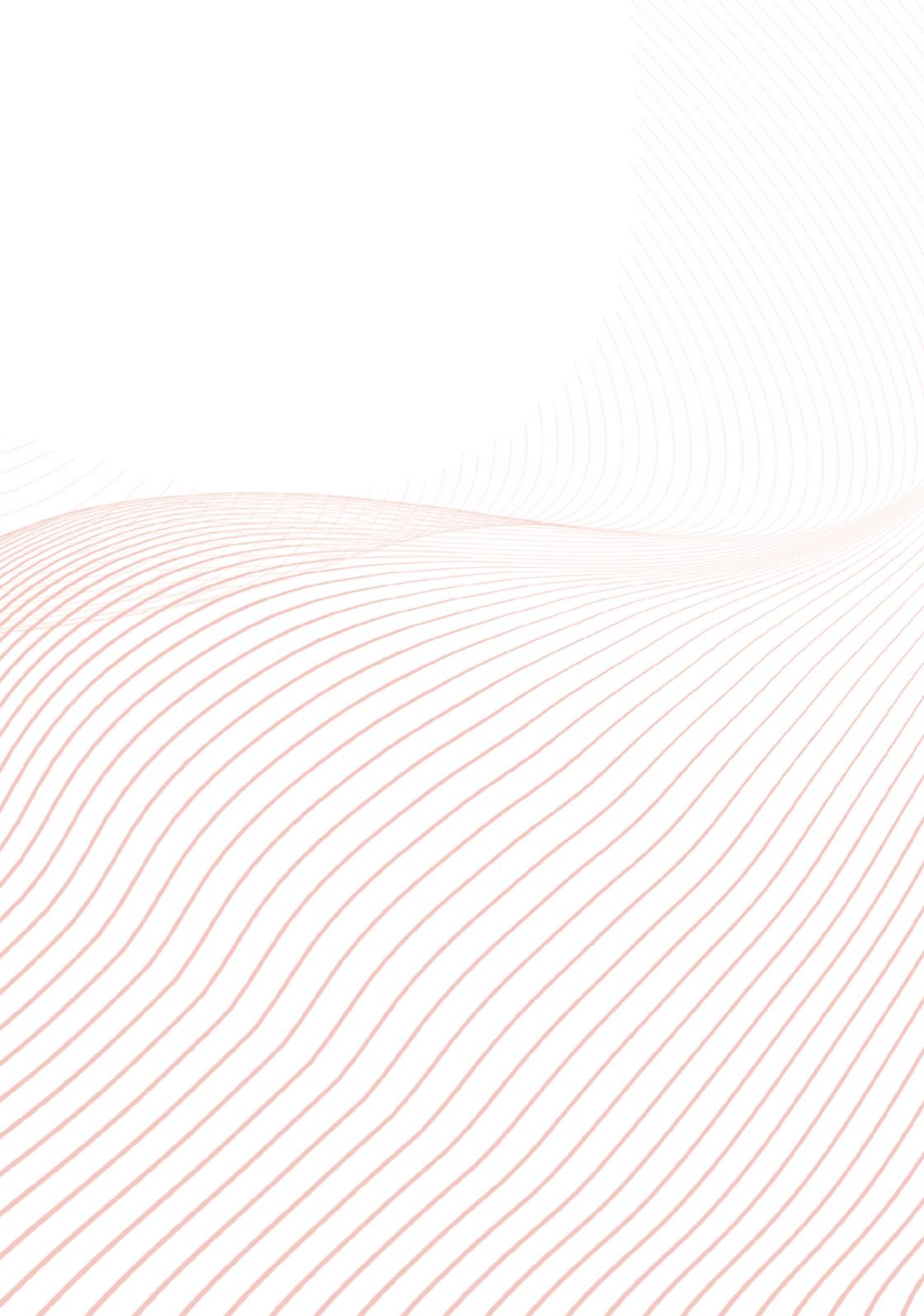
**Synopsis |** The aim of this workshop is to implement and develop the participants' creative skills as sound/musical creators, regardless of their musical prerequisites. The workshop works as a discovery of the creative potential of each participant in a journey in which self-discovery and the relationship with the group are as or more important than the results.

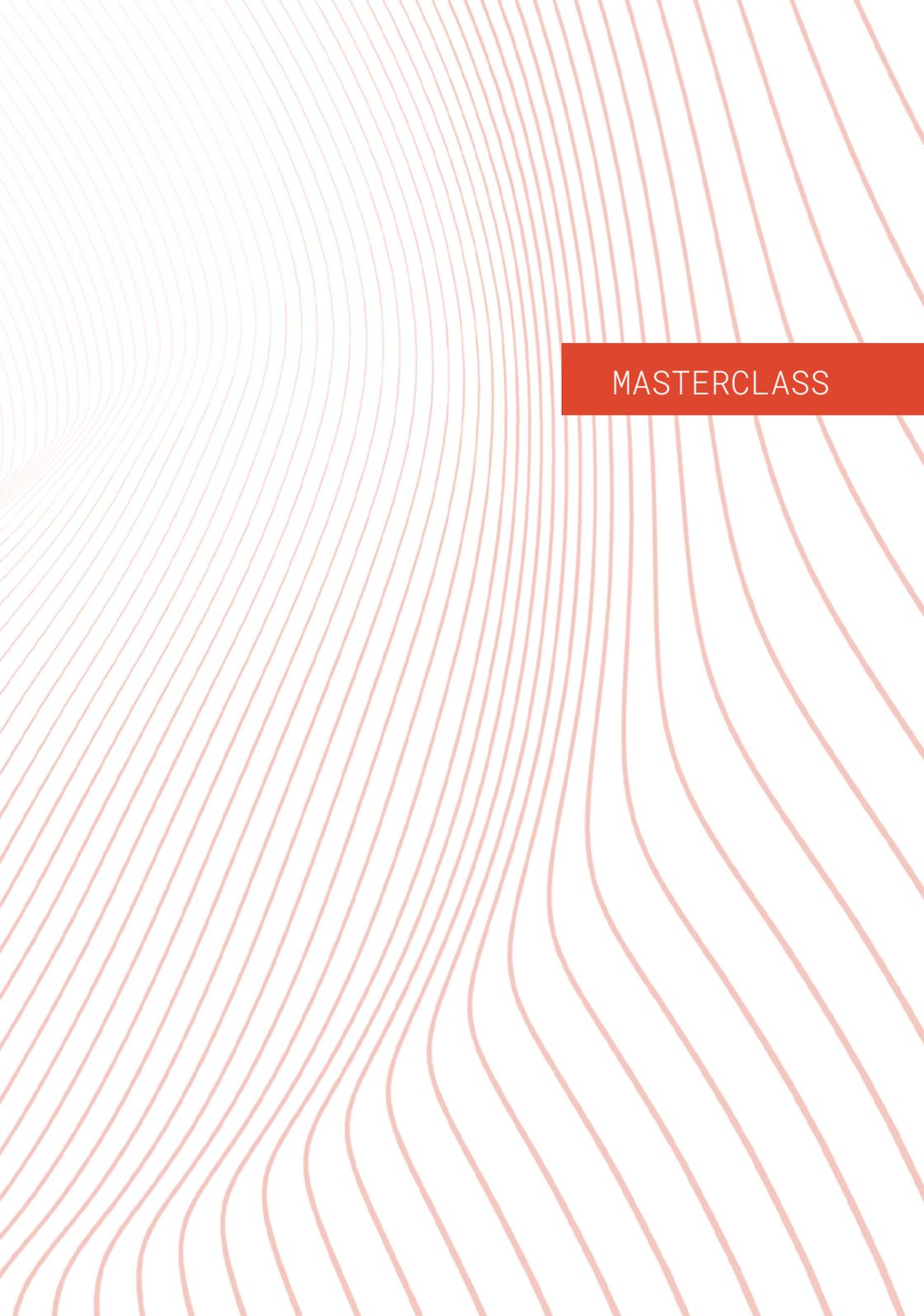
We seek to discover possibilities through the process of attentive listening and the exploration of the relationships between field sound recordings, to be carried out at Parque de S. Mamede, and post-production / sound creation processes to be developed in a studio.

The collected material can range from small-scale movements of small insects and grains of earth, to sounds arising from atmospheric phenomena such as wind or rain, passing through small sound events such as the chirping of birds or the brushing of foliage from different types of vegetation. In this way, it is intended to create a database of local sounds, which will function as a library for the creation to be carried out in the studio.

Documentaries about different authors may punctuate the development of the work by introducing aspects of historical and technical references to increase the participants' sensitivity and knowledge.

**Biography |** Vitor Joaquim. Portalegre (1963). Researcher, electronic improviser, composer and media artist, graduated in cinema, in sound and directing. He holds a PhD in Science and Technology of the Arts. He works solo and in collaborations with creators from the most varied areas. He has released 17 albums and is the author of dozens of compositions for contemporary dance. He presented work in sound sculpture, installation and pieces of transdisciplinary scope as video mapping, video art and performance. He produced, programmed and advised several festivals. Has taught and coordinated audiovisual schools and is a professor and researcher since 2009.





MASTERCLASS

## Birds and Cartoons (illustration masterclass)

by Filipe Abranches

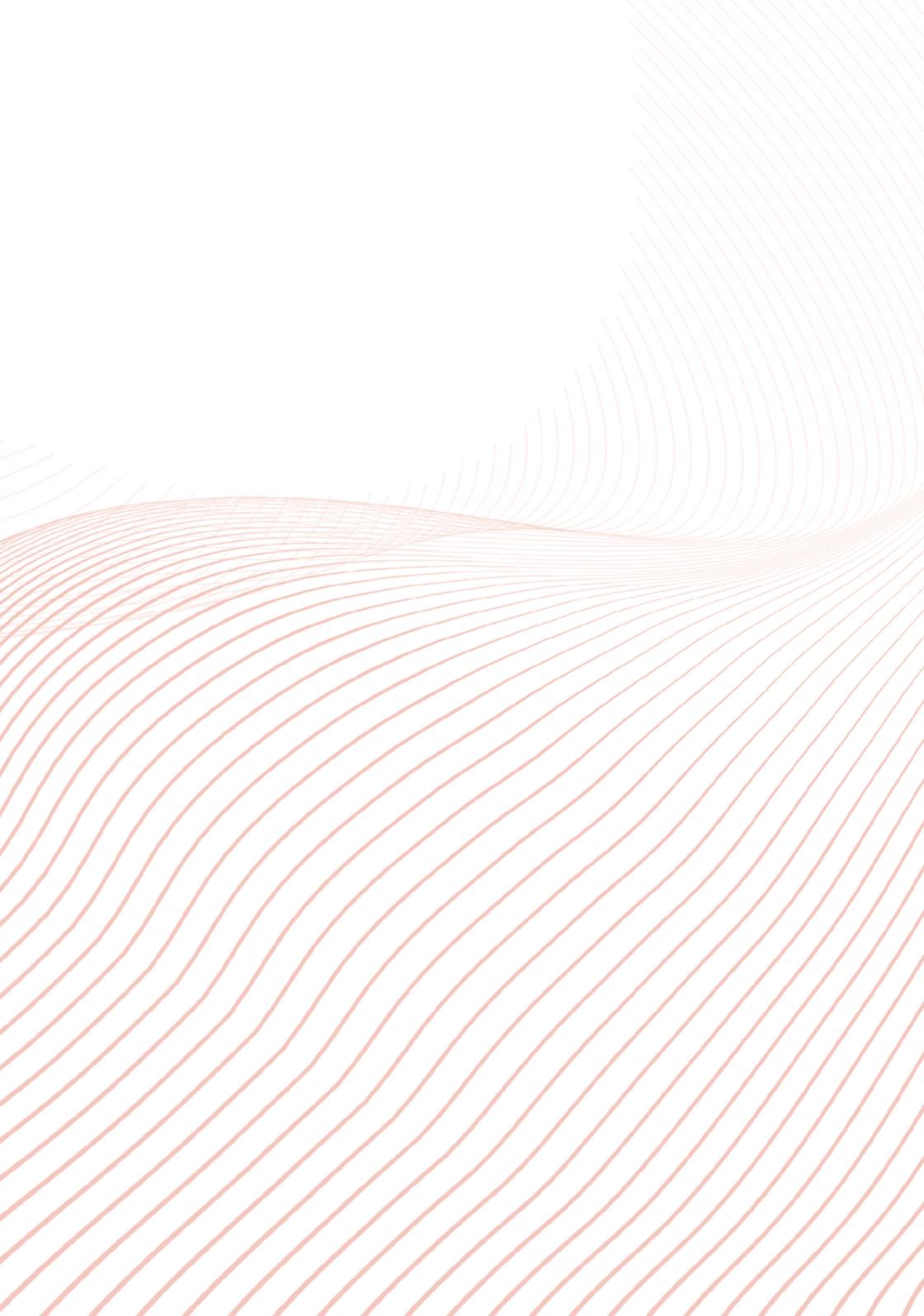
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**Synopsis |** With my first film “Birds” arose a question of a difference between a comic strip and an illustration and an understanding why it is different from an animated film. And here is perhaps the crux of my contribution, which is to try to explain how the transition is made from one medium to another. In this case, how do you transport a five-page comic book short story to an animated film. What are the complex aspects of the adaptation, both graphically and narratively? Some of my other work reflects this concern with adaptation too. It happened in the graphic novel “Diary of K.” from a text by Raul Brandão and in “Birds”, an animated short film with a happy career. Comic book adaptations are very common, namely manga and American comics for cinema/animation. But what motivated me at the time was the possibility of giving life to my drawings. In that adaptation the criterion was to maintain the graphic nature of the original object. This precept outlined options in terms of narrative, editing, framing, rhythm, etc., in order not to stray from the spirit of the original work. The motionless, printed line in the comic strip became a line with movement, a line that trembles. It takes us back to the most archaic animation techniques, in which the register and accuracy of the drawing was not perfect because it was photographed with a truca (vertical photographic reproduction of images). The digital age eliminates these imperfections and vacillations of the materials by far. A range of tools in the opposite direction of material cleanliness, filters for grain or dirt, film scratches or smudges, have sprung up in graphic and film editing programs, as if an inevitable nostalgia animated the creators of this software. I wrote about the film before: “It was through the graphics, shaky and unstable line work that a disturbed and disturbing world was created. A set of nervous and unstable lines which end up outlining the sound and musical idea of the animation”. The sound aspect of the film was perhaps the least predictable, since naturally in a comic book there is no soundtrack from the start. That is, an element that is not present in the original medium. Even so, I have come across comic books that suggest listening to a certain track from a music album, classical or popular, while the reader enjoys reading.

I ended up applying my own musical knowledge and skills to the film’s sound production. This included everything from music to real sound capture even vocalizing/imitating chickens and other birds. The cycle closes here, in the sense that the focus of this adaptation was on the

impossible maintenance of the purity of the object that gave rise to it. The comic work has its beauty and particularity for being a solitary experience. This marks the author and is thus safeguarded by assuming oneself as the total creator of the film. It is not in itself a matter of life or death, but a different, concrete experience that necessarily changes depending on the project at hand.

**Biography |** Filipe was born in Lisbon, 1965. He holds a degree in Filmmaking. Former professor of Illustration/Comics at Ar.Co., and lecturer and coordinator of Illustration Masters at ESAP/Guimarães. Began his work in the LX Comics magazine in the 90's. Worked as illustrator at the Expresso weekly newspaper. Has published, among others, the following comics books: "History of Lisbon", "The Diary of K.", "Solo" and "Jungle". In the field of animation films he's the director of the first film "Pássaros/Birds" (2009), and other films: "Sanguetinta/ Bloodink" (2012) and "Chatear-me-ia morrer tão joveeeeem.../It would piss me of to die so yoooooung..." (2016). Today he is the publisher of UMBRA Comics.





EXHIBITIONS | EXPOSIÇÕES

## Imagines Nostrae Animae Animanostra 30:11

Itinerant exhibition by Cinanima Festival



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The exhibition “Imagines Nostrae Animae” produced in the scope of CINANIMA 2021 is touring the country. It has 23 panels of 11 of the most prominent and awarded Portuguese illustration, animation and comics authors who, over the years, have collaborated with the animation film studio Animanostra.

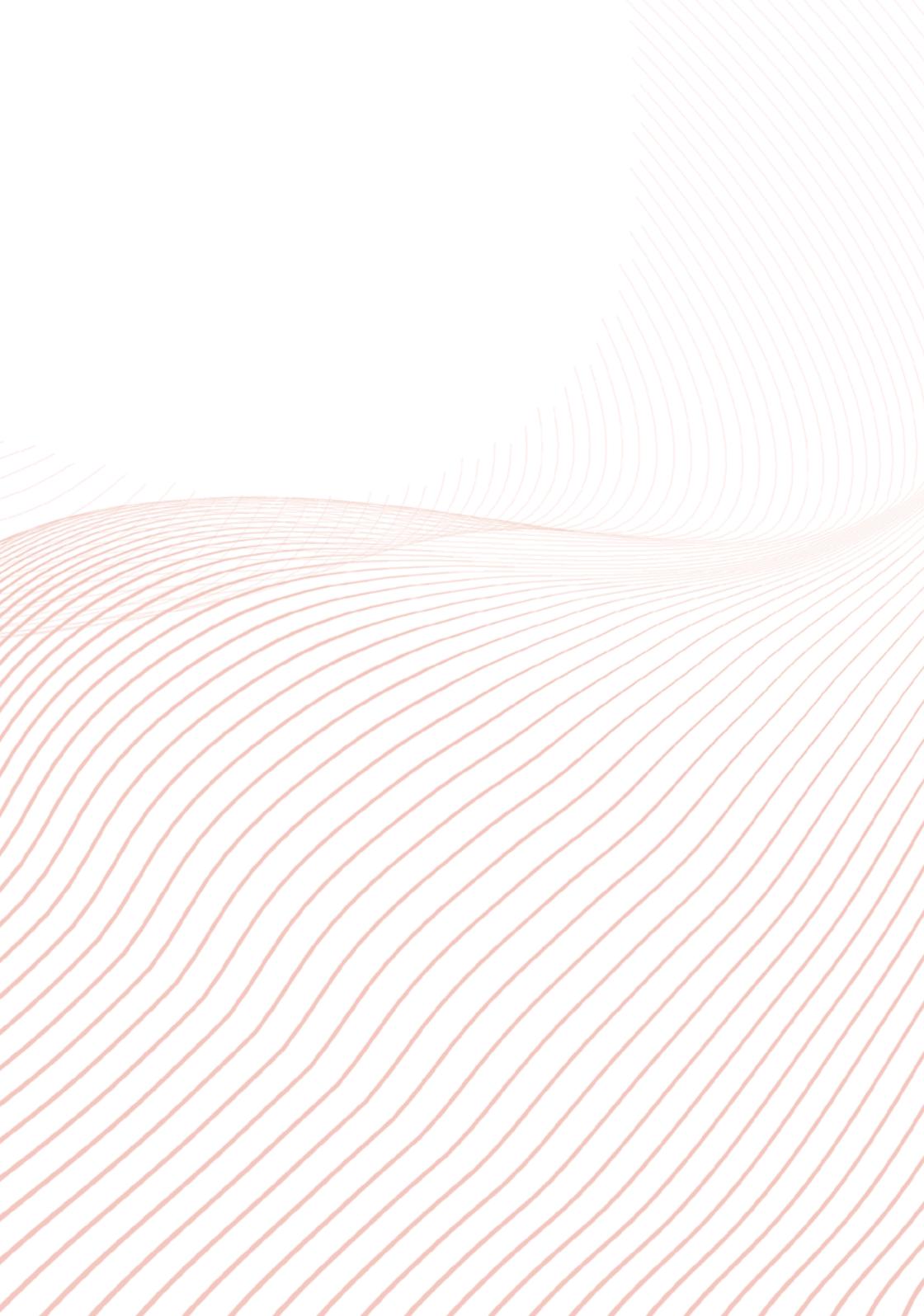
## 4 Estados da Matéria (making of)

by Miguel Pires de Matos



“4 States of Matter” is an abstract animation film whose main theme is “matter”. It is developed in four different acts/movements, each one with a distinct graphic and sound universe, globally constituting a journey through the four major states of matter: solid, liquid, gas and plasma. This exhibition displays the objects and equipment used in the production of the short film.

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CONCERT / AV PERFORMANCE | CONCERTO

## The Construction of Time

By Vitor Joaquim

**Synopsis |** The Construction of Time is a piece that focuses on the questions of time, flow, interiority and breadth of perception that we create from the world in which each of us lives.

Subjective perception and intimately dependent on our state of mind, life experience and knowledge. If we are happy, we feel that time flies, if we experience unpleasant moments, time seems to have no end. What differences in perception are these if not the very construction of time that each one of us makes within himself? From perception to perception, as we experience the elasticity of what we feel, each of us makes his/her own emotional construction of time. As Carlo Rovelli reveals in his book *The Order of Time*, “time for us is memory and expectation.

In the version presented here, in audiovisual form, it is intended to explore the landscape of Parque de São Mamede as a source for the production of visual content that will work in close relationship with the sound piece. If, on the one hand, the sound piece already exists, the same cannot be said of the visual component that will be partially developed during the creative stay associated with the Visual Creation workshop.

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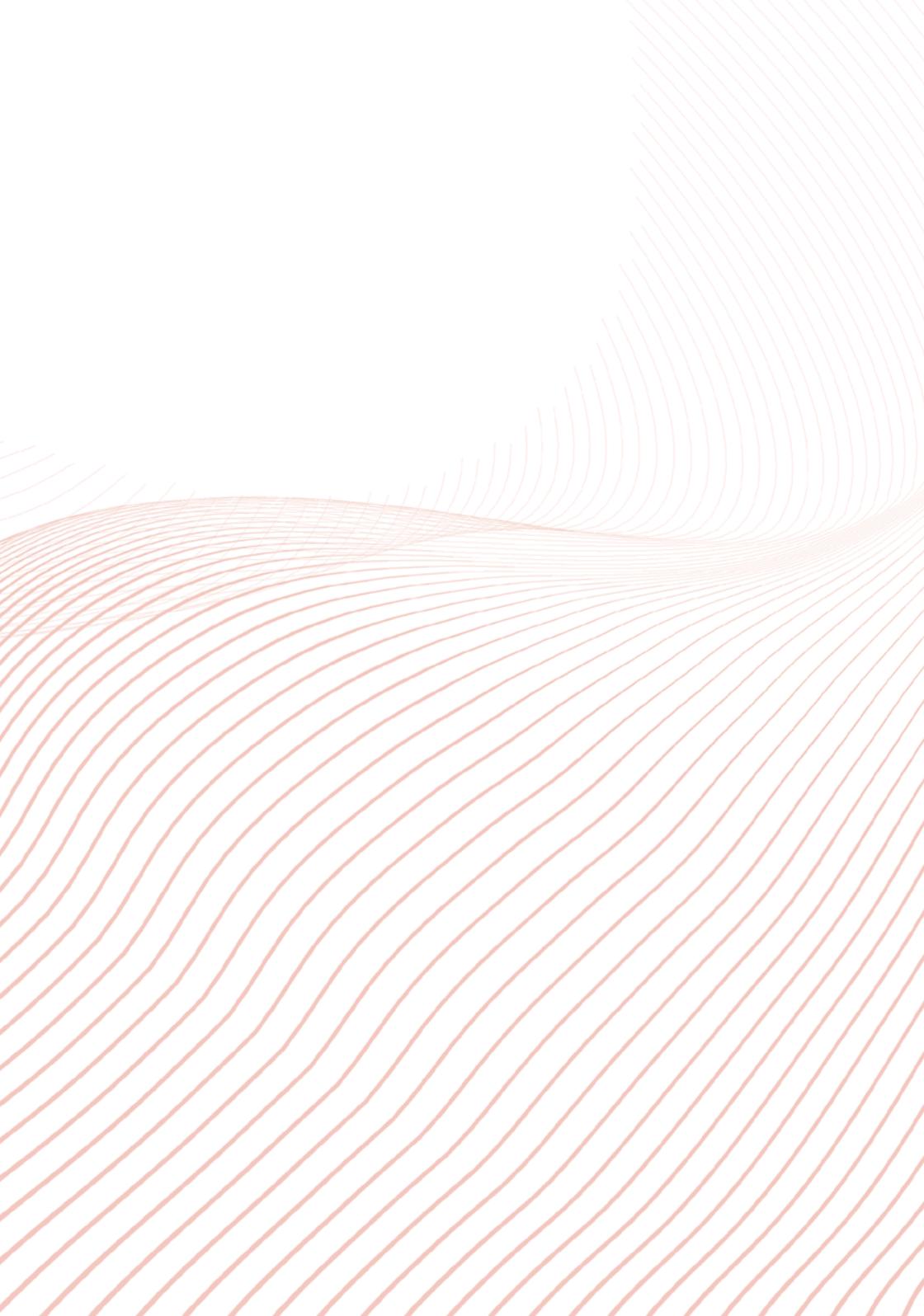
### Artists

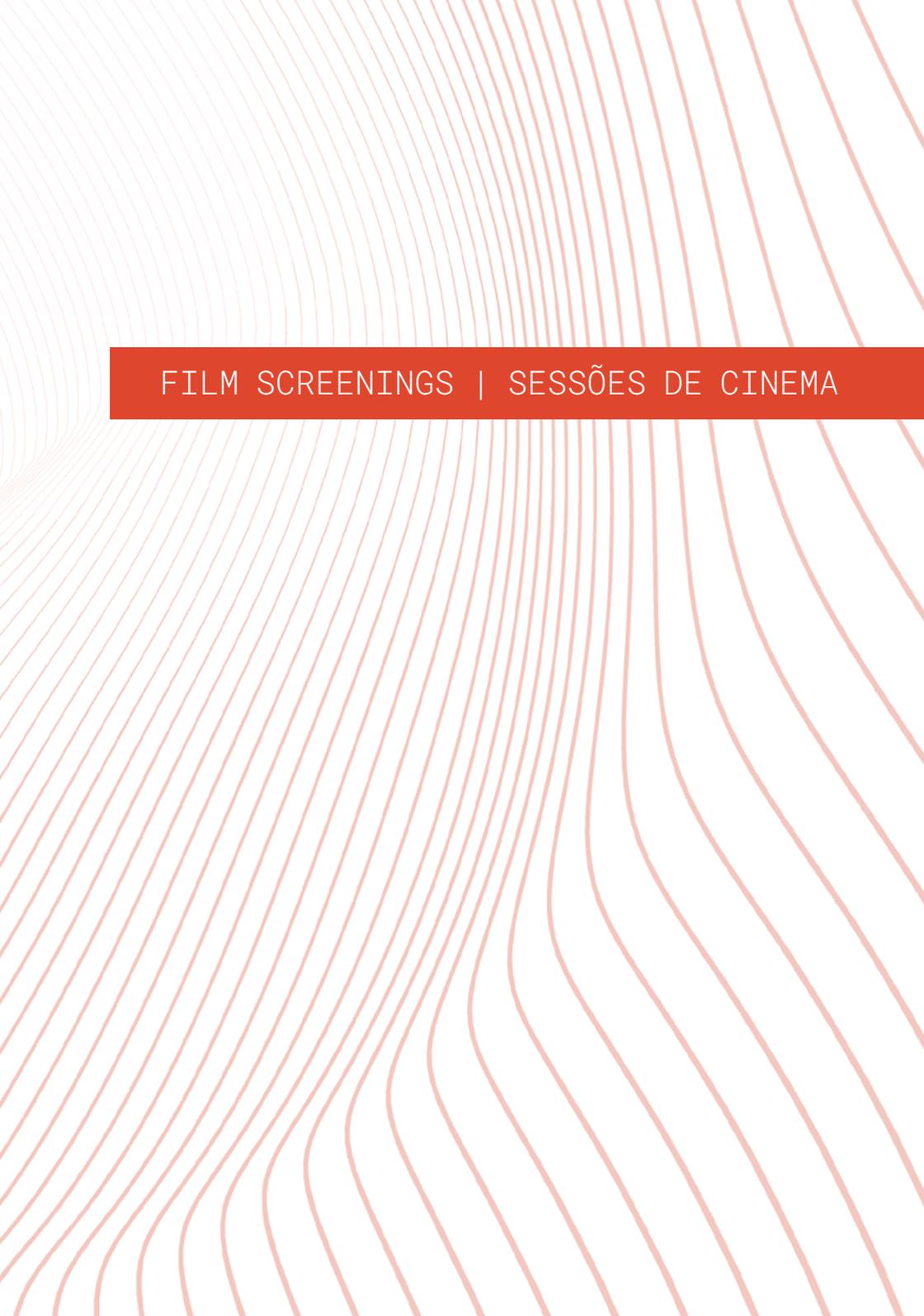
Vitor Joaquim (composer): Electronic, Electroacoustic

João Silva: Trumpet

Hugo Olim: Live Visuals







FILM SCREENINGS | SESSÕES DE CINEMA

## Macau International Short Film Festival

Extension – award-winning films



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The MACAU INTERNATIONAL SHORT FILM FESTIVAL is an annual world-wide audio-visual festival, that aims to motivate overseas and Macau short film and music video productions to compete in this FESTIVAL. The FESTIVAL is following on the success achieved by the first edition of AUDIO-VISUAL COMPETITION which was launched in 2010. In 2015, it turned into a festival for the very first time.

### Short films:

Best Fiction – Phlegm | 06'25" Jan-David Bolt, Suíça

Best Animation Mundo Domino | 06'25" Suki, França

Best Film of the FESTIVAL- Fabiu | 29'29" Stefan Langthaler, Áustria

Best Local Entry – Flowers for My Mother | 12'24" Vitória Caxias, Macau

Macau Cultural Identity – Unseltted | 29'50 Ho Cheok Pan, Macau

## Punta y Raya Festival

Extension – Portuguese Abstract Panorama



The world event for Abstract Art in Motion brings together the Punto y Raya community in various cities. The Festival celebrates the latest achievements in abstract film, animation & new media, and recovers & contextualises great classics, providing a creative meeting point between artists and general audiences. It invites experimenters to take the genre's possibilities to the limit, and motivates new audiences to take an active role in the creative process.

### Short films:

#### **Via | Portugal, 2018, 6'**

Maria Constanza Ferreira

#### **Vitamine C Crystals (Lattice) | Portugal, 2018, 1'**

Maria Constanza Ferreira

#### **Le Plaisir du mouvement – II | Portugal, 2018, 1'**

José-Manuel Barata Xavier

#### **6 Essais sur le mouvement -1 | Portugal, 2006, 1'**

José-Manuel Barata Xavier

#### **6 Essais sur le mouvement -2 | Portugal, 2006, 1'**

José-Manuel Barata Xavier

#### **6 Essais sur le mouvement -5 | Portugal, 2006, 1'**

José-Manuel Barata Xavier

#### **MI-FA | Portugal, 2020, 1'**

José-Manuel Barata Xavier

**Compositio III | Portugal, 2012, 8'**

Sandra Ramos, Bernardo Sarmento, Sílvia Namorado, Miguel Pires de Matos, Miguel Simas

**(UN)evenness | Portugal, 2016, 3'**

Pedro Ferreira

**Zasmažany Film | Portugal, 2013, 5'**

Pedro Ferreira

**Decipre | Portugal, 2014, 2'**

Yue Wang, Bruno Santos e Gonçalo Encarnação

**4 Estados da Matéria | Portugal, 2018, 13'**

Miguel Pires de Matos

**Tom Tom | Portugal, 2021, 3'**

João Levezinho

**Linearea | Portugal, 2019, 2'**

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**Web | Portugal, 2004, 6'**

Anabela Costa

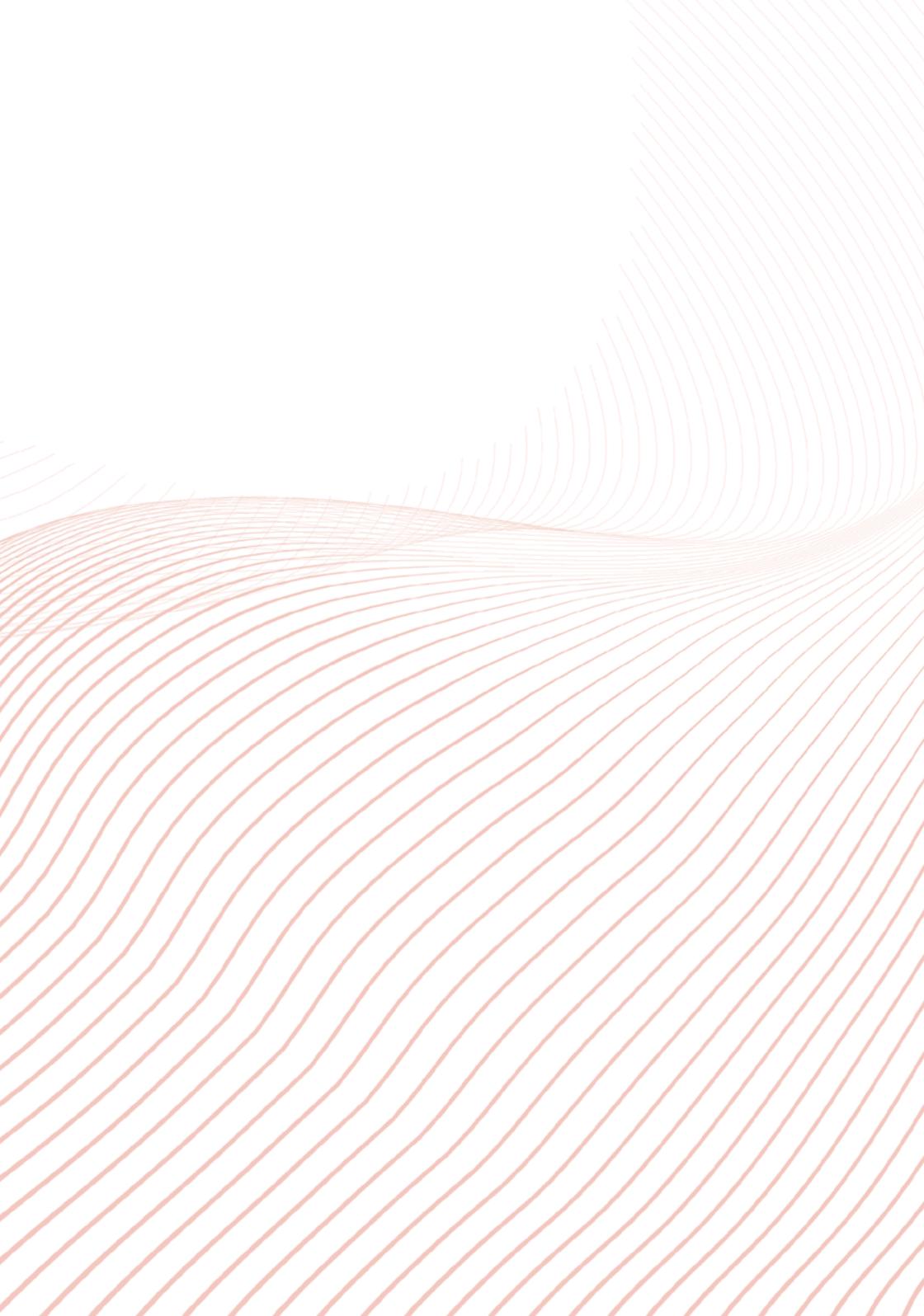
**Head Tail Rail | Portugal, 2013, 7'**

Hugo Olim

**Tesseract. | Portugal, 2017, 9'**

João Pedro Oliveira







PROGRAM | PROGRAMA

**FRIDAY – 3 JUNE**

15:00 – 18:00

**Workshop “Field Recordings & Sound Composition” 1/4  
Campus Politécnico, sala de som**

By Vitor Joaquim

15:00 – 18:00

**Workshop “Field Recordings & Visual Composition” 1/4  
Campus Politécnico, sala de som**

By Hugo Olim

10:00 – 13:00

**Workshop “Field Recordings & Sound Composition” 2/4  
Campus Politécnico, sala de som**

By Vitor Joaquim

10:00 – 13:00

**Workshop “Field Recordings & Visual Composition” 2/4  
Campus Politécnico, 1.10**

By Hugo Olim

10:00 – 13:00

**Workshop “Field Recordings & Sound Composition” 3/4  
Campus Politécnico, sala de som**

By Vitor Joaquim

10:00 – 13:00

**Workshop “Field Recordings & Visual Composition” 3/4  
Campus Politécnico, 1.10**

By Hugo Olim

10:00 – 13:00

**Workshop “Field Recordings & Sound Composition” 4/4  
Campus Politécnico, sala de som**

By Vitor Joaquim

10:00 – 13:00

**Workshop “Field Recordings & Visual Composition” 4/4  
Campus Politécnico, E2**

By Hugo Olim

16:00 – 19:00

**Masterclass “Birds And Cartoons” (Animation / Illustration Masterclass)  
Campus Politécnico, Edifício 2, E1**

By Filipe Abranches

## TUESDAY – 7 JUNE

CONFERENCE VENUE – **Campus Politécnico, edifício 2, anfiteatro E1**

<https://videoconf-colibri.zoom.us/j/86253715339> (unique ZOOM link)

- 10:00 Registration
- 10:30 Opening ceremony
- 11:00 **KEYNOTE SESSION 1 – Sound Art and Public Awareness**  
Raquel Castro (apresentação: João Cordeiro)
- 11:30 **SESSION 1 – Sound and image in Art & Design: contemporary aesthetics, theory and practice**  
**Information Visualization for Explaining Artificial Intelligence: Exploring the Perceptron**  
Marco Heleno, Miguel Carvalhais and Nuno Correia  
**Mobile Production of Sound and Image**  
Stuart Medley and Simon Order  
**O Som do Silêncio, em Tempos de Pandemia**  
Mário Mesquita  
**On Scale: Ontological Variations in Photography**  
Miguel Santos  
**Testing the Fragmentation of Videogames into different Aesthetic Units** ONLINE  
João Pedro Ribeiro, Miguel Carvalhais and Pedro Cardoso  
**Tipografia Contemporânea: som e movimento na apresentação de um novo tipo de letra**  
Vanda Correia
- 13:00 Lunch break
- 14:30 **SESSION 2 – Creativity in Art & Design: theories, processes, and tools**  
**A Method to the Madness: modeling the creative process of new media artists through the analysis of knowledge exchanges** ONLINE  
Huoston Rodrigues Batista and Juergen Hagler  
**Co-Created Media and Online Communities: Participatory Features of Romanian Pandemic-Themed Memes** ONLINE  
Daniel Ungureanu  
**Creative Processes in the Crooked Hillary Memes: from digital entertainment to memetic warfare** ONLINE  
Daniel Ungureanu  
**Desafios autorregulamentados no âmbito da Prática e Criação Artística Contemporâneas: o lugar subjacente da criatividade**  
Daniela F. Pinheiro, Teresa Almeida and Domingos Loureiro  
**“Eternar a Natureza” – A Espiritualidade na Arte** ONLINE  
Ana Gaspar  
**Refletir em ação: a crítica de processo no contexto do design contemporâneo**  
Camila Mangueira and Fabrício Fava
- 16:00 Coffee break

- 16:15 **SESSION 3 - Behind the scenes of the creative process: case studies on Art & Design / Teaching and learning creativity in Art & Design: challenges and opportunities**  
**A Ilustração em Diálogo(s)**  
 Helena Major and Magda Cordas  
**Collaborative Proximity Television: The case of La Última Trinchera**  
 Alvaro Blanco Morett, Alex Iván Arévalo Salinas and José Luis Valhondo Crego  
**Volumetric Storytelling, Filmmaking and Compositions**  
 Simon Quiroz  
**Contemporary Art and Sound-Music Creativity in the Teaching-Learning Process**  
 Susana Maia Porto  
**The Discipline of Motion Design: experiences, teaching approaches, perspectives**  
 Carlo Turri
- 17:45 Coffee break
- 18:45 Exhibition (opening) **Imagines Nostrae Animae Animanostra 30:11**  
**Museu das Tapeçarias de Portalegre**  
 Itinerant exhibition by Cinanima Festival
- 21:30 **Film screening “Macau International Short Film Festival”**  
**CAEP, pequeno auditório**  
 Extension – award-winning films

**WEDNESDAY – 8 JUNE**

**CONFERENCE VENUE** – Campus Politécnico, edifício 2, anfiteatro E1  
<https://videoconf-colibri.zoom.us/j/86253715339> (unique ZOOM link)

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- 10:00 Registration
- 10:45 Opening session
- 11:00 **KEYNOTE SESSION 2 – Creative affect: experiences of feeling and emotion in the creative process ONLINE**  
 Stephanie Taylor (apresentação: João Cordeiro)
- 11:30 **SESSION 4 - The audio-visual Expanded: technologies at the edge of the sound and image experience**  
**Applied Interactive Mindfulness: A Virtual Reality Grave Mourning User Experience in the Chapel of St.Michael in Macao ONLINE**  
 Ka Man Ng and Carlos Sena Caires  
**Design Process of the Augmented Instruments**  
 Daniel Santos Rodríguez and Henrique Portovedo Marques  
**Experience the Past in the Present with Immersive Technologies ONLINE**  
 Tin Lan Chang and Filipa Martins de Abreu  
**Place and Memory: Between sound and image. Digital interactive performance in São Luís, Odemira**  
 André Araújo, Nuno Sousa and Graça Magalhães  
**“(Un)Directed Reading”, an interactive kiosk to encourage writing and reading around campus ONLINE**  
 Gerald Estadieu, Ka Man Ng and Daniel Farinha

- 14:30 **SESSION 5 - Innovation and Sustainability in Art & Design: projects and best practices**  
**A Importância da Iconografia nas Imagens Fotográficas, para a Sensibilização Ambiental: um estudo em contexto académico**  
Luís Vintém and Josélia Pedro  
**Collaborative Practices in Art and Design and Social Creativity** ONLINE  
Ana Nolasco  
**Lista de Verificação de Design de Rótulos e Embalagens para a Sustentabilidade: Uma ferramenta para a sustentabilidade de projetos académicos, com potencial para aplicação em contexto profissional**  
Josélia Pedro, Vanda Correia and Pedro Matos  
**Macao Soundscape as an analysis tool for sound quality assessment**  
Pedro Pestana, Álvaro Barbosa and Gerald Estadieu  
**Innovative design based on “Toilet Revolution”** ONLINE  
Guang Yong Liang and Tin Lan Chang
- 16:15 **KEYNOTE SESSION 3 - 4 States of Matter: the creative process**  
Miguel Pires de Matos (apresentação: Magda Cordas)
- 16:45 Closing session
- 17:00 Coffee break
- 18:45 **Concert/AV Performance “The Construction of Time” - CAEP, pequeno auditório**  
Vitor Joaquim, João Silva e Hugo Olim
- 21:30 **Film screening “Punta y Raya Festival” - CAEP, pequeno auditório**  
Extension - Portuguese Abstract Panorama

## Conference Sessions

### Session 1 - Sound and image in Art & Design: contemporary aesthetics, theory and practice

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- Mobile Production of Sound and Image
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- “Eternar a Natureza” - A Espiritualidade na Arte
- Refletir em ação: a crítica de processo no contexto do design (contemporâneo)

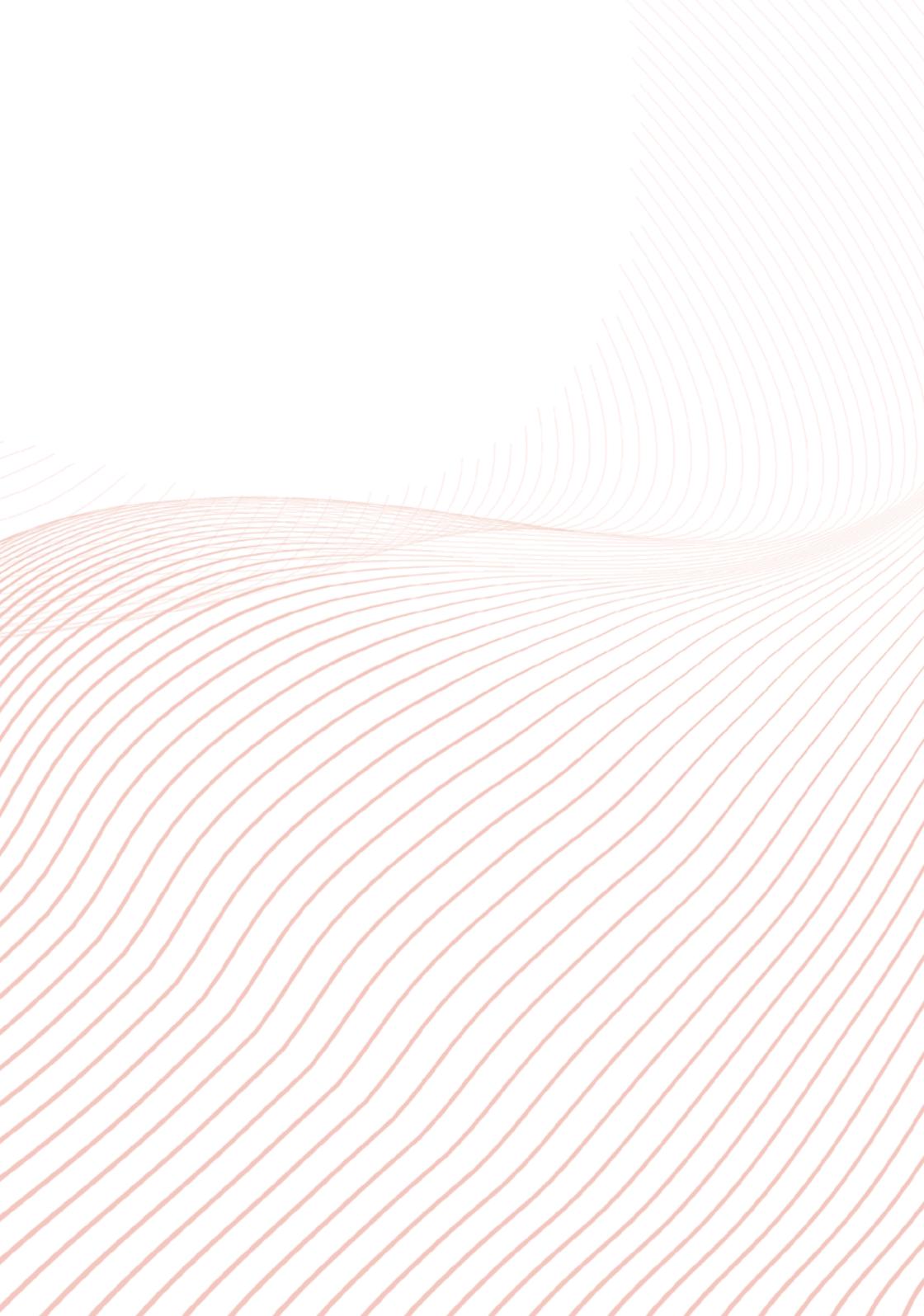
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### Session 3 - Behind the scenes of the creative process: case studies on Art & Design / Teaching and learning creativity in Art & Design: challenges and opportunities

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**Portalegre**  
além do alentejo



**PUNTO y RAYA FESTIVAL**



FESTIVAL INTERNACIONAL DE CINEMA DE ANIMAÇÃO DE ESPINHO  
INTERNATIONAL ANIMATED FILM FESTIVAL OF ESPINHO  
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1<sup>st</sup> International  
Conference on Sound  
and Image in Art &  
Design '22