

IMAC – Interactive Media Art Conference, 2011 May 17-19 DR Koncerthus & IT-University, Copenhagen Conference Chair: Morten Søndergaard

**Program with Abstracts** 

Tuesday May 17th

10.00 V

Welcome & Introduction, By Conference Chair Morten Søndergaard

A long row of reconfigurations precondition and contextualize the art-ttechnology-science relation: Sonification, conceptual aesthetics, electric light, intermedia, concretism, minimalism, electronic media, performance

aesthetics, data, HCI, real time (telematics), embodied (reality based) interaction (Hansen. 2001) (Jacob 2006), and nano/bio science. In this paper I position all those reconfigurations as part of a game of conceptualizing the A-T-S relation. It should be noted that the different reconfigurations are not to be compared with 'periods'. All of the reconfigurations mentioned above are still very active - and, of course, in a way they themselves are just metaphors of, as it were, 'transactions' in a sea of conceptualizations that all, in some way or other, point back to the necessity and need to work with and understand the A-T-S relation. As such, they are part of a very complex and overall structural change of the art-field (and humanism before the advent of human sciences) that has taken place since the mid 18th century (perhaps even before that). Transactive art is not a new thing. Thus, my concern is that of the relational (re)configuration of art, technology and science (a-t-s). The argument: Since the a-t-s relation is not fixed but has been, and still is being, transformed it is important to understand and examine the status and modality of that relation. What is driving the transformation?

10.15-12.15 Session 1

 Javier Alejandro Garavaglia and Claudia Robles Angel. WOODEN WORLDS - An audiovisual performance with multimedia interaction in realtime. Wooden Worlds is an audiovisual performance by Claudia Robles and Javier Garavaglia. The piece, of variable length (conceived however to be about an hour long), is a complex multimedia performance, in which viola, video, photography, live electronics and live soundprocessing interact with each other in real time. This paper describes the technical aspects of the work as much as its aesthetical approach and intention.

> Gesa Friederichs-Bu □ttner, Johanna Dangel and Benjamin Walther-Franks. Interaction and Participation – Digital Media and Dance in Interplay.

We describe the conception and rehearsal process of a transdisciplinary political dance production XY, which interweaves dance with digital media and dramaturgy. By incorporating digital media elements such as interactive video into our set of protagonists, we created new possibilities for storytelling on stage. With respect to implementing digital media elements which are as essential to the creation of the gesamtkunstwerk as conventional means, we introduce the three design features: 'robustness', where digital media has to withstand stress such as invalid input or changes in circumstances; 'comprehension', where the use of digital media applications has to be understandable to the potential user; and 'integration', where digital media has to be equally important for the experience itself. We then exemplify the usage of these design features in XY.

 Birgitta Cappelen and Anders-Petter Andersson. Co-created Staging – Situating installations.

Staging is the creative act of showing something to an audience. When staging, the artist choose and create the context, situation and structure of the presented object, play or installation. The chosen context and situation provide background for the audience interpretations. Meaning is co-created between the artist and audience, based on the cultural and individual understanding of the context and situation. The term installation is open, ambiguous and undefined. One does not completely know what to expect and where to find an installation. It is open towards many interpretations. In this paper we present how we worked with staging of two interactive installations in different exhibition situations, to provoke and motivate different interpretations. expectations and interactions. We argue for staging as a communicative strategy to attract and motivate diverse audiences and user groups to collaborate and co-create through interpretation and interaction. Further we argue that installations have to be open to many possible structures, interpretations, interaction forms and roles the user can take, and shift between dynamically. When the user dynamically restructure, shift roles and thereby re-situate the installation, the user is a cocreator in the staging act. We call this dynamic staging.

4. Heather Dewey-Hagborg. Power/Play

In this paper, I describe my research into surveillance technology with an emphasis on speech recognition. I examine these technologies through the lens of Inductive Bias calling attention to the mistakes and flaws in the system. This article summarizes the research for, and serves as an extension of, my art piece Listening Post. Documentation of Listening Post is available on my website.

12.15-13.30 Poster & demo session In The Design Lab

1. <u>Jacob Sikker Remin</u>. Cheap, Fat and Open.

I propose a physical demo. That is, a fully operational CFO synth, on which the audience can play.

CHEAP, FAT and OPEN is an open source synthesizer, mixed with a Stylophone, a Gameboy, a circuit bent toy, and then some software too. It is an example of an open source project, which has almost become a product. It is a platform for everyone interested in making sounds on chip level, fully hackable + tweakable.

For more on the synth, sound snippets, and a short into watch: http://vimeo.com/16826316

 Ferhat Sen. Augmentrio: Instrument-Inspired Gestural Controllers for New Musical Experience.

In this paper we propose a set of digital instruments that are addressing to a wider

audience, offering new musical experiences. We designed three tangible interfaces that are inspired by a string instrument, oud, a wind instrument, ney and a percussive instrument, bendir. We aimed to provide musical experience for novices with low musical skills and reduced learning curves.

3. Yago De Quay and Ståle Skogstad. Xsens Performance: Playing Music by the Rules

Recent studies suggest that current interactive music results could be improved by structuring its practice. This paper explores the impact of standardized Motion Capture and software architecture on knowledge transfer and efficiency, by illustrating with a computer based musical performance where sounds are controlled by sensors on the dancer's body. It concludes that these factors help refocus the attention to the artistic mission and improve the communication between users.

13.30-15.00 Session 2.

1. Winfried Ritsch. sound plates as piano interface

The vision of "dancing music" is quite old and interactive implementations have been tried out. The interface of a dancer playing piano has to be a dancing interface for machines. For the music-theatre performance "Maschinenhalle #1" for 12 dancers this new instrument has been developed with the choreographer Christine Gaigg and the composer Bernhard Lang and implemented as

a metal sound-plate and interpreted by a robotic piano player.

 Matthias Wölfel, Bernd Lintermann and Nikolaus Völzow. Using Tangible Surfaces in Opera.

This paper shares lessons learned between the interaction of actors on stage and the computer which we gained in the technical development, rehearsal and performance of the multi-media opera Amazonas which were staged in Germany and Brazil in 2010. In particular we focus on the interaction of the actors and a tangible surface (multi-touch table) which offers a broad variety of interaction modalities on stage. We found that the traditional human-computer-interaction (HCI) guidelines cannot directly be applied to HCI on stage and therefore investigate and propose a novel HCI paradigm.

3. Heidi Tikka and Teemu Korpilahti. AFFECT AND GESTURE IN MULTI-TOUCH INTERACTION - CASE: AT HAND

In the next few years we are likely to see interactive touch screens embedded in urban architectures. Interactive installation At Hand anticipates these developments by investigating the city space as the space for affect and gesture. How do we articulate our embodied being in urban spaces? And how are these observations translated into an interactive experience at the touch screen

interface? Our paper describes the process by which the conceptual thinking for an interactive installation is translated into the technical implementation of the pilot, which was installed in a public place in August 2010.

Wednesday May 18th

10.00 – 10.45 Keynote: Dmitry Bulatov.

## Contemporary Art and Techno-biological Hybridisation

"Today innovation is the result of complex interactions between individuals, organizations and external factors. Turning to the metaphor of evolution one can say that the rule "the more adapted to the environment survives" is substituted by the rule "anything that conveys the environment more precisely survives". In the process of continuous complication of systems new correlations emerge between cognitive knowledge and effective model, logic and image, reality and representation. The development of new interdisciplinary relations in the sphere of contemporary knowledge, from science to contemporary art, from the methods of data processing to the methods of metaphor presentation, is particularly influenced by the progress in the filed of techno-biological research. Hence new domains appear that combine various methods of scientific and artistic representation based on technobiological modeling. In the new reality, which becomes more and more artificial and mediaconditioned, a new sign regime is established. which cancels the historically shaped boundaries between nature and culture. natural science and humanitarian technologies. In these conditions it's quite natural when a researcher after having analyzed the

characteristics of the contemporary technobiological domain wants to comprehend the way they impact the development of new artistic strategies and the essence of their novelty."

11.00 - 12.30 Session 3

 stina marie hasse jørgensen.
 Where is the sound of technology in new media?

Where is the sound of technology in new media?

In this paper I will approach the question through a

postphenomenological examination of the sonic display of technology in different works of art, from sound art to new media art. The paper will base its discussion on artworks such as I am Sitting in a Room by Alvin Lucier, I-You-Later-There by Ann Lislegaard, Osmose by Char Davies, RealTime UnReal, Workspace Unlimited by Thomas Soetens and Kora Van den Bulcke, and finally Listening Post by Ben Rubin and Mark Hansen. The works presented can be argued to display a sound of technology, exhibiting the media-specific technology as a part of the artwork.

2. Steve Everett. Auditory
Roughness and Ecological
Listening in Electro-Acoustic
and Live Electronic Music.

This paper proposes an analytic method for electro-acoustic and live electronic music that examines the degree of timbral auditory roughness present and attempts to

contextualize the data within an ecological framework for understanding musical perception. The principal goals of this analytic approach are to ascertain the degree of similarity of timbral formations in specific electro-acoustic works to those found in traditional teleological forms and to investigate if these relationships are relevant in establishing the perceptual conditions for the transmission of musical meaning.

3. Eduardo Patrício. Composing Digital Musical Instruments.

This paper aims to establish a metaphoric view in which the digital musical instruments are seen as musical compositions itself. Such intent is made to suggest a compositional point of view to the digital luthiers/composers's task of instrument designing. To accomplish that the concepts of "open work" (ECO, 2008) and "process work" (AIRA, 1998) will be briefly reviewed and compared to the digital musical instrument's tripartite structure: gestural interface, mapping and sound generation unit. Some examples of digital instruments are presented.

- 12.30 13.45 Posters and Demos see abstracts from Tuesday's program
- 13.45-15.15 Session 4
  - Jon Bellona. Sonic Dog Tags: Expressive Algorithmic Composition from Parsed

Department of Defense Casualty Notices.

In this paper, I present a computer program and compositional tool, Sonic Dog Tags, that retrieves biographical information of fallen service members from the Department of Defense RSS feed and maps this information to create memorial music. The aim is to discuss the methods and compositional mapping strategies for creating individual, expressive, musical works. Both information retrieval and mapping strategies are discussed, while an integrative system for future compositions is proposed.

2. Karin Hansson, Love Ekenberg, Mats Danielsson, Aron Larsson, Johanna Gustafsson Fu□rst and Thomas Liljenberg. Prototyping for Participatory Democracy: Fine Arts as Means for the Study of Multimodal Communication in Public Decision Making.

Abstract: We present a thematic art project in a suburb of Stockholm as a means to generate problem areas in focus for a research project on multimodal communication and democratic decision-making. Through art we play with different techniques and ideas about democracy in a particular location in order to obtain a better understanding of the citizens and their environments. Artists' actions, installations and mediations create a direct confrontation with the place and its inhabitants,

and explore the dynamic relationships that constitute its context. The common denominator for the invited artists is that they work with situation-specific emancipatory art that in various ways relates to the physical and mediated public sphere. The art project is a collaborative process where the artists develop the project and take part in the contextualization in collaboration with researchers. This is achieved partly through a shared memory work on the theme of power / powerlessness. From this feminist research practice notions of democracy is examined in order to investigate, expose, enhance and / or remodel relations of the site. The aim with the art project is to put the site and the individual in a web of geographical, social and economic contexts. The aim is also to contribute to a debate on artistic research by showing how art can be viewed as a qualitative method. Through the practice of the memory work method we contribute to the development of this methodology, and map out a space for art in the field of science.

> Vanessa Carpenter and Nikolaj Møbius. Critical Corset: An exploration in attraction leading to Biometric Social Interaction.

Beginning with an examination of the Critical Corset we developed a series of installations called Biometric Social Interaction to make people more aware of their bodies and to push their boundaries of social interaction.

Corsets have an intricate history, being both

celebrated and criticized by society. The corset has been seen as a form to create the 'ideal' hourglass figure both for women and men. It has been extended in use from historical or formal occasions, to everyday use, to the realm of fetish themes. When someone finds another physically attractive, their body will respond with a higher heart rate, as one physiological effect. As a person's heart rate rises, the corset will tighten, automatically ensuring the practice of standing up taller by tightening the stomach and enhancing the chest, and indicating to the wearer, before they are cognitively aware, that they are attracted to someone.

However, we have extensively explored the Critical Corset and come to the conclusion that heart rate alone is not enough of an indicator. For that reason, we have been developing a series of biometric sensors including temperature, galvanic skin response, circumference sensor, and gaze detection to further explore how attraction occurs, and the resulting social interaction that can take place when experiencing what we call Biometric Social Interaction.

15.30 – 16.30 Special Session
Sanne Krogh Groth and Mats
Lindström: Listening to the
Unheard.

"The present (...) is ongoing, but once inscribed in ethnography, it is marked by the syntax of pastness. The past, in contrast, is frozen in a timelessness, from which it must be wrenched to be synthesized into the

presentness of history. The disjuncture between past and present makes it increasingly difficult for fieldwork to examine either, but necessary to examine both. (...) History, too, forms in a temporal space, contested because fragments of the past remain in the everyday of the present." (Bohlman 1997, p. 249)

With Bohlman's thoughts in mind, the paper intends to discuss the dialogue between past and present at today's artistic institutions. Digitalization of tape archives followed up by various research projects are going on many everywhere. With the electronic music studio EMS as a case, this paper will question which – if any - effect such initiatives have on today's artistic and administrative work.

The paper will be presented as a dialogue between music historian Sanne Krogh Groth (DK) and director of EMS Mats Lindström (S). Groth has recently finished her dissertation on the EMS' early history (1960's and 1970's) in which new information about the institution was conveyed. Along with this research, EMS has also started to digitalize its tape archive, by which many pieces that was forgotten, now becomes accessible.

The dialogue will take its point of departure in Lindström's first reaction after reading the dissertation: "When I came to EMS in the beginning of the 1990's, I thought we were neutral. But now I realize we weren't. We were carrying on a tradition without knowing it". Groth will go into dialogue with Lindström and ask further into this statement - if this realisation, would have made or will make any

changes to his choices as both composer and director at EMS. She will also ask into his thoughts on if and how the digitalization of the archive will effect the music that is produced at EMS today.

Thursday May 20th

09.30 – 10.45 Keynote: Claudia Gianetti

## Acting On The Code – Some Reflections on Image, Apparatus and Viewer

"The transition from formal use of the code for creating artistic generative processes (with results outside the machine) to reflections on the art of the code (an internal process of the machine) in a specific sense of code performance changes the notion of programmed images, the connotation of visualisation of image through art process, and the cognitive involvement of spectator with the art work. This talk aims to explore aspects of these issues."

11.00 – 12.30 Session 6

Lotte Philipsen. 'Emancipative' art? On the relationship between interactive and emancipating dimensions of contemporary (digital) art.

By being interactive, digital media art allows the audience to participate in creating the work, thereby levelling the traditional gap between artist/creator/producer and audience/viewer/consumer. Peter Weibel suggests that digital media art, therefore, 'becomes a civil democratic medium' characterized by 'enactment' and 'emancipation'. At the same time,

contemporary art in general displays a tendency to assign key roles to collaboration and community empowerment (termed 'Relational Aesthetics' by Nicolas Bourriaud, and discussed by Claire Bishop under the heading 'The Social Turn', where play key roles.

This paper critically investigates the assumption, presented by Weibel, that technical interaction in digital works of art automatically encourages social emancipation. It is the thesis of paper that whereas some types of interaction might potentially engage the participants in reflection on democratic processes others tend to deprive the participants of social engagement by limiting their scope of interpretation or placing them in the position of the traditional consumer of the work of art. The paper examines recent winners of the Golden Nica in the category of 'Interactive Art' at Ars Electronica against theories of interactivity and theories of contemporary art and aesthetics in an attempt to consider the social side of interactivity from a postmedia point of view. Among others the paper takes C. Bishop, N. Bourriaud, H. Foster, D. Lopes, C. Paul, J. Ranciere, D. Rokeby, and P. Weibel as its theoretical point of departure.

> 2. Aurélie Beys. Threedimensional restitution of Renaissance pictorial scenes.

The focus in this paper is the threedimensional restitution of pictorial scenes. The

main difficulty is that only one view of the scene in perspective is available. Part of the information is thus inevitably and inexorably missing and hypotheses have to be formulated. After reminding the main principles of translating two-dimensional scenes into three-dimensional ones and to perform the reverse operation, we'll describe the semiautomatic 3D-restitution tool we've worked out. It allows, in a very short time, to obtain a relatively complex three-dimensional restitution of a painted architectural scene, human intervention being reduced to a strict minimum. Our software is accessible to anyone and needs no particular knowledge in the field of perspective. CAD or three-dimensional reconstruction.

3. Maja Petric. GETTING TO KNOW THE UNKNOWABLE AS BOTH WONDERFUL AND TERRIBLE.

My work is about changing the perception of space in function of art. Therefore, the subjects of my work are perception, space and, art. To change perception, I study sensation, experience, and phenomenology. To create spatial situations, I practice designing spaces, fabricating structures, manipulating materials, and integrating lighting and audiovisual systems. The core of my artistic research is the pursuit of the unknowable — the sublime. The sublime has been a subject in philosophy and art since circa 1200 B.C. when the sage Veda Vyasa described it as a mystery in the sacred Hindu scripture Bhagavad-Gita. Since

then, the meaning of the term has been vigorously debated, but it remains indefinable. My interest is not to define the sublime. Critical history has proven that the sublime cannot be precisely put into words, just as the meaning of life is inherently unknowable.

Postmodern French philosopher and literary theorist Jean-François Lyotard recognized avant-garde art as a novel opportunity for accessing the sublime. He argued that the nature of avant-garde modern art has the unique potential to manipulate the balance of senses, reason, and emotion in a manner that results in a sensation of pleasurable pain. My further investigation is in practice of art that carefully entices senses, reason, and emotion in a way that results in an experience of the unknowable.

Artists including Anish Kapoor, Mark Rothko, Bill Viola, and James Turrell marked the twentieth century as an age of expanding our sensing apparatus to experience the sublime. Through their abstract but integrated use of materials, space, color, light, and image, they excite our senses and intrigue our minds to the point of reaching the essence of the unknowable. The success of their work is in experimental manipulation of senses through which the space is experienced cognitively and emotionally. Their innovative use of materials that engage sight, hearing, touch, smell, emotion, memory, and imagination transforms the spaces that they work in into places that demonstrate the existence of the unpresentable.

The technological age is allowing for more

multisensory engagement. My interest is in elaborating on technological advancements that can fuse perception of senses and add to the phenomenological experience of my artistic intention of presenting the presence of the unpresentable.

12.30-13.00

Posters / demos in IT-U Atrium
 David Cuartielles, Andreas
 Göransson, Tony Olsson,
 Ståle Stenslie and David
 Sjunnesson.
 TECHNOLOGICAL
 MASHUPS - building HiFi
 wearables.

The state of the art in digital technologies allows for tools to help prototyping interactive artifacts much faster than ever before. Even if many of those might not be ready for entering the everyday life, they become relevant pieces within the art and design fields. This paper explores the creation of wearable artifacts including digital intelligence with the ability of getting/serving information feeds from/to the internet and bringing them to live as haptic feedback patterns on wearables.

We hereby present a way to quickly deploy wearable sensor networks that will either give physical feedback to the user or broadcast that information to a remote location. We will focus in where to host the intelligence of the system, and how to implement the communication between the different devices in our suggested design solution.

This technological mash-up of several hardware and software parts, can be used to

create everything from art pieces to medical devices. The systems should be able of operating by themselves but also give control to external flows of commands.

13.00 – 14.30 Session 7

 Anne Ring Petersen. Narrative and cross-embedding in interactive media art: Sally Pryor's "Postcard from Tunis".

The topic of this paper is the reciprocal relationship between navigation and interactivity on the one hand, and meaningmaking, narrative and comprehension, on the other. Turning to Australian media artist Sally Prvor's interactive work Postcard from Tunis (v. 1 for Mac 1997, v. 2 for PC 1999) for a significant example, I wish to explore how interactivity in media art can facilitate other kinds of narrative, related to, but also different from those of older narrative media. In terms of medium, Postcard from Tunis, could be described as a remediation of the postcard by the digital medium of the CD-ROM or, better, as a cross-embedding of postcard and computer - two means of communication with a common potential to transmit information and experiences over great distances as well as to enable cross-cultural understanding, i.e. an understanding based on interaction and exchange with people from foreign cultures, their specific concepts and modes of perception, thinking, feeling and acting. The overall question of this paper is the question of how patterns of storytelling can be transformed by introducing interactivity into the

reader's - or rather the reader-user's engagement with the work. I will explore this issue by using Pryor's Postcard as my guide and testing ground. The theoretical part of my argument will revolve around the concepts interactivity, remediation and narrative. I will use philosopher Dominic McIver Lopes' definition of interactivity as the basis of my argument, turn to media theorists Jay David Bolter and Richard Grusin for a definition of remediation, expanding it with media historian Norman M. Klein's designation of crossembedded media, and then turn to literary scholar and media theorist Marie-Laure Rvan for an adequate notion of narration. Sally Prvor's Postcard from Tunis shares some of the characteristics of a standard postcard. Its small screen space echoes the format of the standard postcard, and the series of thirtyfive different screens in the work parallels the postcard wallet's montage of different images on a folded strip. Its style is personal and local, but also international in that it communicates experiences of travel and cultural encounter with a foreign country. It is primarily addressed to people for whom Tunisian society and Arabic would represent an encounter with a foreign culture and language. I wish to propose that the embedding of the postcard into the medium of an interactive CD-ROM that actively engages the user in a performative production of coherence and meaning transforms the older image and text based medium into a multimedia narrative that effectively rejects the sender-receiver model of human communication and substitutes it with an

integrationist model that sees signs as multidimensional instruments for facilitating the integration of whatever activities people are engaged in.

## 2. Paolo Cirio. Recombinant Fiction

In previous ages, mediums for narrating fiction such as theatre, literature, cinema and television have defined languages, models and formats; each media development provided an expressive shift in forms of storytelling. Nowadays, media are multiplying, hybridizing, and mutating. The way they are used alters continually, creating potentially new ways of producing fiction and spectacle. Networked digital media merge as a productive vehicle to create new forms of fiction. In fact, the rise of forms of storytelling such as 'Transmedia Storytelling', 'Alternative Reality Games', 'Transfiction', 'Dispersed Fiction' and 'Viral and Guerrilla Marketing' is a clear sign of an important revolution in ways to tell stories. Recombinant Fiction emerges as a political and aesthetic fiction genre of this new immersive and participative form of art. By identifying valuable, distinctive characteristics and objectives, Recombinant Fiction defines a unique genre able to drive tactical activism and dramatic purposes.

Our contemporary media environment era is characterized by the explosion of Personal Media (e.g. devices with platforms for email, instant messenger, blogs, photo and video sharing services, etc.) resulting in new modes of personal expression and interpersonal

relations. Nonetheless. Mass Media continues to grow as well. Networked media generates new channels and interconnected devices for consuming entertainment and news (e.g. proprietary web platforms, digital TV, portable video/reader players, screen billboard, etc.). This results in the deregulation of advertising restrictions and privacy policies by the corporate media complex to boost the flux of information. Additionally, networked digital technologies accelerate and facilitate the production of offline and analogue spaces of information (e.g. print-on-demand, production of manufactures, organization of public assembly, mapping public spaces etc.). This results in a new mass of active prosumers, and a general increase of information in interior and urban landscapes.

All of the above listed media are digital in origin, and therefore easily reproducible and transmissible through networks (e.g. Internet, GSM, Wi-Fi, etc.). Networked digital media generate an intensification of flux, interactions and processes of communication. The informative environment created by all those media that broadcast messages, is defined as Infosphere. This conceptual sphere is the space in which modern society is immersed, where people express themselves, build their own realities and manage societal organization.

In this context, a modern form of fiction should be narrated by networked media and staged in the Infosphere, which can be used as the medium to dramatize reality and find a way to change it by a dramatic representation, as humanity has always done.

3. Synne Skjulstad. Fashioning Digital Arts.

This paper discusses how digital arts are taken up within luxury fashion branding as a means to communicate an insider relationship to the art world and to communicate a brand's role as a cultural actor. Digital art and technologies are linked to innovation and to the Avant-garde, and this relation is articulated via mediations of art, architecture, and interior design that link 'brandscapes' to digital innovation in fashion branding. Drawing on social semiotics, from insights on digital art and architecture, as well as theory on branding, this paper unpacks relations between digital arts, architecture and luxury fashion branding. In sum it argues that digital arts play an important role in fashion branding as art and in artful branding.

14.45 – 16.00 Keynote: Atau Tanaka

## Music One Participates In: Performance from Stage to Street to Pocket

"Digital music has undergone fundamental shifts – it has gone real time, it has become interactive, it has become miniaturized, and completely democratized. I'll map out my personal trajectory in this time to look at broader evolutions in the field with sensors, networks, and mobility. These are not just technological changes, but changes that bring

about shifts in musical approaches. Form factors change, analogue is reconciled with digital, and new directions in Open Source and DIY culture continue to challenge our assumptions on what it means to be an artist, composer, performer, participant, in these evolving musical/technological landscapes."