



LEONARDO ELECTRONIC ALMANAC

VOL 18 NO 3 VOLUME EDITORS LANFRANCO ACETI, JANIS JEFFERIES,

IRINI PAPADIMITRIOU / EDITORS JONATHAN MUNRO AND ÖZDEN ŞAHİN

Touch and Go is published in collaboration with Watermans and Goldsmiths College in occasion of the Watermans' International Festival of Digital Art, 2012, which coincides with the Olympics and Paralympics in London. The issue explores the impact of technology in art as well as the meaning, possibilities and issues around human interaction and engagement. *Touch and Go* investigates interactivity and participation, as well as light art and new media approaches to the public space as tools that foster engagement and shared forms of participation.



TOUCH AND GO

Copyright 2012 ISAST

Leonardo Electronic Almanac

Volume 18 Issue 3

August 2012

ISSN 1071-4391

ISBN 978-1-906897-18-5

The ISBN is provided by Goldsmiths, University of London.

LEA PUBLISHING & SUBSCRIPTION INFORMATION

Editor in Chief

Lanfranco Aceti lanfranco.aceti@leoalmanac.org

Co-Editor

Özden Şahin ozden.sahin@leoalmanac.org

Managing Editor

John Francescutti john.francescutti@leoalmanac.org

Art Director

Deniz Cem Öndüğü deniz.onduygu@leoalmanac.org

Editorial Board

Peter J. Bentley, Ezequiel Di Paolo, Ernest Edmonds, Felice Frankel, Gabriella Giannachi, Gary Hall, Craig Harris, Sibel Irzik, Marina Jirotko, Beau Lotto, Roger Malina, Terrence Masson, Jon McCormack, Mark Nash, Sally Jane Norman, Christiane Paul, Simon Penny, Jane Prophet, Jeffrey Shaw, William Uricchio

Contributing Editors

Nina Czegledy, Susan Collins, Leonardo Da Vinci, Anna Dumitriu, Vince Dziekan, Darko Fritz, Marco Gillies, Davin Heckman, Saoirse Higgins, Jeremy Hight, Denisa Kera, Frieder Nake, Vinoba Vinayagamoorthy

Cover Image

Scenocosme

Editorial Address

Leonardo Electronic Almanac

Sabancı University, Orhanlı – Tuzla, 34956

Istanbul, Turkey

Email

info@leoalmanac.org

Web

- » www.leoalmanac.org
- » [www.twitter.com/LEA_twitts](https://twitter.com/LEA_twitts)
- » www.flickr.com/photos/lea_gallery
- » www.facebook.com/pages/Leonardo-Electronic-Almanac/209156896252

Copyright © 2012

Leonardo, the International Society for the Arts,
Sciences and Technology

Leonardo Electronic Almanac is published by:

Leonardo/ISAST
211 Sutter Street, suite 501
San Francisco, CA 94108
USA

Leonardo Electronic Almanac (LEA) is a project of Leonardo/
The International Society for the Arts, Sciences and Technol-
ogy. For more information about Leonardo/ISAST's publica-
tions and programs, see <http://www.leonardo.info> or contact
isast@leonardo.info.

Leonardo Electronic Almanac is produced by
Passero Productions.

Posting of this journal is prohibited without permission of
Leonardo/ISAST, except for the posting of news and events
listings which have been independently received.

The individual articles included in the issue are © 2012 ISAST.

LEONARDO ELECTRONIC ALMANAC, VOLUME 18 ISSUE 3

Touch and Go

VOLUME EDITORS

LANFRANCO ACETI, JANIS JEFFERIES, IRINI PAPADIMITRIOU

EDITORS

JONATHAN MUNRO, ÖZDEN ŞAHİN

Watermans International Festival of Digital Art, 2012

Touch and Go is a title that I chose together with Irini Papadimitriou for this LEA special issue. On my part with this title I wanted to stress several aspects that characterize that branch of contemporary art in love with interaction, be it delivered by allowing the audience to touch the art object or by becoming part of a complex electronic sensory experience in which the artwork may somehow respond and touch back in return.

With the above statement, I wanted to deliberately avoid the terminology 'interactive art' in order to not fall in the trap of characterizing art that has an element of interaction as principally defined by the word interactive; as if this were the only way to describe contemporary art that elicits interactions and responses between the artist, the audience and the art objects.

I remember when I was at Central Saint Martins writing a paper on the sub-distinctions within contemporary media arts and tracing the debates that distinguished between electronic art, robotic art, new media art, digital art, computer art, computer based art, internet art, web art... At some point of that analysis and argument I realized that the common thread that characterized all of these sub-genres of aesthetic representations was the word art and it did not matter (at least not that much in my opinion) if the manifestation was material or immaterial, conceptual or physical, electronic or painterly, analogue or digital.

I increasingly felt that this rejection of the technical component would be necessary in order for the electronic-robotic-new-media-digital-computer-based-internet art object to re-gain entry within the field of fine art. Mine was a reaction to an hyper-fragmented

and indeed extensive and in-depth taxonomy that seemed to have as its main effect that of pushing these experimental and innovative art forms – through the emphasis of their technological characterization – away from the fine arts and into a ghetto of isolation and self-reference. Steve Dietz's question – *Why Have There Been No Great Net Artists?*¹ – remains unanswered, but I believe that there are changes that are happening – albeit slowly – that will see the sensorial and technical elements become important parts of the aesthetic aspects of the art object as much as the brush technique of Vincent Willem van Gogh or the sculptural fluidity of Henry Moore.

Hence the substitution in the title of this special issue of the word interactivity with the word touch, with the desire of looking at the artwork as something that can be touched in material and immaterial ways, interfered with, interacted with and 'touched and reprocessed' with the help of media tools but that can also 'touch' us back in return, both individually and collectively. I also wanted to stress the fast interrelation between the art object and the consumer in a commodified relationship that is based on immediate engagement and fast disengagement, touch and go. But a fast food approach is perhaps incorrect if we consider as part of the interactivity equation the viewers' mediated processes of consumption and memorization of both the image and the public experience.

Nevertheless, the problems and issues that interactivity and its multiple definitions and interpretations in the 20th and 21st century raise cannot be overlooked, as much as cannot be dismissed the complex set of emotive and digital interactions that can be set in motion by artworks that reach and engage large groups of people within the public space. These interactions

generate public shows in which the space of the city becomes the background to an experiential event that is characterized by impermanence and memorization. It is a process in which thousands of people engage, capture data, memorize and at times memorialize the event and re-process, mash-up, re-disseminate and re-contextualize the images within multiple media contexts.

The possibility of capturing, viewing and understanding the entire mass of data produced by these aesthetic sensory experiences becomes an impossible task due to easy access to an unprecedented amount of media and an unprecedented multiplication of data, as Lev Manovich argues.²

In *Digital Baroque: New Media Art and Cinematic Folds* Timothy Murray writes that "the retrospective nature of repetition and digital coding—how initial images, forms, and narratives are refigured through their contemplative re-citation and re-presentation—consistently inscribes the new media in the memory and memorization of its antecedents, cinema and video."³

The difference between memorization and memorialization may be one of the further aspects in which the interaction evolves – beyond the artwork but still linked to it. The memory of the event with its happening and performative elements, its traces and records both official and unofficial, the re-processing and mash-ups; all of these elements become part of and contribute to a collective narrative and pattern of engagement and interaction.

These are issues and problems that the artists and writers of this LEA special issue have analyzed from a variety of perspectives and backgrounds, offering to the reader the opportunity of a glimpse into the complexity of today's art interactions within the contemporary social and cultural media landscapes.

Touch and Go is one of those issues that are truly born from a collaborative effort and in which all editors have contributed and worked hard in order to

deliver a documentation of contemporary art research, thought and aesthetic able to stand on the international scene.

For this reason I wish to thank Prof. Janis Jefferies and Irini Papadimitriou together with Jonathan Munro and Özden Şahin for their efforts. The design is by Deniz Cem Önduygu who as LEA's Art Director continues to deliver brilliantly designed issues.

Lanfranco Aceti

Editor in Chief, *Leonardo Electronic Almanac*
Director, Kasa Gallery



1. "Nevertheless, there is this constant apparently inherent need to try and categorize and classify. In *Beyond Interface*, an exhibition I organized in 1998, I 'datamined' ten categories: net.art, storytelling, socio-cultural, biographical, tools, performance, analog-hybrid, interactive art, interfacers + artificers. David Ross, in his lecture here at the CAD-RE Laboratory for New Media, suggested 21 characteristics of net art. Stephen Wilson, a pioneering practitioner, has a virtual – albeit well-ordered – jungle of categories. Rhizome has developed a list of dozens of keyword categories for its ArtBase. Lev Manovich, in his *Computing Culture: Defining New Media Genres* symposium focused on the categories of database, interface, spatialization, and navigation. To my mind, there is no question that such categorization is useful, especially in a distributed system like the Internet. But, in truth, to paraphrase Barnett Newman, "ornithology is for the birds what categorization is for the artist." Perhaps especially at a time of rapid change and explosive growth of the underlying infrastructure and toolsets, it is critical that description follow practice and not vice versa." Steve Dietz, *Why Have There Been No Great Net Artists? Web Walker Daily* 28, April 4, 2000, <http://bit.ly/QJEWIY> (accessed July 1, 2012).
2. This link to a Google+ conversation is an example of this argument on massive data and multiple media engagements across diverse platforms: <http://bit.ly/pGgDsS> (accessed July 1, 2012).
3. Timothy Murray, *Digital Baroque: New Media Art and Cinematic Folds* (Minneapolis: University of Minnesota Press, 2008), 138.

Touch and Go: The Magic Touch Of Contemporary Art

It is with some excitement that I write this preface to Watermans International Festival of Digital Art, 2012. It has been a monumental achievement by the curator Irini Papadimitriou to pull together 6 groundbreaking installations exploring interactivity, viewer participation, collaboration and the use or importance of new and emerging technologies in Media and Digital Art.

From an initial call in December 2010 over 500 submissions arrived in our inboxes in March 2011. It was rather an overwhelming and daunting task to review, look and encounter a diverse range of submissions that were additionally asked to reflect on the London 2012 Olympic and Paralympic Games. Submissions came from all over the world, from Africa and Korea, Austria and Australia, China and the UK, Latvia and Canada and ranged from the spectacularly complicated to the imaginatively humorous. Of course each selector, me, onedotzero, London's leading digital media innovation organization, the curatorial team at Athens Video Art Festival and Irini herself, had particular favorites and attachments but the final grouping I believe does reflect a sense of the challenges and opportunities that such an open competition offers. It is though a significant move on behalf of the curator that each work is given the Watermans space for 6 weeks which enables people to take part in the cultural activities surrounding each installation, fulfilling, promoting and incorporating the Cultural Olympiad themes and values 'inspiration, participation and creativity.'

Some, like Gail Pearce's *Going with the Flow* was made because rowing at the 2012 Olympics will be held near Egham and it was an opportunity to respond and create an installation offering the public a more interactive way of rowing, while remaining on dry land, not only watching but also participating and having an effect on the images by their actions. On the other hand, Michele Barker and Anna Munster's collaborative *Hocus Pocus* will be a 3-screen interactive artwork that uses illusionistic and performative aspects of magical tricks to explore human perception, senses and movement. As they have suggested, "Magic – like interactivity – relies on shifting the perceptual relations between vision and movement, focusing and diverting attention at key moments. Participants will become aware of this relation as their perception catches up with the audiovisual illusion(s)" (artists statement, February 2011). Ugochukwu-Smooth Nzewi and Emeka Ogbob are artists who also work collaboratively and working under name of One-Room Shack. *UNITY* is built like a navigable labyrinth to reflect the idea of unity in diversity that the Games signify. In an increasingly globalized world they are interested in the ways in which the discourse of globalization opens up and closes off discursive space whereas Suguru Goto is a musician who creates real spaces that are both metaphysical and spiritual. *Cymatics* is a kinetic sculpture and sound installation. Wave patterns are created on liquid as a result of sound vibrations generated by visitors. Another sound work is Phoebe Hui's *Granular Graph*, a sound instrument about musical gesture and its notation.

Audiences are invited to become a living pendulum. The apparatus itself can create geometric images to represent harmonies and intervals in musical scales. Finally, Joseph Farbrook's *Strata-caster* explores the topography of power, prestige, and position through an art installation, which exists in the virtual world of Second Life, a place populated by over 50,000 people at any given moment.

Goldsmiths, as the leading academic partner, has been working closely with Watermans in developing a series of seminars and events to coincide with the 2012 Festival. I am the artistic director of Goldsmiths Digital Studios (GDS), which is dedicated to multi-disciplinary research and practice across arts, technologies and cultural studies. GDS engages in a number of research projects and provides its own postgraduate teaching through the PhD in Arts and Computational Technology, the MFA in Computational Studio Arts and the MA in Computational Art. Irini is also an alumni of the MFA in *Curating* (Goldsmiths, University of London) and it has been an exceptional pleasure working with her generating ideas and platforms that can form an artistic legacy long after the Games and the Festival have ended. The catalogue and detailed blogging/documentation and social networking will be one of our responsibilities but another of mine is to ensure that the next generation of practitioners test the conventions of the white cube gallery, reconsider and reevaluate artistic productions, their information structure and significance; engage in the museum sector whilst at the same time challenging the spaces for the reception of 'public' art. In addition those who wish to increase an audience's interaction and enjoyment of their work have a firm grounding in artistic practice and computing skills.

Consequently, I am particularly excited that the 2012 Festival Watermans will introduce a mentoring scheme for students interested in participatory interactive digital / new media work. The mentoring scheme involves video interviews with the 6 selected artists and their work, briefly introduced earlier in this preface, and discussions initiated by the student. As so often debated in our seminars at Goldsmiths and

elsewhere, what are the expectations of the audience, the viewer, the spectator, and the engager? How do exhibitions and festival celebrations revisit the traditional roles of performer/artist and audiences? Can they facilitate collaborative approaches to creativity? How do sound works get curated in exhibitions that include interactive objects, physical performances and screens? What are the issues around technical support? How are the ways of working online and off, including collaboration and social networking, affecting physical forms of display and publishing?

As I write this in Wollongong during the wettest New South Wales summer for 50 years, I want to end with a quote used by the Australia, Sydney based conjurers Michele Barker and Anna Munster

Illusions occur when the physical reality does not match the perception. 

The world is upside down in so many alarming ways but perhaps 2012 at Watermans will offer some momentary ideas of unity in diversity that the Games signify and *UNITY* proposes. Such anticipation and such promise!

Janis Jefferies

*Professor of Visual Arts
Goldsmiths
University of London, UK*

23rd Dec 2011, University of Wollongong, NSW, Australia

-
1. Stephen L. Malnik and Susana Martinez-Conde, *Sleights of Mind: What the Neuroscience of Magic Reveals about our Everyday Deceptions* (New York: Henry Holt and Company, 2010), 8.

Leonardo Electronic Almanac

Volume 18 Issue 3

4 **EDITORIAL** Lanfranco Aceti

6 **INTRODUCTION** Janis Jefferies

10 **SUGURU GOTO, CYMATICS, 2011 - AN ACTION SHARING**

PRODUCTION Simona Lodi & Luca Barbeni

+ **SUGURU GOTO** in conversation with Paul Squires

30 **INTERACTIVITY, PLAY AND AUDIENCE ENGAGEMENT** Tine Bech

44 **UNITY: IN PURSUIT OF THE HUMANISTIC SPIRIT** One-Room Shack
Collective

+ **ONE-ROOM SHACK COLLECTIVE** in conversation with Evelyn Owen

52 **HOKUSPOKUS** Michele Barker & Anna Munster

58 **AS IF BY MAGIC** Anna Gibbs

60 **BLACK BOXES AND GOD-TRICKS: AN ACCOUNT OF USING
MEDICAL IMAGING SYSTEMS TO PHOTOGRAPH CONSCIOUSNESS
IN THE CONTEXT OF A DIGITAL ARTS PRACTICE** Eleanor Dare

72 **CO-AUTHORED NARRATIVE EXPERIENCE: AFFECTIVE, EMBODIED
INTERACTION THROUGH COMBINING THE DIACHRONIC WITH THE
SYNCHRONISTIC** Carol MacGillivray & Bruno Mathez

84 **UNTITLED** Phoebe Hui
+ **PHOEBE HUI** in conversation with Jonathan Munro

98 **GOING WITH THE FLOW**
GAIL PEARCE in conversation with Jonathan Munro

102 **THE SWEET SPOT** Graeme Crowley in collaboration with The Mustard and
Blood Orchestra

108 **STRATA-CASTER: AN EXPLORATION INTO THE TOPOGRAPHY OF
POWER, PRESTIGE, AND POSITION** Joseph Farbrook
+ **JOSEPH FARBROOK** in conversation with Emilie Giles

114 **WHERE IS LOURENÇO MARQUES?: A MOSAIC OF VOICES IN A 3D
VIRTUAL WORLD** Rui Filipe Antunes

122 **GEOMETRY**

FÉLICIE D'ESTIENNE D'ORVES in conversation with Claire Le Gouellec

130 **THE EMPOWERING POTENTIAL OF RE-STAGING** Birgitta Cappelen &
Anders-Petter Andersson

140 **SCENOCOSME: BODY AND CLOUDS**

Grégory Lasserre & Anaïs met den Ancxt

154 **LIGHT, DATA, AND PUBLIC PARTICIPATION**

Dave Colangelo & Patricio Davila

164 **INCARNATED SOUND IN MUSIC FOR FLESH II: DEFINING GESTURE
IN BIOLOGICALLY INFORMED MUSICAL PERFORMANCE**

Marco Donnarumma

176 **THE STORY OF PARCIVAL: DESIGNING INTERACTION FOR AN
INTERDISCIPLINARY DANCE PERFORMANCE** Gesa Friederichs-Büttner

& Benjamin Walther-Franks

190 **INTERACTION'S ROLE AS CATALYST OF SYNTHESIZED
INTELLIGENCE IN ART** Judson Wright

200 **IN SEARCH OF A DIGITAL MASTERPIECE (OR TWO): STANZA**

Maria Chatzichristodoulou [aka Maria X]

212 **TELEMATIC TOUCH AND GO**

Ellen Pearlman, Newman Lau & Kenny Lozowski

224 **HAPTIC UNCONSCIOUS: A PREHISTORY OF AFFECTIVITY IN
MOHOLY-NAGY'S PEDAGOGY AT THE NEW BAUHAUS**

Charissa N. Terranova

236 **THE GESTALT OF STREET TEAM: GUERRILLA TACTICS, GIFS, AND
THE MUSEUM** Charissa N. Terranova

240 **BIOGRAPHIES**

250 **ACKNOWLEDGEMENTS**

Biographies

» **LANFRANCO ACETI** works as an academic, artist and curator. He is Visiting Professor at Goldsmiths College, Department of Art and Computing; teaches Contemporary Art and Digital Culture at the Faculty of Arts and Social Sciences, Sabanci University, Istanbul; and is Editor in Chief of the Leonardo Electronic Almanac (The MIT Press, Leonardo journal and ISAST). He was the Artistic Director and Conference Chair for ISEA2011 Istanbul and works as gallery director at Kasa Gallery in Istanbul. He has a Ph.D. from Central Saint Martins College of Art and Design, University of the Arts London. His work has been published in Leonardo, Routledge and Art Inquiry and his interdisciplinary research focuses on the intersection between digital arts, visual culture and new media technologies. His artworks have been exhibited internationally and currently he is working on an art and curatorial project titled *The Museum of Contemporary Cuts* (MoCC).

Lanfranco Aceti is also the founder and director of the research center ORADST (Operational Research in Art, Design, Science and Technology) and of CADST (Curating Art, Design, Science and Technology).

» **IRINI MIRENA PAPADIMITRIOU** is the Head of New Media Arts Development at Watermans Arts Centre in West London, a space with a long history and commitment to presenting innovative work as well as supporting artists working with technology.

She is also part of the Digital Programmes Team at the v&a, mainly responsible for the monthly Digital Futures and Digital Drop-in programmes where artists/designers/technologists are invited to share work and research with fellow professionals and the public with a particular focus on processes and work in progress rather than finished work. Irini curates the annual Digital Design Weekend, a weekend of events during the London Design Festival at the v&a, including interactive installations, talks and performances, hacking and tinkering projects, workshops and more.

» **JANIS JEFFERIES** is Professor of Visual Arts at Goldsmiths researching electronic communication in cloth and convenes MFA and PhD practice based programmes in Arts and Computational Technology, Department of Computing.

Recent publications include *Interfaces of Performance* edited by Janis Jefferies, Maria Chatzichristodoulou, Rachel Zerihan, Ashgate Publishing, "The Artist as Researcher in a Computer Mediated Culture" in *Art Practices in a Digital Culture* (2010), eds Gardiner and Gere, Ashgate Publishing, "Loving Attention: An outburst of craft in contemporary art" (2010) in *Extraordinary: Craft Culture and Contemporary Art*, Duke University Press, USA, (editor, Maria Buszek, Kansas City Art Institute, USA), and "Wires and Wearables" in *This Pervasive Day: The Potential and Perils of Pervasive Computing* (2011), ed. Jeremy Pitt, Imperial College Press, London and "... and some trace of her": Katie Mitchell's Waves in Multi Media Performance" (2012), *Women: A Cultural Review*, Taylor and Francis, "Situated Knowledge: The Subjective and The Personal In Creative Arts Research" in *Journal of Research Practice* (2012), ed Daina Silina, The Centre for New

Media Culture in Riga, Latvia and "Pattern, Patterning, Probe" in *The happening of the social: devices, sites and methods*, editors, Celia Lury and Nina Wakeford, Routledge Publications, forthcoming September 2012.

» **SIMONA LODI** is co-founder and art director of Share Festival, Share Prize and Action Sharing, art critic and curator. Since 1993 she has been a contributor to many leading contemporary art publications, including Tema Celeste, Arte e Critica, Flash Art, Segno, MyMedia, Cluster, Il Giornale dell'Arte, Il Giornale dell'Architettura, and Neural.

In 2007 she launched the Action Sharing platform, sponsored by the Turin Chamber of Commerce, the Polytechnic of Turin, and mechatronics companies in Piedmont, to promote the production of artistic projects that use mechatronic elements in a syncretic way, where art, science, research and experimentation are brought together and combined to create new tools of knowledge.

She organises exhibitions and writes articles and essays on the relationship between art and technology, and the impact that the digital revolution, new media and the Internet as forms of expression have had on contemporary art.

Recently she has published "Cease & Desist Art: yes, this is illegal!" in *REFF | Rome Europe Fake Factory* edited by C. Hendrickson, S. Iaconesi, O. Persico, F. Ruberti, L. Simeone. Foreword by Bruce Sterling. Texts by Richard Barbrook, Tatiana Bazzichelli, Massimo Canevacci, Antonio Caronia, Stephen Kovats, etc. Edited Derive e Approdi, Milan, 2010.

» **LUCA BARBENI**'s career began in 1999 when he launched the *net.art Island.8081* project with the 80/81 group (www.8081.com). From 2004 to 2006 he worked for Teknedia. In 2006 he began working with Simona Lodi and Chiara Garibaldi on the Piemonte Share Festival, initially as an external curator before joining the association itself. An expert in web cinema,

he has published two books on the subject—the first in 2006, entitled *Webcinema, L'Immagine Cibernetica* (Web-cinema. The Cybernetic Image), and in November 2010, *Fino alla fine del cinema* (Until the End of Cinema), based on three web cinema exhibitions created thanks to and for the Share Festival.

» **CHIARA GARIBALDI** is an architect and expert in sustainable technological space and exhibitions. She is co-founder and general director of the Share Festival, Share Prize and Action Sharing. Since 1989 Chiara has collaborated with a number of important academic and corporate institutions in Italy and abroad, such as the Polytechnic of Turin and the Polytechnic of Milan, Castello di Rivoli, Softech in Turin, Esats in Seville, and for the Spanish pavilion at Seville Expo '92.

In 2006 she launched the Action Sharing platform, sponsored by the Turin Chamber of Commerce, the Polytechnic of Turin, and mechatronics companies in Piedmont, to promote the production of artistic projects that use mechatronic elements in a syncretic way, where art, science, research and experimentation are brought together and combined to create new tools of knowledge.

Having focused on the relationship between architecture and nature, technology and sustainability, in the digital era she has turned her attention to how new media and the Internet influence contemporary forms of expression, creating projects, designing exhibitions and directing multimedia productions. The unifying theme of her work as an architect lies in the analysis of how contemporary life is being shaped by the digital and global age.

<http://www.toshare.it/>

» **TINE BECH** is a visual artist and researcher working with interactive installations and public art. Her work is concerned with how we engage with our immediate environment and aims to create experiences of immersion and play. Projects have centered around the use of interactive electronics and location tracking technology; urban spaces and environmental elements such as gravity, water, sound and light. Her work has been shown both nationally and internationally, in venues including Victoria and Albert Museum, Sackler Centre (UK), The Science Museum (UK), SIGGRAPH Art Gallery (USA), Aarhus Centre for Contemporary Art (DK), Fort Collins Museum of Contemporary Art (USA), Trøndelag Centre of Contemporary Art (NOR), L Gallery (Moscow) and at The Royal British Sculptors Gallery (UK).

<http://www.tinebech.com/>

» **UGOCHUKWU-SMOOTH NZEWI** and **EMEKA OGBOH** are conceptual artists from Nigeria working under the collaborative platform of One-Room Shack. Their collaborative enterprise is located at the interstice of conventional forms of artistic production and contemporary avant-gardism. In their work they engage with but are not limited to structures of power and power play, hegemony, homogeneity, political economy of means and forms of sociability in an increasingly globalized world. They are interested in the ways in which the discourse of globalization opens up and closes off the discursive space. One-Room Shack's creative enterprise continually examines the very nature of the discursive space and the roles played by both central and minor characters.

<http://1roomshack.com/>

» **MICHELE BARKER** and **ANNA MUNSTER** have collaborated since 1995. Their work integrates photographic, video and interactive installation practices and has addressed issues relating to processes of perception, embodiment and scientific/medical visualization. In particular, they are both interested in the history of forms of medical visualization, looking at their origins in early nineteenth century developments in chronophotography, tintypes and medical portraiture. They have also explored ways in which medical images and discourses such as genetics find their way into contemporary popular culture in, for example, the desire to produce designer babies.

Examples of recent work dealing with neuroscientific imaging and its histories include *Struck*, a 3-channel digital video installation exhibited in the us, China and Australia; and *Something which does not show itself*, a single channel video shown in Australia. Both these pieces create a disjunction between medical data – clinical reports and grayscale images of neurological damage – and the experience of subjectively reacting and relating to that data.

Michele Barker is a senior lecturer at the College of Fine Arts, University of New South Wales, Sydney Australia. Anna Munster is an Associate Professor, the College of Fine Arts, University of New South Wales, Sydney Australia. She is the author of *Materializing New Media: Embodiment in Information Aesthetics*.

<http://sensesofperception.info/>

» **ANNA GIBBS** is Associate Professor, School of Communication Arts & Writing and Society Research Group, University of Western Sydney, Australia.

She has published across the genres of fiction, poetry, and fictocriticism, as well as critical and theoretical writing in textual, cultural and feminist studies. A member of the editorial boards of Australian Cultural Studies, The UTS Review, Cultural Studies, and Social Semiotics, at various times, Anna has also been

a member of the Board of Directors of various arts organizations. She has co-edited two collections of Australian writing, and her current research interests include affect theory, public emotion, embodiment and corporeality, psychoanalysis, and media (including writing for new media). She is working on an ARC-funded research project, The Power of the Image, with Virginia Nightingale.

» **ELEANOR DARE** is a fine-artist who works with code and embedded hardware systems such as EEG and digital cameras. The research she undertakes is practice-based and discursive, working at the interface of science and art, as befits her academic background, that of a fine artist working in the Department of Computing at Goldsmiths, University of London. She is holding an MSc (with distinction) in Arts Computing as well as a PhD in Arts and Computational Technology.

» **CAROL MACGILLIVRAY**, following 20 years as an animator and film editor, won an AHRC award to study MA Digital Moving Image at London Guildhall. She then went on to publish her first book '3D for the Web – Interactive 3D Animation using 3DS Max, Flash and Director' (Elsevier) in 2005.

She became a senior lecturer in animation at the University of West London and was awarded both a Teaching Fellowship and Enterprise Fellowship, going on to become Associate Dean of Research and Enterprise in the Faculty of the Arts at that university in 2009.

She is currently a PhD candidate in Arts and Computing at Goldsmiths University: Extracting the Abstract: The Contribution of Kinetics to Communication. Carol's research is practice-based, producing and interrogating a trans-disciplinary model of kinetic aesthetics that is applicable to computer-based and mechanical interactive art systems. The aim of her thesis

is to prove that movement/change is a key signifier in perception by demonstrating that we are all skilled exegetes; and that movement is the lacuna in the text.

» **BRUNO MATHEZ** is a French audiovisual artist living in London. His creations can be referred to as experimental visual equivalents of different types of media or stage practices. Bruno specializes in creating visuals for music concerts, operas, dance and theatre shows. He has exhibited *Photophonics*, a light-to-sound installation made in collaboration with sound technologist Mike Blow, in the UK since 2008, including at the Royal Festival Hall in London. He is part of the interactive audiovisual group The Sancho Plan with whom he worked for the Ars Electronica Center in 2009 and toured in Europe and in the US. He is currently doing a Master of Fine Arts at Goldsmiths university in London in interactive technologies and is investigating the themes of visual music in space and interactive video sculptures using projection mapping techniques.

» **PHOEBE HUI** is an interdisciplinary artist and researcher mainly working in the relationship between art, technology, and language. Most of her works defamiliarize, and experiment with, text, image, and sound, to discover new possibilities and to transcend ordinary boundaries. Her recent projects have increasingly relied on interdisciplinary ideas drawn from literary theory, art history, quantitative research, electronics, computer science, and interface design.

Hui received her Master of Arts in Fine Art at Central Saint Martins College of Art and Design and her Bachelor of Arts in Creative Media from City University of Hong Kong. She has participated in a number of solo and group exhibitions locally and internationally. She is the recipient of a number of grants and awards, including Asian Cultural Council Altius Fellow, Bloomberg Emerging Artist Award, Hong Kong Art Devel-

opment Council Art Scholarship, Hong Kong Design Association Design Student Scholarship, Kagoshima Art and Culture Exchange Delegate and Pamphlets & Packaging Design Competition Grand Prizes Champion. She was invited to share her research-based art practice in ISEA 2009 and present a paper on digital media pedagogy at MIT Media Lab in 2008.

www.earthlinginger.com

» **GRAEME CROWLEY** is a London-based designer and artist, specializing in new media design, photography and multi-media installations – initiated and is leading the project. He is a principal of Tui Interactive Media, one of the UK's most established digital agencies, and a founding member of The Café Society, an internet-based group of artists, who exhibit and organise gallery events and workshops around the world (<http://cafesociety.org/>, www.tui.co.uk)

» **THE MUSTARD AND BLOOD ORCHESTRA** is a collective of musicians from around the UK led by Johnny Nicholds.

» **JAKE PYNE** is a multi-disciplinary developer from London and programmer of The Sweet Spot (www.jakepyne.co.uk). The post-production has been completed by established house and techno producer, Flicker (www.flickertracks.com).

» **JOSEPH FARBROOK** grew up in New York City and Santa Fe, raised by his father, a concrete poet, and his mother a painter. Farbrook creates virtual reality art installations, video sculptures, and videographs. He has also created media-reflexive live performances mixed with interactive screen projections. Farbrook's latest work explores the intersections between video, video games, and sculpture.

Farbrook exhibits both nationally and internationally including SIGGRAPH2010, the AC Institute in NYC, the

Museum of Contemporary Art in Denver, La Fabrica Arte Contemporaneo in Guatemala, Museo De Arte Contemporaneo in Columbia, as well as venues in the Netherlands, China, Czech Republic, and the USA. Farbrook teaches interactive media art at the Worcester Polytechnic Institute.

<http://farbrook.net>

» **RUI FILIPE ANTUNES** is a PhD candidate in Arts and Computational Technologies at Goldsmiths, University of London. His work has been awarded twice in the VIDA competition of art and artificial intelligence (editions 12th and 13th) and features in a number of publications such as Preble's Artforms or the Journal of Virtual Worlds. A large number of curatorial projects and shows have included his work in the last ten years, including in 2010: Post Human/Future Tense, at the Arcade Gallery, in Chicago; FILE 2010 – Media Arte, São Paulo, Brasil; or {SONiK} Fest, BronxArtSpace, NY. In 2009 his work featured in the exhibition Lá Fora, in Lisbon, a perspective of historical and contemporary art by Portuguese living abroad. Has taught multimedia and computing in Portugal for ten years. Currently he is a visiting lecturer at the City University and the University of Greenwich in London. He is also part of Piki Productions.

» **SUGURU GOTO** is a composer, musician, inventor and multimedia artist, considered one of the most innovative representatives of a new generation of Japanese artists.

He is highly connected to technical experimentation in the artistic field and to the extension of the existing potentialities in the human-machine relation. In his works, new technologies are mixed up in interactive installations and experimental performances. Suguru Goto is the inventor of so-called 'virtual' musical instruments, which create an interface for human movements and the computer to communicate,

where sound and video image are controlled by virtual musical instruments in real-time through computers. Lately, he has been creating robots to perform with acoustic instruments, and he is gradually constructing a robot orchestra.

He has shown work at leading festivals, such as Resonances/IRCAM, Sonar, ICC, Haus der Kulturen der Welt, ISEA, NIME, AV Festival, STRP Festival 2009, the Venice Biennale and Share Festival. Suguru has worked on the production of computer music and on research with the Gestural Controller group at IRCAM in Paris since 1995. His project *Robotic Music* was presented at the 53rd Venice Biennale in Italy in 2009. In 2010 he won the Action Sharing competition for the production of his work *Cymatics* in Turin.

» **PAUL SQUIRES** is the Managing Director of Perini, an integrated digital business based in Oxford. It comprises of three brands, Perera (an agency covering digital, mobile and social media); Xpeso (an online display advertising solution for publishers), but is perhaps most well-known for Imperica, an online magazine covering the intersection of art, brands, advertising, and digital culture.

With its long-form editorial proposition that puts people first and is not afraid to be controversial, Imperica has covered topics including automata, dubstep, Facebook, photography, and cats with thumbs. www.imperica.com

» **EVELYN OWEN** is a freelance writer and researcher with interests in the relationships between geography, art and identity, especially in urban and/or (post)colonial contexts. Since moving to London in 2007, she has been based at Queen Mary, University of London, where she completed an MA in Cities and Cultures. Her MA dissertation, entitled *Banksy in the City: Re-placing Street Art*, discussed media representations of the UK street artist Banksy and imaginative geographies of London's East End.

She is currently writing her PhD thesis, *The geographies of contemporary African art world*, which is concerned with the geographical knowledges produced by, and associated with, contemporary art from Africa and/or by Africans.

Evelyn is also the author of *African Art in London* blog, <http://africanartinlondon.wordpress.com>.

» **JONATHAN MUNRO** His artwork is centered around human behavior and interaction with dynamic, ever changing spaces. Past projects include collaborative project *capincaptin* and in 2009 founded the artist run organization, TINT, tintarts.org. In 2011 Jonathan was awarded an AHRC grant to study an MFA in Computational Studio Arts at Goldsmiths University. His latest curatorial project is setting up the Tin Shed Gallery in New Cross, London. www.jonathanmunro.com www.tin-shed.org

» **GAIL PEARCE** works as an artist with film and animation, as well as using a variety of media. She also makes digital and interactive installations. She has worked in international collaborations in Russia over three years, as part of 'emplacements,' a site specific collaboration with Russian and other international artists. *Drawn to Love* was created especially for the Moscow Contemporary Arts Centre "M'ARS" and the festival "Art Digital 2005: Digitalised Love." Other projects include *Credit Crunch*, a short film exploring people's attitudes to money via their purses and wallets. Shown at the London International Documentary Festival 2010, Art Expo London 2010. She also co-edited *Truth or Dare; Conversations on Art and Documentary* with Cahal McLaughlin, published by Intellect (2007) and is organizing *Truth, Dare or Promise*, further conversations on art and documentary. www.gailpearce.com

» **EMILIE GILES** is an alumnus of MA Interactive Media: Critical Theory and Practice at Goldsmiths College. Since graduating, she has been involved co-organizing MzTEK, a nonprofit education initiative with the aim of encouraging women to learn skills in the field of arts and technology, interning for renowned artists Blast Theory and has been working for social video advertising gurus Unruly.

She is currently involved with TESTIMONIES, a project which explores oral history through social media in relation to the 2012 Olympic and Paralympic Games and is also facilitating workshops at Furtherfield Gallery for the Embroidered Digital Commons with Ele Carpenter, part of *Being Social* exhibition.

Emilie's own practice revolves around notions of pervasive gaming, linked with urban exploration and psychogeography. Her work is largely experimental, focusing on the methodology of creating rather than on the finished piece. Recent work includes *Emotional Geocaching* – a piece which looks at our emotional reaction to our surroundings, whilst embarking on a *dérive*, *Lost London* – a pervasive experience with a psychogeographical twist which invites participants to go in search of London's network of disused tube stations and *Ace of Spades Hunt* – a treasure hunt which explores issues surrounding blood diamond mining.

» **FÉLICIE D'ESTIENNE D'ORVES** explores the meaning and impact of light through her work. She uses light and sound technologies to create a mysterious art of beauty and power, challenging the boundaries of her materials and our own perceptions of them. The resulting kinetic work appears frameless and seems to possess a life of its own. Her audience is invited to engage in both the works' seductive simplicity and delve into their complex layers of mystery.

Key examples of D'Estienne d'Orves' work include *Gong*: a resonant, pulsating, often frightening work from her *Cosmos Series* in 2009 and *Monolithe*, in 2008, which stands like a futuristic needle-point sur-

rounded by ancient spiritual drama and was presented at Paris' all-night art happening, Nuit Blanche.

In 2004, Félicie founded the in-visible collective, a conceptual multi-media studio, In-visible – <http://in-visible.fr/> <http://felicie.metaproject.net/> www.feliciedestiennedorves.com

» **CLAIRE LE GOUELLEC** (née Albert) studied History of Art at UEA and moved straight into the commercial art world working for The Mathaf and Victor Frances Galleries and then long term for The Sladmore Gallery, under director Edward Horswell, as a researcher. Claire is currently a freelance Art Historian, based in London and takes an interest in all aspects of Contemporary Art whilst maintaining an expertise for 19th and 20th century European Sculpture."

» **BIRGITTA CAPPELEN** is industrial designer, interaction designer and Associated Professor at Oslo School of Architecture and Design (AHO). She has worked within the field of interactive media since 1985. Since 1999 within research in tangible and musical interaction, creating art installations in the group MusicalFieldsForever.com together with Fredrik Olofsson and Anders-Petter Andersson.

» **ANDERS-PETTER ANDERSSON** is sound designer, musicologist and Assistive Professor in Interactive Sound Design, combining music and computers at Kristianstad University in Sweden.

» **MUSICALFIELDSFOREVER** explores new forms of expression in interactive media by creating open, audio-tactile art installations, musical fields. A musical field is open for co-creation on many levels. Since 2006 they have worked with tangible musical interaction for people with disabilities, in a health context. Currently in the project RHYME.no

» **GREGORY LASSERRE** and **ANAIS MET DEN ANCXT** are two artists who work together as a duo with the name Scenocosme (www.scenocosme.com). They develop the concept of interactivity in their artworks by using multiple forms of expression. They mix art and digital technology in order to search for the substance of dreams, poetics and sensitivities. They also explore the invisible relationships with our environment by visualizing the energetic variations of living beings. They design interactive artworks where spectators share sensory experiences.

They have exhibited at ZKM Centre for Art and Media – Karlsruhe, Villa Romana – Firenze, Museum Art Gallery of Nova Scotia and in many international biennals and festivals: Biennale of contemporary art – Sevilla, NAMOC / TransLife – Beijing, Art Center Nabi / INDAF – Seoul, Experimenta Melbourne, ISEA (Belfast & Istanbul), Futuresonic (UK) etc.

» **DAVE COLANGELO** is an artist, academic, and educator. He holds an MA in Cultural Studies from Goldsmiths College, University of London, and is in the process of completing a practice-based PhD in Communication and Culture at York and Ryerson Universities where he is investigating screen-based installations in public space and the impact of digital media on art, design, and scholarship. Dave is a founding member of N/A, an art and design collective and shared studio space. He is also an instructor at OCAD University (Faculty of Liberal Arts and Sciences).

» **PATRICIO DAVILA** is a designer, artist, researcher and educator. He is currently an Assistant Professor at OCAD University (Faculty of Design) and member of the OCADU Mobile Media Lab. He is also completing a doctoral degree in the Communication and Culture at York and Ryerson Universities with a focus on Critical Approaches to Design and Data Visualiza-

tion. As an educator he has taught Interactive Design, Data Visualization, Typography, Research Methodologies, Thesis and Core Studio.

» **MARCO DONNARUMMA** is a new media and sonic artist, performer and teacher based in Edinburgh, UK. Weaving a thread around biomedicine research, musical and theatrical performance, participatory practices and subversive coding, Marco looks at the collision of critical creativity with humanized technologies. He has performed and spoken in 30 countries worldwide. His works have been selected at leading art events (ISEA, Venice Biennale, WRO Biennial), specialized festivals (FILE, EMAF, Mapping, Píksel, Laboral), and academic conferences (NIME, ICMC, Stanford CCRMA, PdCon). Has been artist in residence at Inspace (UK) and the National School of Theatre and Contemporary Dance (DK). Fundings include the European Commission, Creative Scotland, New Media Scotland and the Danish Arts Council. Marco won the first prize in the Guthman Musical Instrument Competition (Georgia Tech, US) for the Xth Sense, a biophysical technology named the "world's most innovative new musical instrument."

» **GESA FRIEDRICH-BUTTNER** (researcher and media artist) is a member of the graduate school 'Advances in Digital Media' at the University of Bremen (TZI). She has studied at the University of Bremen, at Iceland's Academy of the Arts Listaháskóli Íslands in Reykjavik and at Chalmers University in Gothenburg, and holds a Bachelor in Digital Media and a Master in Information Technology, specializing in Art & Technology. During her work with various artists in Germany and Sweden, including a research stay at the Interactive Institute in Stockholm, she got more and more interested in the intersection of performance art and digital media. Her research tackles various aspects emerging from the marriage of these disciplines.

» **BENJAMIN WALTHER-FRANKS** is a researcher and media artist at the University of Bremen's TZI. During his studies of Digital Media (M.Sc.) at the same university he developed an equal interest in technological and design aspects. In his work he investigates performance-based interaction, using realtime motion or video capture for animation production and at the intersection of performing arts and digital media.

» **JUDSON WRIGHT** is a computer programmer. His software experiments/artwork, papers and performances have been included in galleries, stages, books and journals extensively around the world and on the web since about 1986. He graduated from Brown University and has an MA from the Interactive Telecommunications Program at New York University.

» **DR MARIA CHATZICHRISTODOULOU** [aka Maria X] is Director of Postgraduate Studies and Lecturer in Theatre & Performance at School of Arts & New Media, University of Hull (UK). She has previously taught at Richmond International American University (London) and the University of London colleges Goldsmiths, Birkbeck and Queen Mary. Maria has worked as Community Officer (The Albany, London) and Co-director (Fournos cultural centre, Athens, Greece). She co-founded and co-directed Medi@terra international art & technology festival (Athens, Greece), initiated and co-directed the festival and conference Intimacy: Across Visceral and Digital Performance (London, UK, 2007). Maria has published and presented her research widely, curated media and live art shows, organized and co-chaired conferences (e.g. 'Live Interfaces,' University of Leeds, 2012) and performed in real space and online (UpStage, Second Life). She is co-editor of the volume *Interfaces of Performance* (Ashgate, 2009), and the forthcoming volumes *Intimacy Across Visceral and Digital Performance* (Palgrave Macmillan, 2012), and *From Black Box to Second Life: Theatre and Performance in Virtual Worlds*.

» **ELLEN PEARLMAN** a New York artist and writer co-founded the first Summer Institute in Telematic Art with Hong Kong Polytechnic University and Videotage in Hong Kong creating an internationally linked global interactive telematic performance. Her work, *Surveillance Siddhi* premieres at Cyberfest in St. Petersburg, Russia in conjunction with a residency at Cyland Labs, Ellen is co-organizer of the New York 3D Volumetric Society, and Artistic Adviser to the Yuanfen Gallery, the very first gallery of new media in Beijing, China. She was a reviewer for ISEA New Mexico, and SIGGRAPH ASIA in Yokohama, Japan, She presented her work at ISEA Istanbul and ISEA New Mexico. A FUSE Digital Artist in Residence at Videotage in Hong Kong she has lectured on New Media at the Central Academy of Fine Arts (CAFA), and the Communications and Animation University in Beijing, the Songzhuang Art Center, and universities in Wuhan and Tianjin, China. She participated in the first Beijing International Conference on Art Theory and Criticism at CAFA, the first Conference on Interactive Design, and the first conference on New Media Research, both at Tsinghua University. Invited by the Open Academy project supported by the Prince Claus Fund of the Netherlands, she went to Ulan Bator, Mongolia working on presentation and curatorial practices with the Blue Sun arts group and lectured at the Mongolian Fine Arts Academy. Ellen received an Asian Cultural Council Grant and a Canadian Banff Mountain Culture Grant to film sacred monastic dance in nomadic Tibet. She has been both a Banff Non Fiction and Digital Media Research Residency Fellow.

» **CHARISSA N. TERRANOVA** is Assistant Professor of Aesthetic Studies at The University of Texas at Dallas. She lectures and teaches seminars on art and architectural history, theory, and criticism and media and new media theory. Forthcoming from the University of Texas Press, Dr. Terranova's book, *Automotive Prosthetic: The Car, Technological Mediation, and*

the Conceptual Turn in Art, 1951-Present, focuses on conceptual art, the aesthetic experience of seeing the world in motion through the car window, and the global political economy of the automobile and petroleum products in the post-wwii period. Dr. Terranova is currently writing a second manuscript as well, a pre-history of the digital image in art, building on themes of technological mediation, theories of embodiment, and the history of dematerialization/virtualization in art present in her first book.

» **ALFREDO SALAZAR-CARO** is a nationally and internationally recognized young sculptor and new media artist. His forté is the union of cultures: the hand-wrought three-dimensional objects of sculpture shot through with the finesse and contemporaneity of digital movement and light.

Born in Mexico City in 1989, Salazar-Caro migrated to the United States with his family in 2002. His formative years were spent in Dallas, Texas, where he focused on music, art, and science. This led him to pursue an education with an emphasis on biology with the intention of becoming a medical doctor. Several elective art classes gave him a change of heart, and Salazar-Caro switched his focus to art.

He currently lives in Chicago, where he attends the School of the Art Institute. His work has been shown at the Dallas Museum of Art, Museum of Contemporary Art Chicago, and the Gerrit Rietveld Academie in Amsterdam.

Acknowledgements

It is incredibly exciting to end this long but rewarding journey of Watermans' International Festival of Digital Art with this special LEA issue, Touch and Go.

Our year-long festival was initiated to coincide with the Olympics and Paralympics in London and celebrate international digital art hosting a series of installations that explore the impact of technology as well as the meaning, boundaries and issues of interaction and participation.

The Leonardo Electronic Almanac special issue Touch and Go is the result of discussions and themes explored during the Festival presentations and seminars at Watermans in collaboration with Goldsmiths University of London including audience engagement, new media geographies, digital art and illusion, gesture and art in virtual reality and more that you can discover at this great collection of essays, interviews and artists' papers.

I would like to thank Lanfranco Aceti and his fantastic team at LEA for their valuable support and for making this possible. I am grateful to all artists and Touch and Go contributors for their hard work, enthusiasm and patience during this year and of course to Prof. Janis Jefferies and her students at Goldsmiths for their involvement in the discussions and great support in this project.

Irini Papadimitriou

Head of New Media Arts Development, Watermans

The Watermans' International Festival of Digital Art has been made possible with the kind support of:

- » London Borough of Hounslow
- » Arts Council England
- » The Outer London Fund
- » Goldsmiths, University of London
- » Athens Video Art Festival
- » onedotzero
- » The Great Britain Sasakawa Foundation
- » The Japan Foundation
- » The Australian Government through the Australia Council and the NSW
- » Government through Arts NSW
- » Royal Holloway, University of London
- » Action Sharing and Camera di Commercio Industria Artigianato e
- » Agricoltura di Torino
- » Bonfiglioli Transmissions
- » Show Laser Systems
- » Atelier Michel Delarasse

Watermans' International Festival of Digital Art projects:

Cymatics Suguru Goto

Saturday 7 January – Sunday 19 February 2012

UNITY One-Room Shack Collective

Saturday 25 February – Sunday 8 April 2012

HokusPokus Michele Barker and Anna Munster

Saturday 14 April – Sunday 20 May 2012

Granular Graph Phoebe Hui

Saturday 26 May – Sunday 8 July 2012

Going With The flow Gail Pearce

Saturday 14 July – Sunday 19 August 2012

Strata-caster Joseph Farbrook

Saturday 25 August – Sunday 14 October 2012

Geometry Felicie d'Estienne d'Orves

Thursday 2 February – Wednesday 26 September 2012



