

Pere Amengual - PEDRO TROTZ

Electronic Artist | Chaotic Electrophones Researcher

Contact: pere.amengual@gmail.com | Madrid, Spain

Official Channels: pedrotrotz.com

PROFESSIONAL PROFILE

Sound, electronic, and visual artist with over 40 years of continuous professional trajectory, recognized as a pioneer of experimental electronics in the Balearic Islands. Specialized in generative creative coding, multichannel sonovisual performances, modular synthesis, and interactive site-specific installations. His professional praxis balances advanced music production, hardware hacking, and academic research, focusing extensively on the intersections of Chaos Theory, generative sonovisual creation, and sound technology.

ACADEMIC EDUCATION & RESEARCH

- **PhD Candidate in Music and its Science and Technology** | Universidad Politécnica de Madrid (UPM) & Real Conservatorio Superior de Música de Madrid (RCSMM).
 - *Research Focus:* Non-linear chaotic synthesis, electrophones, and the physical/algorithmic implementation of Rob Hordijk's "Rungler" circuit architecture. (In progress, 2026).
- **Master's Degree in Electroacoustic Composition and New Media** | Centre Superior de Formació Musical Katarina Gurska, Madrid.
- **Bachelor's Degree in Multimedia (Extraordinary Graduation Award)** | Universitat Oberta de Catalunya
- **University Degree in Audio Systems and Sound Reinforcement.** | Universitat de València
- **Postgraduate Certification: Design of Interactive Spaces** | SOMA, Berlin.
- **Initial Music Training:** Classical and contemporary musical studies under Neil Manel Frau Cortés and Pau Frau Buron.

Peer-Reviewed Publications and Conferences

- Amengual-Gomila, P. & Sanz-Hervás, A. (2026). "The Gift of Chaos: Rob Hordijk's Open Design Philosophy and the Formation of Post-Digital Instrument Communities". Medium paper, poster and demo presentation

published in the Proceedings of the International Conference on New Interfaces for Musical Expression (NIME 2026). London, UK.

- **Amengual-Gomila, P. (2026).** *"Sistemas caóticos en la creación sonora: La emergencia temporal del Rungler de Rob Hordijk"*. Lecture-demo presentation and the II Conference on Sound Art "Rebecca Collins". Spanish National Research Council (CSIC). Madrid, Spain.

Specialized Technical Training:

- **Design of Modular Systems & Advanced Synthesis Techniques** | Masterclasses under synthesizer designers Rob Hordijk and Stephan Schmidt.
- **Digital and Sound Art / Creative Coding** | Advanced seminars under Alva Noto at *La Casa Encendida, Madrid*, Julien Bayle at *CC4AV, Berlin*, and Abe Pazos at the *School of Machines, Berlin*.

SELECTED EXHIBITIONS, PERFORMANCES & SITE-SPECIFIC INSTALLATIONS

- **2026** - *Tránsito* (Sound Works Series). Featured installation at the *Relatos del ruido* sessions, Cineteca de Matadero (Madrid) and the II Conference on Sound Art "Rebecca Collins" organized by the Spanish National Research Council (CSIC).
- **2024** - *Estudios sobre lazo de realimentación no-lineal*. Solo sonovisual presentation deploying custom Max/MSP engines at the Centre Superior de Formació Musical Katarina Gurska, Madrid.
- **2024** - *Landing Page*. Interactive generative piece optimized for mobile devices presented at Encontres Electroacústics, Fundació ACA.
- **2022** - *Ressò / Thereministic*. Interactive gestural sonovisual installation and live electronic closing performance at Casal Solleric, Palma de Mallorca. Historical collective exhibition curated by Jordi Alomar, showcased alongside pioneering artists Llorenç Barber and Wolf Vostell.
- **2019** - *Club Miseria*. Spatial sound performance and acoustic intervention for the solo exhibition of painter Bel Fullana, Casal Solleric, Palma de Mallorca.
- **2014** - *Estudis sobre corbes de Lissajous*. Audiovisual live performance integrating modular synthesizers and raw live vector laser projection systems at the ME_MMIX Festival.
- **2010** - *Playlist*. Generative net-art and software-based sound performance at Laboral Centro de Arte, Gijón / Online Network.
- **2006** - *Sintètic*. Immersive multichannel sound performance at the Pitch Festival.

PROFESSIONAL EXPERIENCE & INSTITUTIONAL LEADERSHIP

- **Translation Coordinator & Localization Specialist** | Steinberg Media Technologies GmbH (Remote / Germany). Managed and coordinated the complete localization workflow for Spanish-language technical documentation, operational manuals, and Graphical User Interfaces (GUI) across prominent digital audio workstations (DAWs) and proprietary audio software architectures.
- **Technical Manual Writer & Product Documentalist** | BiyiBlip Instruments. Authored specialized, technical user manuals, preset patches and user guides for boutique electronic instruments.
- **Founding Member** | Function() - Balearic Digital and Electronic Art Festival (2019). Responsible for curating open media artists and designing sound systems for electronic acts.
- **Independent Music Producer & Sound Engineer** (1980s - Present). Comprehensive studio production, mixing, and technical consulting for underground electronic and experimental acts in the Balearic music scene, including targeted album productions for bands such as *The Monarch*, *Biyi*, and *OPP*.
- **Hardware Hacker & Music Production Educator** (Independent). Expert in electronic music production techniques, and custom studio design. Specialized in generative creative coding and developing hybrid sonovisual instruments using RNBO, Max/MSP, and custom electronic circuits.

TECHNICAL SKILLS & DISCIPLINARY EXPERTISE

- **Creative Coding & DSP Environments:** Max/MSP/Jitter, Gen~, RNBO, JavaScript (Web Audio API, WebGL, HTML5 Canvas), Python (for Data extraction and parsing).
- **Sound Synthesis & Engineering:** Sound design with modular synthesizers, chaotic circuit analysis (Hordijk's Rungler, non-linear feedback paths), advanced synthesis techniques, multichannel audio, and fixed-media multichannel format-agnostic routing.
- **Software Localization & Technical Writing:** GUI string localisation, technical translation management, software translation with fuzzy-logic tools, and precision product documentation for pro-audio hardware and instruments.
- **Languages:** Catalan (Native), Spanish (Native), English (C2), German (B1).