

INDEX

Page 18
OPENING

PAPERS

Page 21

Celestino Soddu

Italy

Argenia, Generative Art and Design Lab

ARGENIA. INTERPRETING THREE THOUSAND YEARS OF HISTORY TO LIVE ON MARS

Page 31

Enrica Colabella

Italy

Generative Art & Design Lab, Argenia

THE GENERATIVE ART OF FINITUDINESS

Page 43

Dmitry L. Weise

Russia

Central Research Institute of Dental and Maxillofacial Surgery, Department of Radiation Diagnostics. Moscow

PHYLLOTAXIS IS NOT LOGARITHMIC

Page 50

Peter Beyls

Belgium

University College Ghent, The School of Arts

TRILOBITE, A LEARNING ROBOTIC CREATURE USING DEEPCONVOLUTIONAL NEURAL NETWORKS

Page 59

Monika Karwaszewska

Poland

Stanisław Moniuszko Academy of Music in Gdańsk

FROM KAMIL CIEŚLIK'S IN DANZIG TO IN EDANZIG

Page 68

Alain Lioret

France

Department of Arts et Technologies de l'Image, Paris 8 University

QUANTUM GENERATIVE ART

Page 74

Nicolas Reeves, J.M. Chomaz, V. Cusson
Canada

**School of Design, University of Quebec in Montreal, Hydrodynamics laboratory,
École Polytechnique, Paris-Saclay, Music & Technology, McGill University, Montreal,**
TECTONICS OF THE MISTS :SCULPTING THE VERY SUBSTANCE OF CLOUDS

Page 87

Ben Baruch Blich
Israel

Faculty of the Arts
MODELLING OF ARCHITECTURAL MODEL

Page 92

Jack Ox
USA

Creative Director of Intermedia Projects Inc
Research Associate with the Center for Advanced Research Computing, UNM
Research Fellow at ART/SCI Lab, ATEC, University of Texas, Dallas
DATA FROM DADA: MAPPING KURT SCHWITTERS' SOUND-POEM, THE
URSONATE, INTO A 73 SQUARE METER PAINTING

Page 102

Jan Paredaens
Belgium

University of Antwerp
THE BEAUTY-DEGREE OF PARAMETERS IN GENERATIVE ART

Page 109

David Upton
UK

Artist
A SYSTEM FOR GENERATING COLOURS AND IMAGES USING 'ONE-TIME'
CRYPTOGRAPHY

Page 120

Philip Galanter
USA

Department of Visualization, Texas A&M University, College Station, Texas
THE ONTOLOGY OF GENERATIVE ART, INFORMATION, AND UNIVERSAL
DARWINISM

Page 127

Stefanie Egger, Christian Lepenik

Austria

The Invisible Lab, Graz

LINEARISATION OF NON-LINEAR PROBLEMS – CURATING A WRITTEN EXHIBITION

Page 133

Chad Eby

USA

**School of Art and Visual Studies, University of Kentucky, Lexington, KY,
AMONG BLACK BOXES AND MAZE-BUILDING RATS: REFLECTIONS ON ART
MAKING WITH AUTONOMOUS RULES; AUTOMATIC CITIES**

Page 144

Guillaume Rochais

France

ACCRA, Université de Strasbourg

**FROM CODE TO OBJECT: ISSUES, APPROACH, AND PROBLEMATICS OF THE
REIFIED ALGORITHMIC ARTWORK; SIGNS (2018 - IN PROGRESS)**

Page 153

Nicolai Steinø

Denmark

Aalborg University, Department of Architecture and Media Technology

**PARAMETRIC URBAN DESIGN AS A MEDIUM FOR THE ARTISTIC EXPLORATION
OF URBAN SPACE AND FORM**

Page 165

Yan Bello Mendez

Spain

**CREATIVE FOUNDER & AI EXPERT. SPACEMINDS SL, MADRID
USING GENERATIVE ART, DATA-STORYTELLING AND ARTIFICIAL INTELLIGENCE
BASED GAMES AS EDUCATIONAL RESOURCES TO GENERATE AWARENESS
ABOUT FALLS PREVENTION**

Page 179

Dragana Ciric

Serbia

University of Belgrade

**[EXO] BETWEEN THE SCIENTIFIC AND ARTISTIC METHODOLOGIES: OPERATING
REGIMES, OR SOFT ARCHITECTURE OF THE INTEGRATIVE RESPONSIVE KINETIC
SYSTEM**

Page 208

Sławomir Wojtkiewicz

Poland

Technical University of Białystok, Faculty of Architecture, Department of Visual Arts

THE APPLICATION OF GENERATIVE DESIGN SYSTEM AND BIM IN THE SHAPING OF CONTEMPORARY RESIDENTIAL ARCHITECTURE DESIGN APPROACH.

performance: THE LAND, THE CITY

Page 216

Nathan Matteson, Nicholas Kersulis

USA

School of Design, College of Computing and Digital Media, DePaul University, Chicago IL; Otis College of Art and Design, Los Angeles CA

GOOD-FOR-NOTHING (NO. 2) AND GOOD-FOR-NOTHING (POURS)

Page 220

Stig Møller Hansen

Denmark

Center for Design & Visual Communication, Danish School of Media and Journalism, Copenhagen

PROGRAMMING FOR GRAPHIC DESIGNERS: BUILDING A PROJECT-BASED INTERACTIVE ONLINE TEXTBOOK AROUND VIDEO WORKED EXAMPLES

Page 231

Stephen M Campbell

UK

The Puzzle Factory, Salford

THE PUZZLE FACTORY'S, GENERATIVE ART STUDIO

Page 242

Ahmed Abdulwahid Dhannoon Taha, Oday Qusay Abdulqader Alchalabi

Iraq

Department of Architecture Engineering, College of Engineering, University of Mosul

THE USE OF THE MULTI-FRAMING MECHANISM IN THE FACADES OF ISLAMIC ARCHITECTURE

Page 249

Andre Kudra

Germany

AoC Initiative, Germany | Echtzeit – Digitale Kultur, Switzerland

DEMOSCENE DARK MATTER – THE CULTURE THAT MAKES PEOPLE STAY IN THE SCENE

Page 256

Volodymyr V. Riznyk

Ukraine

Department of Automated Control Systems, Lviv Polytechnic National University

GENERATIVE DESIGN UNDER THE INTELLIGENT MANIFOLD COORDINATE SYSTEMS

Page 268

Ela Krieger

Israel

Art Department, Oranim Academic College, Kiryat Tiv'on

ON ARTISTIC AUTONOMY AND THE PATTERN IN JASPER JOHNS'S SCENT (1973–1974)

Page 276

Marie-Pascale Corcuff

France

GRIEF, ENSAB, Rennes

BACK TO SNOWFLAKES, AND BEYOND

Page 287

Hedy Hurban

UK

Department of Art, Design Architecture, University of Plymouth

AN EXPLORATION OF SOUND, DIGITAL ART, PERFORMANCE, AND WEARABLE TECHNOLOGY INSPIRED BY TRADITIONAL WHIRLING DERVISH MOVEMENT AND FLAMENCO DANCE

Page 300

Joshua Holden

USA

Department of Mathematics, Rose-Hulman Institute of Technology, Terre Haute, IN
STOCHASTIC SNARE DRUMS AND TRANSITION-MATRIX TOM-TOMS: COMPOSING ROCK DRUM KIT SOLOS USING STOCHASTIC PROCESSES

Page 307

Helena A. Verrill

UK

Warwick Mathematics Institute

FRACTALS FROM TRUCHET TILINGS

Page 315

Daniel Bisig, Ephraim Wegner

UK, Switzerland, Germany

Center for Dance Research, Coventry University, Coventry, United Kingdom,

Institute for Computer Music and Sound Technology, Zurich University of the arts,

Zurich, Offenburg University, Offenburg

PUPPETEERING AN AI - INTERACTIVE CONTROL OF A MACHINE-LEARNING BASED ARTIFICIAL DANCER

Page 333

Henk Hietbrink

The Netherlands

independent researcher, Utrecht

A VISUAL INTERPRETER FOR PRE-DEFINED MUQARNAS UNITS

Page 343

Irene Rousseau

USA

Artist, President American Abstract Artist

NATURE AS A STRATEGY FOR PATTERN FORMATION IN ART

Page 349

Tanmay Banerjee, Alain Lioret, John Bardakos

France

Team INREV / AI-AC Lab, Université Paris 8 Vincennes Saint-Denis

re-prOCesS.iN_(g)_ene/Rate: [GENERATIVE PROPERTIES OF A LINE IN SYSTEMS

ART & RELATIONAL AESTHETICS]

Page 353

Daniel Larrain

Chile

Catholic University of Chile; McGill University

PROJECTING TEXT TO MUSICAL MATERIALS: MAPPING AS A CREATIVE PROCESS

Page 363

Jeffrey M. Morris

USA

Department of Performance Studies, Texas A&M University, College Station, Texas

THE MUSIC OF MACHINE MISREADING:

MACHINE LEARNING ARTIFACTS AS SOURCES FOR ARTISTIC CONTENT AND

CONTROL

Page 369

Erik Demaine, Martin Demaine

USA

Massachusetts Institute of Technology, Cambridge, MA

MORE THAN WORDS: FONTS AS GENERATIVE ART

Page 379

Aamina Karim Malik

Pakistan

MEMORIES WITH SOUNDS

Page 388

Artemis Moroni, Jonatas Manzolli, C. Dezotti, E. Nascimento, T. Lacerda, G. Kuae, D. Gonçalves, M. Medicina

Brazil

Division of Cyberphysical Systems – CTI Renato Archer, Institute of Arts, University of Campinas

RE-DRAWING CAMPINAS WITH DISC-RABISCO

Page 394

Davide Prete, Sergio Picozzi

USA

University of the District of Columbia, The Catholic University of America

FROM DIGITAL TO PHYSICAL: BEST PRACTISES TO 3D PRINT DIGITAL MODELS IN LARGE SCALE PHYSICAL MODELS

Page 399

Christopher Fry

UK

Westminster School of Art, University of Westminster

ENCOUNTERS WITH ERRORS: HOW THE ERROR SHAPES RELATIONSHIPS WITH DIGITAL MEDIA PRACTICE

Page 409

Alp Tuğan,

Turkey

**GRADUATE SCHOOL OF SOCIAL SCIENCES, ÖZYEĞİN UNIVERSITY, İSTANBUL
LIBERATION OF THE MEDIUM: DECENTRALIZATION OF DYNAMIC GENERATIVE
ART CREATIONS BY NFT MARKETPLACES**

Page 421

Benjamin Storch

UK

Sculpture Artist

POINT OF CREATION

Page 427

Robert Spahr

USA

School of media arts, Southern Illinois University Carbondale

DEFENDING UNCERTAINTY: THE CREATIVE PROCESS AND GENERATIVE ART;

Page 428

Liu Yi-yang Tyler

Finland

Department of New Media, Aalto University, Espoo

ENDLESS, NAMELESS SCULPTURE: HACK THE CRAFTIVISM THROUGH AI

Page 435

Performnces, Artworks, and Posters

Page 437

**Enrica Colabella, Celestino Soddu, Nicola Baroni, Pitano Perra
Italy**

**Generative Art & Design Lab, Argenia
OVER THE STONES OF FINITUDINESS**

Page 442

**Beata Oryl, Michał Garnowski
Poland**

**Stanisław Moniuszko Academy of Music in Gdańsk
IN DANZIG. A CHOREOGRAPHIC INPHRASIS**

Page 444

**Kathryn Ricketts, Angela Ferraiolo, Arne Eigenfeldt
Canada, USA**

**Faculty of Education, University of Regina, Regina; Visual Arts Faculty, Sarah
Lawrence College, New York; School for the Contemporary Arts, Vancouver
BLOMSTER - THE HUMAN GARDEN**

Page 446

**Kathryn Ricketts, Scott Morgan
Canada**

**Faculty of Education, University of Regina
RECOLLECTIONS WORN**

Page 448

**Robert Spahr, Jay Needham
USA**

**School of media arts, Southern Illinois University Carbondale
OBJECTS, PERCEPTION AND TIME: THE PRESENT MOMENT AMPLIFIER AND THE
COMING OF AUTO-GENERATIVE SYNTHETIC SOUND**

Page 449

**Barbara Loi
Italy**

poet

**VOICES OF JANAS, VOICES OF SIRENS
SOURCES FOR ARTISTIC CONTENT AND CONTROL**

Page 454

Arne Eigenfeldt

Canada

School for the Contemporary Arts Simon Fraser University, Vancouver

THE NEW NORMAL

Page 455

Angela Ferraiolo

USA

Visual and Studio Arts, Sarah Lawrence College, Bronxville, New York

GEOLOGY: A GENERATIVE ARTWORK

Page 457

Anjika Verma

USA

Art Department, University of Wisconsin-Madison, Madison

DUET

Page 462

Caitlin E. McDonald

UK

Creative Informatics, University of Edinburgh, Edinburgh

PELICAN STAIRS: A WAPPING GREAT PANDEMIC MEMOIR

Page 466

Santo Leonardo

Italy

ICT Manager / Generative Artist

**UNPREDICTABLE ENDLESS VARIATIONS GENERATED BY HARD MATH
PROBLEMS**

Page 469

Craig Jackson, Jeff Nilan

USA

**Department of Mathematics and Computer Science Ohio; Wesleyan University,
Delaware, OH**

**DESCRIBING A COLLABORATIVE, INTERDISCIPLINARY UNDERGRADUATE
COURSE ON GENERATIVE ART: PAST PRACTICE AND IDEAS FOR THE FUTURE**

Page 470

Chad Eby

USA

School of Art and Visual Studies, University of Kentucky, Lexington, KY

AUTOMATIC CITIES

Page 471

Binru Yang, Cody Tucker

Germany

Max Planck Institute of Colloids and Interfaces, ITECH University of Stuttgart

TIME-FORM-PERFORMANCE - TESSELLATION DESIGN LAWS

Page 475

Guillaume Rochais

France

ACCRA, Université de Strasbourg

SIGNS (2018 - IN PROGRESS)

Page 478

Oday Qusay Abdulqader Alchalabi, Ashraf Ibrahim Alhafude

Iraq

Department of Architecture Engineering, College of Engineering, University of Mosul

THE ADAPTIVE RE-USED OF THE HISTORICAL ORNAMENTS IN THE SPACE

Page 479

Mark Zanter

USA

Marshall University, School of Music

RETRACEMENTS

Page 482

Curtis L Palmer

Canada

Edmonton, Alberta

HARDWARE, SOFTWARE & WETWARE LIMITS TO POPULATING INFINITE ZOOS

Page 486

Christine Ramsay

Canada

Department of Film, Faculty of Media, Art and Performance, University of Regina

STUDIES IN ALUMINUM, STUDIES IN CLAY

Page 494

Brenikou

Greece

Polytechnic of Patras , Department of Computer Engineering & Informatics , Hellas

BASE POLYGONS , TESSELLATIONS, APOPHENIA, PAREIDOLIA

(WHAT IS "REAL" AND WHAT IS NOT ?)

Page 501

Maria Mannone

Italy

European Centre for Living Technology, Ca' Foscari University of Venice;

Department of Mathematics and Computer Sciences, University of Palermo

VENETIAN DISTORTING MIRRORS

Page 546

J.R. Chang

USA

Department of Art and Design, University of Delaware, Newark, Delaware

[FISHTANK]

Page 506

Chin-En Keith Soo, Rowan Simmons

New Zealand

University of Waikato, Department of Design

ebBe

Page 509

Anna Ursyn, Stuart Smith

USA

Computer Graphics, Digital Media University of Northern Colorado, Computer

Science and Music, U Mass, Lowell

CITY RITUAL

Page 510

Andrea Wollensak, Brett Terry, Bridget Baird

USA

Connecticut College, New London, CT

ENVIRONMENTAL CRITICAL ZONES: READING THE WRACK LINES

Page 514

Regina Bittencourt

Chile

Interdisciplinary Artist, Math Art, Santiago

HENDEKA: MAKING ART USING MODULUS 11

Page 516

Jim Bizzocchi

Canada

School of Interactive Arts and Technology, Simon Fraser University, Burnaby

FLOW

Page 521

David Bouchard

Canada

New Media, Ryerson University, Toronto

HIGHWAYS, A GENERATIVE MEDITATION ON THE GEOMETRY OF INTERCHANGES

OPENING XXIV GENERATIVE ART CONFERENCE

Everything has changed in these last two pandemic years. Technology continues to be indispensable but our human identity emerges as a new ancient value to be preserved in order not to simplify our complexity.

We wonder to gain a generative connection between different visions and tools in our global world for trying to give an aesthetic answer to the complex problem of our disappearing humanity.

So moving from the center of our experiments, theories, and discussions we will try to space around problems and tools where the awareness of the importance of human identity and its fullness and complexity remains preserved and the tools do not become the occasion of an unacceptable simplification of our human identity.

Generative Art can be one of the starting points of this step forward in the consideration and use of technologies. First of all, technology should not be rejected just as the creative action of man cannot be rejected or put in the background. As in all manifestations of Art, the idea, the creativity, and the tools are not opposing events but converge in making an art process that enhances us. This must be considered as a basic inalienable point of our human identity.

Change in post time is not an exclusion of human characters. As in nature, everything is following a complex evolutionary process where the winner is the preserved identity. This is GA philosophy.

Celestino Soddu and Enrica Colabella
Chairs of Generative Art Conferences