

## DAVID MONACCHI

## Short CV

Main author's website:

David Monacchi (XXXX) is an eco-acoustics researcher, composer and interdisciplinary artist. He has been developing the project *Fragments of Extinction* since 1998, conducting field research in the world's remaining areas of undisturbed primary equatorial forest. The recipient of multiple awards throughout Europe and North America, Monacchi is pioneering a new compositional and science dissemination approach based on 3D soundscape recordings of ecosystems to raise awareness on the biodiversity crisis through science-based sound art. His Eco-acoustic Theatre invention (a full-periphonic space dedicated to soundscape listening) has received the international patent in 2014 and is now being built in museums and public spaces as SONOSFERA®. He has worked extensively in cross-disciplinary contexts (contemporary music, cinema, video-art, site-specific public art, bioacoustics, natural history and science museums), and is founding member of artistic and scientific networks as the International Society of Ecoacoustics. A research fellow at Simon Fraser University - Vancouver in 1998 and a Fulbright scholar at University of California, Berkeley in 2007, Monacchi has taught at the University of Macerata since 2000, and is now professor of Electroacoustics at the Conservatorio "G. Rossini" of Pesaro (IT). A TEDx speaker in 2017, Artistic Research fellow at IRCAM-Paris in 2018, Monacchi is author of the multi-awarded documentary film *"Dusk Chorus - based on Fragments of Extinction"*. Collaborations with ICCROM and IUCN to promote advocacy in primary forest soundscape conservation, culminated in a recent invited talk for the plenary session of the 2018 United Nations Biodiversity Conference, UN COP-14.

### PROFESSIONAL EXPERIENCE

- 2009-Present Professor (tenure from 2018): "Electroacoustics" State Conservatory 'G. Rossini' Pesaro, Italy.
- 2006-2009 Adjunct Professor: "Electroacoustics", "Lab of Electroacoustics" State Conservatory of Pesaro, Italy.
- 2006-2009 Professor (non-tenured): "Musica Elettronica" Conservatory 'U. Giordano' Foggia, Italy.
- 2000-2009 Adjunct Professor: "Multimedia Acoustics", "Lab of Applied Sound Design" University of Macerata, Italy.

### RESEARCH FELLOWSHIPS

- Mar 2018 – Jul 2018: "Artistic Research Residency" – IRCAM, Centre Pompidou, Paris, France.
- May 2007 – Nov 2007: "Fulbright" Research Scholar – CNMAT, University of California, Berkeley, USA.
- Jan 1998 – Jun 1998: "Erato-Farnesina" Fellowship – WSP, Simon Fraser University, Vancouver, Canada.

### EDUCATION

- 17/10/1994 – MM Musica Elettronica (Electroacoustic Composition) - State Conservatory of Pesaro – Italy
- 16/09/1992 – BM Music - Conservatory of Music "G. Rossini" Pesaro – Italy

### PUBLICATIONS (selected)

#### **Research Articles (peer-reviewed journals and conference proceedings)**

- 2019 – David Monacchi, Almo Farina "A Multiscale Approach to Investigate the Biosemiotic Complexity of Two Acoustic Communities in Primary Forests with High Ecosystem Integrity Recorded with 3D Sound Technologies", *Biosemiotics*, Springer. Print ISSN1875-1342 Online ISSN1875-1350 <https://doi.org/10.1007/s12304-019-09361-z>
- 2017 – David Monacchi, "The Sonic Heritage of Ecosystems: toward a formulation". Proceedings of the SOIMA International conference Unlocking Sound and Image Heritage, Brussels, ICCROM-UNESCO, 2016. ISBN 978-92-9077-264-4 DOI: 10.18146/soima2015 <https://library.avanet.nl/the-sonic-heritage-of-ecosystems-toward-a-formulation/>
- 2014 – David Monacchi, "Fragments of Extinction – A Periphonic Audio-video Concert Based on Rainforest Ecosystems 3D Recordings". Proceedings of the EAA Joint Symposium on Auralization and Ambisonics, Berlin, Germany. [https://www.academia.edu/37365461/FRAGMENTS\\_OF\\_EXTINCTION\\_A\\_PERIPHONIC\\_AUDIO-VIDEO\\_CONCERT\\_BASED\\_ON\\_3D-AMBISONICS\\_FIELD\\_RECORDINGS\\_OF\\_PRIMARY\\_RAINFOREST\\_ECOSYSTEMS](https://www.academia.edu/37365461/FRAGMENTS_OF_EXTINCTION_A_PERIPHONIC_AUDIO-VIDEO_CONCERT_BASED_ON_3D-AMBISONICS_FIELD_RECORDINGS_OF_PRIMARY_RAINFOREST_ECOSYSTEMS)
- 2013 – David Monacchi, "Fragments of Extinction: Acoustic Biodiversity of Primary Rainforest Ecosystems", *Leonardo Music Journal*, Volume 23, The MIT PRESS, ISSN 0961-1215 . [https://www.mitpressjournals.org/doi/abs/10.1162/LMJ\\_a\\_00148#.VwrRqXB-GZk](https://www.mitpressjournals.org/doi/abs/10.1162/LMJ_a_00148#.VwrRqXB-GZk)
- 2012 – David Monacchi, "Challenges and Perspectives on the Construction of SPACE, a Full-periphonic Ambisonic Studio for Soundscape Composition", in *The Global Composition – proceedings*, Darmstadt, Germany. ISBN 978-3-00-038817-0

#### **Books, Research Monographs Book Chapters and others**

- 2019 – David Monacchi, *"L'Arca dei Suoni Originari"* pgg. n. 319, Mondadori. ISBN: 9788804683964
- 2017 – David Monacchi, Bernie Krause *"Ecoacoustics and its Expression through the Voice of the Arts: An Essay"* in A. Farina, S. Gage ed., *Eco Acoustics: The Ecological Role of Sounds*, WILEY.
- 2016 – David Monacchi, *"A Philosophy of Eco-acoustics in the Interdisciplinary Project Fragments of Extinction"*, in F. Bianchi, V. J. Manzo, ed., *Environmental Sound Artists*, OXFORD UNIVERSITY PRESS, pp. 158–167.
- 2011 – David Monacchi, *"Recording and Representation in Eco-Acoustic Composition"*, in J. Rudi, ed., *Soundscape in the Arts*, NOTAM, Oslo, pp. 227–250. ISBN 978-82-996867-4-7

## On-line magazines and Institutional news (selected)

01-03-2021 **Nature** - Where I work: my race to capture the sounds of ancient rainforests. *Nature* 591 (170).

<https://www.nature.com/articles/d41586-021-00535-9>

25-06-2019 **PNAS** - Proceedings of the National Academy of Sciences 12580–12583 vol. 116 | no. 26.

[www.pnas.org/cgi/doi/10.1073/pnas.1908588116](http://www.pnas.org/cgi/doi/10.1073/pnas.1908588116)

29-07-2016 – David Monacchi, Fragments of Extinction - The Sonic Heritage of Ecosystems, IUCN global news.

<https://www.iucn.org/news/protected-areas/201607/fragments-extinction-sonic-heritage-ecosystems>

## **INVITED PRESENTATIONS** (selected) (Keynote=K Invited=I Participation=P)

14-29/11/2018	UN Biodiversity Conference COP-14, Sharm El-Sheikh, Egypt. Invited talk at the plenary session (20-11-2018) “Living in Harmony with Nature” <b>(K)</b>
24-28/06/2018	ISE (International Society of Ecoacoustics), third “Ecoacoustics Congress”, Brisbane, Australia. <a href="#">Keynote talk</a> + keynote multichannel concert “Fragments of Extinction–The Sonic Heritage of Ecosystems”. <b>(K)</b>
29-30/05/2018	IRCAM (Institute of Research and Coordination in Acoustics and Music), Paris, France. The Sound of the Anthropocene: nature(s). Talk and listening session with Fragments of Extinction’s selected ecosystems. <b>(I)</b>
01-10/09/2016	IUCN Intergovernmental World Conservation Congress 2016, Honolulu Hawaii. Poster + immersive sound installation “Fragments of Extinction – The Sonic Heritage of Ecosystems” in the Protected Planet Pavilion. <b>(I)</b>
15/04/2016	IUCN headquarters Gland, Switzerland. Talk+3D concert “FoE-The sonic Heritage of Ecosystems” <b>(I)</b>
03-04/09/2015	ICCROM International Conference “SOIMA-2015: Unlocking Sound and Image Heritage”, in coll. UNESCO, Brussels, BE. Talk+keynote concert “Fragments of Extinction, The Sonic Heritage of Ecosystems”. <b>(K)</b>
11-13/09/2015	ECSITE – European Network of Science Centres and Museums, Annual Conference, Trento, IT. Talk + listening sessions “The intelligent sound of ecosystems” into the first prototype of Eco-acoustic Theatre. <b>(P)</b>
26/02/2015	UCLA – University of California Los Angeles, Social Sciences, Dean’s Lectures, Los Angeles, USA. Talk+concert “Fragments of Extinction–An Environmental Sound-Art Project on Acoustic Biodiversity of Ra.”. <b>(I)</b>
03-05/04/2014	EAA – European Acoustics Association, International Symposium “Joint Symposium on Auralization and Ambisonics”, Berlin, DE. Talk + keynote concert “Fragments of Extinction (Borneo2012)”. <b>(K)</b>
20-24/05/2014	Society of Code Biology, First International Conference in Code Biology – Université Paris Decartes, Paris, FR. Talk “Eco-acoustic Codes of Borneo Primary Forest”. <b>(I)</b>
16-18/06/2014	ISE, International Society of Ecoacoustics, First Conference “Ecology and Acoustics”, Muséum National d’Histoire Naturelle, Paris. Talk “FoE – A New Recording Approach in Primary Equatorial Forests”. <b>(I)</b>
25-28/07/2012	WFAE – World Forum for Acoustic Ecology, International Conference “The Global composition” Hochschule of Darmstadt, DE. Talk+concert ‘Full-Periphonic Ambisonic Studio for Soundscape Composition’. <b>(P)</b>
25-27/03/2012	AES – Audio Engineering Society Conference “Spatial Audio in Today’s 3D World” – University of York, UK. Poster “Challenges and Perspectives in the Construction of a Full-Periphonic Ambisonic Studio”. <b>(P)</b>
3-7/10/2011	Balance-Unbalance 2011, Concordia University, Montreal, CA. Concert ‘States of Water’. <b>(I)</b>
25/06/2009	Ambisonics Symposium 2009, IEM, University of Music and Performing Arts, Graz, AU. Talk and Ambisonic full-periphonic 3D Concert “Fragments of Extinction, Africa’s travel report”. <b>(I)</b>
26/10/2007	Invited lecture + concert at CNMAT (Center for New Music and Audio Technologies), University of California – Berkeley, “Field Recording and Eco-Acoustic Composition”. Concert in coll. with Bernie Krause. <b>(I)</b>
07-14/10/2006	“Ear to the Earth” Festival and international conference, Electronic Music Foundation, NYU, 3LD, New York, USA. Talk + concert + multichannel sound installation “Fragments of a Sonic World in Extinction” <b>(I)</b>

## **ORGANIZATION OF INTERNATIONAL RESEARCH CONFERENCES**

25-27/06/2010	Conference organizer of “Orecchio alla Terra - Ear to the Earth”, Conservatorio “G. Rossini” - Pesaro, in coll. with Electronic Music Foundation, New York and Mostra Internazionale di Nuovo Cinema, Pesaro.
June 2021	Conference organizer of the “4 <sup>th</sup> International Congress of Ecoacoustics”, University of Urbino - ITALY, International Society of Ecoacoustics (suspended for COVID restrictions)

## **RESEARCH EXPEDITIONS**

- 1) Jan-Feb 2016 Field recording expedition in primary forest areas in and around Yasuni biosphere reserve – Amazon.
- 2) Aug-Sep 2012 Field recording expedition in primary forest area in Ulu Temburong – Brunei, Borneo.
- 3) Sep-Oct 2010 Research expedition in primary forest areas in Gunung Mulu World Heritage area, Sarawak and Sabah – Malaysia, Borneo.
- 4) Aug-Sep 2008 Field recording expedition in primary forest area in Dzanga-Sangha World Heritage area – Congo Basin, Central African Republic.
- 5) Feb-Mar 2002 Field recording expedition in primary forest area Rio Branco and Rio Jauperi – Amazonas, Brazil.

## **PATENTS**

21/02/2014 – **Italian patent** “Teatro Bioacustico” AN2014A000033 with patent **0001423451 granted on 27/07/2016**.

15/10/2015 – **European patent** “Eco-acoustic Theatre” EP 14723504.8 (International WIPO PCT WO2014/132280 A9) with patent **EP 3052719 B1 granted on 10/05/2017**

07/01/2016 – **United States Patent** “Eco-acoustic Theatre” EP 14723504.8 with patent **US 9,447,592 B2 granted on 20/09/2016** [https://worldwide.espacenet.com/publicationDetails/originalDocument?FT=D&date=20160920&DB=EPODOC&locale=en\\_EP&CC=US&NR=9447592B2&KC=B2&ND=2](https://worldwide.espacenet.com/publicationDetails/originalDocument?FT=D&date=20160920&DB=EPODOC&locale=en_EP&CC=US&NR=9447592B2&KC=B2&ND=2)

## **PARTICIPATION IN INDUSTRIAL INNOVATION**

The implementation of the Eco-acoustic Theatre patent 2014 has given different results:

1. Design, engineering and construction of the 5-mt diameter (height 4.05mt), 21.1 loudspeakers, 12 seats, mobile *Demo Eco-acoustic Theatre* presented at the European Conference of Science Museums, ECSITE (11-13/09/2015 Trento, Italy). The Theatre is now traveling as a demo facility for Fragments of Extinction.
2. Design, engineering and construction of the 16-mt diameter (height 6.03 mt), 16.2 loudspeakers, 124 seats, permanent *Soundscape Theatre*, opened to the public at NATURAMA Natural History Museum (26/06/2017 Svendborg, Denmark).
3. Design and construction of a **SONOSFERA** (implementation of the Eco-acoustic Theatre patent 2014). The Sonosfera (9.5 meter diameter, 45 loudspeakers, 6 projectors 4K for a 360° screen, circular seating system for 60 people) is a sound-insulated semi-anechoic theatre, for soundscape listening. Official opening to the public: January 6th 2020.

## **PRIZES AND AWARDS**

2012 – Giovannini National Prize for Innovation, 5th edition – Prize for sound art and interdisciplinary innovation, to the presence of President of the Italian Republic – Rome (Italy)

2008 – 1<sup>st</sup> Prize at the 35th International Competition of Sound Art and Electroacoustic Music of Bourges (France)

1996 – Locarno Film Festival - First Prize for soundscape design “XVII Video Art - Festival et Forum International des Nouvelles Images de Locarno” (Switzerland)

1993 – Multiple Sound Festival - First Prize for the sound environment “Scale Dorsali” Maastricht (Holland)

## **MEDIA PRODUCTS AND PUBLICATIONS (selected)**

2017 – documentary film “*Dusk Chorus – based on Fragments of Extinction*” <https://vimeo.com/209585874> written and narrated by David Monacchi (soundscape design from 3D research recordings, surround sound by D. Monacchi) – 11 International Awards and 36 Official Selections (updated 28 July 2018). For the Green Film Network Award (the best films winners in N. 33 Environmental Film Festivals in the world) *Dusk Chorus* positioned as Second Best Documentary 2017 on a global scale. Recently *Dusk Chorus* was awarded Best European Science Film 2017-2018, by Science Film Academy, Vienna.

2011 – feature film “OKA” directed by Lavinia Currier, Roland Productions. Film on Central African’s Bayaka Pigmies (soundscape design of the entire film by D. Monacchi, produced at Warner Bros, Hollywood).

**CD and DVD** (selected - as composer + sound engineer + bi-trilingual booklet written by D. Monacchi)

2008 - Monacchi, D. CD “*Eco-Acoustic Compositions*”, EMF Media, Earth Ear, New York, USA.

2007 - Monacchi, D. CD “*Prima Amazonia*”, Portraits of Acoustic Biodiversity, Wild Sanctuary, San Francisco, USA.

2005 - Monacchi, D. CD “*Paesaggi di Libero Ascolto*”, Ants Records, Roma, ITALY.

2004 - Monacchi, D. et al DVD “*Paesaggi Sonori - Soundscapes*”, Università degli Studi di Macerata, ITALY.

1995-2005 - N. 65 CDs of early, classic and contemporary music produced as recording and mastering engineer.

## **Exhibitions (selected 2015-2018)**

2018 - permanent exhibition: *The Sound of Equatorial Rainforests* – a 23-min. loop immersive audio-video for the Soundscape Theatre - NATURAMA natural history museum, Denmark (full-periphonic HOA audio, 360° video with 16K res.) featuring an educational journey on tropical forests and the soundscape of primary forests.

2017 - permanent exhibition: *Fragments of Extinction* – a 42-min. loop immersive audio-video for the Soundscape Theatre at NATURAMA natural history museum (full-periphonic HOA audio, 360° video with 16K res.) featuring an immersive soundscape experience and extensive surround real-time visual spectrogram analysis.

2016 - temporary exhibition: *The Sonic Heritage of Ecosystems* – a 15-min. loop immersive 3D-listening on interactive headphones, as virtually simulated preview of the Eco-acoustic Theatre for the IUCN Protected Planet Pavilion, at the World Conservation Congress, Hawaii

2015 - temporary exhibition: *The Intelligent Sound of Ecosystems* – a 25-min. loop full-periphonic experience into the Eco-acoustic Theatre (demo mobile 5-mt diam). MUSE Museum of Natural History, Trento IT.

## **AFFILIATIONS IN INTERNATIONAL SOCIETIES AND JOURNALS (Current)**

- [Journal of Ecoacoustics](#) – Editorial board
- [Fragments of Extinction](#), Non-profit Org. – Founder and President
- [International Society of Ecoacoustics](#) – Board Member
- Global Sustainable Soundscape Network – Purdue University (USA) and others – Founding Member
- Ear to the Earth – Leader Member
- [ECSITE](#), European Network of Museums and Science Centers – Fragments of Extinction NGO, Member
- World Forum for Acoustic Ecology – Member