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.
LEONARDO ELECTRONIC ALMANAC, VOLUME 18 ISSUE 3

Touch and Go

VOLUME EDITORS
LANFRANCO ACETI, JANIS JEFFERIES, IRINI PAPADIMITRIOU

EDITORS
JONATHAN MUNRO, ÖZDEN ŞAHİN

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/ISAST. For more information about Leonardo/ISAST's publications and programs, see http://www.leonardo.info or contact isast@leonardo.info.

Copyright © 2012
Leonardo Electronic Almanac is produced by Passero Productions.

Reposting 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.
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 ответ, 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 approach is perhaps incorrect if we consider as part of 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?* – 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.

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.

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 refuged through their contemplative re-citation and re-presentation—consistently inscribes the new media in the memory and memorization of its antecedents, cinema and video.”

The difference between memorization and memorization 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.

**Lafranco 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, interacters + 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 toolkits, 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/QjEWlY (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/p6GdDS (accessed July 1, 2012).

Contemporary Art

The Magic Touch Of

Touch and Go:

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 ground-breaking 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 of new and emerging technologies in Media and Digital Art.

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).

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 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 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

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!

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 Barberi
+ 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 MARQUEZ?: 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-Büttnner & 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

CONTENTS

CONTENTS
Interactivity, Play and

“Play is the swing of the rhythm in music, the bounce in the ball, the dance that delivers us from the lockstep march of life. It is the “meaningless” moment that makes the day memorable and worthwhile.” (Brown, 2010: 43)

INTRODUCTION

A growing number of artists today are pushing forward the exploration and understanding of audience engagement. As new technologies emerge, different ways to creatively interact and collaborate emerge with them. There is a blurring of the boundaries between artists, audiences and participants which promotes new ways of interacting.

This paper will focus on the making of playful interactive artworks, as an affective model for audience engagement. The paper is based on my artistic practice and draws on my PhD research at the Digital Cultures Research Centre (DCRC) UK. My practice-based doctoral research focuses specifically on the development of a play directory showing the different kinds of play initiated through interactive artworks, in order to create a model for making playful interactive art installations, which will inform my own and future artists making of artworks. The model is concerned with creating immersive and playful art experiences and is linked to play theory and interactive art practices. Through my own practice and others it looks at how we can create conditions or possibilities for play within and around interactive artworks. Ultimately, the model aims to connect people with their immediate environment, the artwork and with each other.

The intention in making a model for creating playful interactions is not to define a good or successful interactive artwork. What is of interest to me is the interactive behavior elicited by the artwork; what kind of play takes place? How do a material’s inherent properties and affordances play a role in how the audience play or interact? And equally, how does a space’s inherent properties play a role in how the audience play or don’t? How do the levels of legibility of the artwork enable or hinder interaction? How can I create collaborative interaction if needed? These questions are the focus of my PhD research.

This paper argues that interactive art or media art should turn its attention to emphasize the issues that audience engagement

Catch Me Now by Tine Bech, Kinetica Art Fair, 2011.
INTERACTIVITY AND EMBODIED CONNECTIONS

The terminologies of media art or digital art are fluid (nomenclature) and reflect the changing nature of the field. For interactivity in terms of systems and authorship see Cornock & Edmonds (1973), Edmonds, Turner and Candy (2004), Haque, Dubberly and Pangaro (2004). For a cultural approach see Manovich (2001) and Dovey et al (2006), for game relations see Aarseth (2003) and Klastrup (2004), and for a curatorial discourse see Dietz (2000), Huhtamo (2007), Paul (2008) and Graham and Cook (2010). The exhibition Decode V&A 2009–10 also offered insight into the ongoing curatorial debate, by defining the exhibition in three sections: 1) Code 2) Network and 3) Interactivity – a similar three phased, more rigorous definition is offered by Graham and Cook.

From all the many ways of defining media art I want to emphasize those that use the body as a site for interactions. In other words interactive artwork (my preferred term) is defined as an artwork where the audience both physically and visibly interacts with the work. This "conversation is usually non-verbal and involves a dance of physical movements." 5 The artwork is defined by incorporating a person as part of the artwork and the focus is moved to the interactions between the audience and the artwork. This is ultimately what my practice is concerned with – the dialogue between artwork and audience. The term 'interactive art' illustrates the dialogue of interaction that takes place in the in-between space, between artwork and the audience. Crucially, this leads to an understanding of where interactivity is seen as a mode or behavior.

I consider physical participation or a bodily interface using movement as the nexus of audience engagement. While there is a long tradition within contemporary art of using movement to activate the viewer as well as an exploration of the body, for example land-art, performance, and social participatory artworks – the body as an interface is perhaps relatively new within participatory and interactive arts that employ technology.

Interactive artist David Rokeby sees the human interface as a method for accessing "a pool of content of unimaginable complexity." 6 My own use of interactive technology often tries to address the interplay between the digital and the physical, proposing the body as the membrane through which we must necessarily relate to the world.

It is this use of the body and movement in art that has enabled a move away from a visual representational communication to an actual (physical) connection. As explained here by Stiles and Shanken in the context of activating the viewer via motion and empathy:

"…movement culminated when artists introduced the body in interaction with the viewer. This conjunction augmented a structural change in art (…) and drew the physiological processes underlying visual perception into the terrain of interactive contingency, and altered the communicative means of art from a dependence on metaphor to one of virtual and actual connection." 7

If we agree that the last century dealt with the art of representation by ways of seeing, then in this century art is an exploration into experiences: "through interactivity, contemporary artists mirror, distort, and confuse the audience’s experience not of representation but of reality itself." 8 For example, artist Scott Snibbe’s interactive artwork opens the possibility for reshaping reality – away from seeing and towards a more visceral experience. Carsten Höller’s series of slides is also an exploration of the world through the senses. Höller’s slides initiate play by inviting the body into an experience of exhilaration and vertigo. The works are, using Roger Caillois definition ‘illims,’ an “attempt (to) momentarily destroy the stability of perception.” 9

Dorothea von Hantelmann supports this and argues in the Test Site catalogue that these new works can be seen as ‘experiences creation,’ which signals:

"A fundamental shift in the way in which the meaning of an artwork is understood; from a level of intention, expression or content to a dimension of effect and experience; from what an artwork ‘says’ to what it ‘does’." 10

In other words there is a shift taking place in which artworks are moving away from the traditional representation of statements towards artworks which produce experiences and behaviors.

---

5. Stiles and Shanken.
6. My own use of interactive technology often tries to address the interplay between the digital and the physical, proposing the body as the membrane through which we must necessarily relate to the world.
7. Interactive artist David Rokeby sees the human interface as a method for accessing “a pool of content of unimaginable complexity.”
8. For example, artist Scott Snibbe’s interactive artwork opens the possibility for reshaping reality – away from seeing and towards a more visceral experience.
9. Carsten Höller’s series of slides is also an exploration of the world through the senses. Höller’s slides initiate play by inviting the body into an experience of exhilaration and vertigo.
10. The works are, using Roger Caillois definition ‘illims,’ an “attempt (to) momentarily destroy the stability of perception.”

---

Fig. 1. Echidna is an interactive sound sculpture, which uses an electromagnetic field to create a sound when the sculpture is almost touched. As a magnetic field reacts to water, the human body (around 60% water) is the ideal interface for Echidna.
This brief (and selective) history proposes the body and the creation of experiences as a particular mode of interaction, one that involves gestures, touching, moving etc. These kinetic interactions are a distinct mode of interactions where the body is activated into play such as jumping, dancing, running, what in turn, and crucially for this paper’s context, a play anthropologist such as Geoffrey Bateson would read as play behavior. Indeed, movement is the most primal element and is found in all forms of play. Through the playful body we structure our understanding of the world – ‘we think in movement’. This embodied interactive play is reminiscent of Roger Caillois’ play categories of ‘illinx’ and ‘paidia’ with its intervention of: happy exuberance which effects an immediate and disordered agitation, an impulsive and easy recreation, but readily carried to excess, whose impromptu and unruly character remains its essential creation, but readily carried to excess, whose impromptu and unruly character remains its essential property; it is combined with an audacity and trickery) as a means to engage the audience to stand back, look, don’t touch. This embodied interactive play is an active participating culture. In this context play is a persuasive and powerful tool. It can change people’s behavior and inspire audiences to interact, rather than simply observe. In fact the “hallmark of play is that anyone can do it.”

TECHNOLOGY AS MATERIAL

There is an extensive and continuing debate around the use of technology and new media within contemporary art and it is only briefly touched on here. More insight can be found in: Quaranta (2011), Graham and Cook (2010), Arns (2007), Stiles and Shanken (2010), Christiane Paul (2008), Huhtamo (2007), Dietz (2005), CRUMB and Rhizome discussion lists, Manovich (1996). Much of the debate is about the specificity of technology and the field of media art, or what perhaps now is post-media art. My approach is that of art after media; which critically, enables us to focus on the more important issues that art can highlight and not the medium or the newness of the technology. As Erikku Huhtamo writes:

“This embodied interactive art has historic links to Dada and Fluxus, where artists often used play (absurdities, audacities and trickery) as a means to engage the audience to stand back, look, don’t touch, and cook (2010), Arns (2007), Stiles and Shanken (2010), Christiane Paul (2008), Huhtamo (2007), Dietz (2005), CRUMB and Rhizome discussion lists, Manovich (1996). Much of the debate is about the specificity of technology and the field of media art, or what perhaps now is post-media art. My approach is that of art after media; which critically, enables us to focus on the more important issues that art can highlight and not the medium or the newness of the technology. As Erikku Huhtamo writes:

Today interactive media is everywhere; its forms have become commonplace. It might be wise to turn attention from the modes and technologies of interaction to the themes and topics they can serve, highlight and criticize. Artists today, I would argue, are fairly uninhibited in their choice of media and will mix technology with traditional contemporary materials. Artists are connected to, and changed by, a world which is increasingly using technologies. Artists today, I would argue, are fairly uninhibited in their choice of media and will mix technology with traditional contemporary materials. Artists are connected to, and changed by, a world which is increasingly using technologies.

Artists today, I would argue, are fairly uninhibited in their choice of media and will mix technology with traditional contemporary materials. Artists are connected to, and changed by, a world which is increasingly using technologies. Artists today, I would argue, are fairly uninhibited in their choice of media and will mix technology with traditional contemporary materials. Artists are connected to, and changed by, a world which is increasingly using technologies.

Linked to understanding technology as neither tool nor medium but rather as a material. Tom Armitage writes that “technology is not always a tool, an engineering substrate; it can be something to mould, to shape, to sculpt with.” Armitage’s viewpoint is similar to the long tradition in visual art of exploring materials. Technologies have affordances and properties just like any material and just as the grain of the wood allows
INTERACTIVE AND PARTICIPATORY
PLAY BEHAVIOR

The notion to surprise, tease or trick is plentifully represented within art and particularly in art which involves human interaction of some kind. A good example is Michael Naimark’s description of an artwork (unknown), which used a plank of wood, a hammer and cheap old-fashioned sharpened pencils – the kind with an eraser at the end, to create a playful audience interaction. He writes that most people would try to hammer the pencils in and found it difficult “mainly due to those damn erasers.” Naimark’s example plays well with the audience. It also makes the case for “a much broader conceptual space for interactive art.” The playful behavior of the artwork highlights that we can use and play with any material and its affordances to create interactive art. Another example that demonstrates the range of play and interactive behavior is Maurizio Cattelan’s work Charlie. Charlie is a boy on a tricycle moving around the gallery. The work behaves like an interactive work using sensors, camera and programming but instead plays a double game – the work is in fact controlled by a man with a remote control hiding around a corner, secretly playing with you – the audience. Cattelan’s work uses subversion and plays with the distinction between art and audience interactions. I experienced Charlie myself and I took delight in being tricked, because, to me, it showed my own preoccupation with the technologies. I spent most of the time trying to figure out how the piece worked technically, only to walk around a corner and find the person with the remote who was controlling the artwork.

What participatory art and interactive art have in common is an aim to explore and push the boundaries of the audience/artist relationship. This is epitomized here by (participatory) artist Carsten Höller who is quoted saying: “You could say that the real material I’m working with is people’s experience” and (interactive) artist Golan Levin’s reply, when asked what digital technologies allow him to do: “I can create ‘behaviour.’”

CATCH ME NOW

Catch Me Now (Fig. 2) is one of five research projects into the making of playful interactive artwork. The work is a unique interactive spotlight which plays with the audience. A small spotlight is moving randomly around on its own. When you catch the spot it will grow, enticing you to participate, creating possibilities for play and performance – and for the audience to step into the light and take center stage.

The work consists of a moving-head spotlight linked to a computer, which in turn is connected to a camera surveying the area. The programming language is OpenCV blob analysis and cex. The work is programmed site-specifically for the exhibition space – often in a ‘passer-by’ space. When the spotlight is on its own e.g. not being played or interacted with, it is always a small spot (iris approx 30 cm) and moves occasionally, when it gets bored while roaming in its programmed play space. The spot reacts when a person steps into the light by immediately opening up into an encompassing spotlight, creating an individual personal spotlight moment. It then changes color and stays with the participant for a few seconds, before getting ‘bored’ and swooping away to resume a random position, becoming a small spot once again. The artwork is a ‘chase me, catch me,’ turning the conventional notion of a spotlight following you upside down. Two well-known artworks also using the material of a spotlight is Marie Sester’s excellent artwork Access and Kma’s Flock.

The aim of Catch Me Now is to create a playful interactive light, which opens up the possibility for physical participation and play. A spotlight provides a known affordance (at least for most people) for performance.
It is an invitation to play. Some materials look and feel intriguing; they are fun or sensory. Their affordance is playful, either because culturally we are familiar with the material as a play element (such as balloons, bold colors, and spotlights) or because the material has a playful appearance. A tactic to deliberately use certain sculptural material creates an opening into the work – it becomes an invitation and makes it easier for the audience to approach and people are less restrained. The link between the artist’s material intelligence and the artist’s intentions (mine here is of play) are entwined in interactive artwork’s behavior. Seeing technology as a material means that the interface can take on a sculptural feel.

When artists use objects in new ways, or hack technology and transform places, they create the unexpected. Artwork that reacts with a playful anthropomorphic life is liable to take us by surprise. This connects us with the work and we pay attention. It counteracts the mind’s tendency to name and categorize our surrounding, without really looking. Richard Gold’s paper This is Not a Pipe in which he uses the metaphor to describe the role of ubiquitous computing is interesting in this context:

“Our pattern-matching mechanisms seem to make only a lazy distinction between the symbol and the symbolized. This is surely what allows advertising to work, not to mention art, literature, painting, etroica, and of course, language itself.”

Making interactive art is much like planning a social event. We need to know how people might behave (act/play/perform) so that we, in the words of Krüger, can “anticipate the participant’s possible reactions and compose different relationships for each alternative.” Graham, as mentioned above, suggests that the interactive artist’s role is similar to that of a “party host” – a metaphor for “a role that may control the guests (tightly) or supply only the necessary social lubricants.”

Catch Me Now (Fig. 2) facilitated a range of play forms. Often people simply enjoyed running and catching the light with no greater purpose to their play other than the experience of it. In this context Csikszentmihalyi’s theory of flow was unmistakably demonstrated. People would frequently stay with the work longer than they first intended – catching the light over and over again. The play was immediate; people would enter into play after observing others, or by stumbling upon the light. The instant the light (iris) opened up, people were captivated into staying with the work. Observation also showed interactions with a strong performance element such as ‘strike a pose’ and lots of ‘look at me’ and ‘ta daaa! I caught the light.’ The work clearly unlocked playful behavior; people would create fantasy play (some odd chicken impersonators were about at one point), make small impromptu dances or initiate physical demonstrations, such as cartwheels. Often competitive games developed when groups played together. When groups of children interacted, the dominant game would be who catches the light first, spotting where the light went and running fast. Some friendly stepping on toes and pushing others out of the light – ‘it’s mine’ also happened.

The emerging play was noticeably different between adults and children. Children seemed to enter into play mode more quickly and the differences were also apparent in how long participants played; often children were called away by impatient adults after 10 minutes. I frequently overheard remarks such as ‘one more go, then say bye-bye light’ and replies ‘nooo one more go please.’ Adults playing were more tentative in their physical play and more often than not, a child would steal the light from the adult, who would gladly step back and let the younger person play. This tweet by an audience member attending Illuminate Bath 2012 illustrates the challenge in creating work in which adults allow themselves to play if children are playing:

“Loved all the installations at @ Illuminatebath tonight. Missed having a go on @tinebech Spotlight tomorrow = amovewithchildren” (Tweet feed: @hannah_ab 25/01/2012).

Catch Me Now does not facilitate narrative play (as in games) and there are no clear forward-driving goals or proceeding through levels. Rather, the work is opened ended, allowing the audience to put their personalities into the work and create their own (meaningful) experiences.

Since a key principal in my artist doctoral practice is to create play and agency, I use simple interfaces that ties into the work and create their own (meaningful) experiences.
The interface also needs to be reliable and robust. It goes without saying that interactive art needs to actually work in order to be interacted with. A good experience is dependent on knowing that the environment is reacting. There are those who believe that the ‘out of order’ sign at interactive exhibitions is a Dadaistic aspect of interactive art and should be read as part of the work i.e. sometimes it works, sometimes it does not. Personally, I find it creates great frustration if my own work or other artists’ works do not want to play with me.

The question of who controls the artwork, the audience or the artist is debatable. As David Rokeby writes:

“for many people, interaction has come to mean control. People look to interactive technology for empowerment, and such technologies can certainly give the inter-actor a strong sense of power.”

There is no doubt that materializing the audience’s physical interactions enhances their engagement significantly. It creates a sense of victory – a ‘Yay I caught it’ moment. It is pointless (and the moment of victory impossible) if the audience is not made aware of how the environment is responding to them. Beryl Graham also confirms this: “the primary pleasure of interactions is that of control, which is why the thwarting of audience control or the realization of token control is a site of such displeasure.”

However, it is important to acknowledge, as Rockeby states that the audience control over the interactions is often actually limited. I believe the artist is the creator and decides the frame for the agency. Artist’s overriding methodology is to influence the viewers interactions through the material affordance, the code and the subject matter. The audience do not participate with an illusion of power; rather the ambiguous aspect of control is accepted as implicit and unspoken. This is Bateson’s meta-message of play – we know we are playing: “The playful nip denotes the bite, but it does not denote what would be denoted by the bite.” When we play, we suspend our disbelief and treat our experiences as true (and serious), but nonetheless we do know that it is only play. The play paradox, according to Bateson, is that the experience is both real and not real at the same time.

CONCLUSIONS

The Playful interactive artworks presented in the paper have been an exploration into creating playful interactive experiences through involvement of the body. This distinct mode of embodied play holds the possibility to delight, tease and empower us. It is the sense of ‘victory’ made possible by opening the artwork to participation, the feeling of exuberance we get when we enter into play with an interactive artwork that is playing well – playing well is akin to being alive and present. These modes of playful embodied interaction are worthy of further exploration. It is more than hey let’s play; it is an exploration into visceral experiences – knowing the world through other modalities than the dominant visual media of our contemporary existence. When we accept an invitation to play, we invest in the moment – we care. It is important to recognize that while play is fun it is also serious, in fact research shows that our ability to recognize the play-signals of others (and of interactive art) establishes trust and helps us to adapt to the unexpected in a complex world, as Brown states. It’s not about new technology but about creating art, which moves us and allows us to find new ways of engaging with people emotionally and socially – much like the old Japanese Automata. There are many social limitations in our daily lives that hold us back, but once we accept the invitation to play, we engage and our surroundings once again become open to possibilities!

Play has the ability to break down social barriers and as such it is transformative. After all, we know that play is the most pervasive behavior across human culture. Embodied playful interaction has the potential to become a meaningful form of engagement. The invitation is there!

REFERENCES AND NOTES

1. Digital Cultures Research Centre is the hub for a network of researchers from across the University of the West of England. They work across Art & Design, Computer Sciences, Cultural & Media Studies and Geography to investigate the ways in which people make culture through their use of digital communications: http://www.dcrc.org.uk/about. The ocrs hub is the branchchild of Professor Jon Dovey, ocr is based at the media innovation lab Pervasive Media Studio. The Studio is a unique environment where designers, artists and engineers share expertise to produce new experiences for media audiences.

12. Whole book by the bilingual writer posted at Rhizome is in English. There is a review of the book is in Italian but the abstract of the final chapter where it is not expected to exist (look at the art (not the media) and learn “to look for art in interaction/technology.”)

13. Quanrant adds to the discourse that the art world critically does not see art as a method for rethinking curating – the “enactment of a double negative, the not …not binary and far more complex. Furthermore both worlds have changed a lot over the 15 years – yet the debate seems to be ongoing still.

14. If we continue from the above footnote then artist’s material choices can be linked to previous debates about the divide between media art and gallery art, or in the words of Manovich Duchamp-land (contemporary art exemplified by galleries and museums etc) and Turing-land (computer art represented at sogakun, isa, Ars Electronica, 2011 etc). According to Manovich, Duchamp-land is concerned with producing objects of art that are ‘oriented towards the content, complicated’ and often ‘ironic’ and ‘self-referential’, and often ‘literally destructive attitude towards its material.’ Turing-land or new media art on the other hand is oriented ‘towards new, state-of-the-art computer technology.’ It takes technology seriously and produces artworks that are ‘simple and usually lacking irony’ (Manovich 1996:1-2). Domenico Quaranta adds to the discourse that the contemporary art world critically does not see art as a method for research into the medium ‘but as a powerful statement on the world we are living in’ (2011:np).

15. These statements are of course only a snippet of the debate, which is far less binary and far more complex. Furthermore both worlds have changed a lot over the 15 years – yet the debate seems to be ongoing still.

16. This is related to the wider debate about art, medium and technology. Art before media / Art with media / Art through media / Art after media.


19. Ibid.


23. Access by Mani Sester (2005) is a robotic and acoustic spot, which lets online users anonymously track individuals in public places. It explores elements such as exposure, control and transparency of surveillance. Flock by KMA (2007) is a large scale outdoor multiple spotlight installation inspired by Tchaikovsky’s Swan Lake. Pe destrains become performers, allocated their own spot where ghostly projections and stories are revealed.


25. My material approach is concerned with the properties and affordances of materials – how objects and materials behave and how they are experienced and interacted with. Barbara Bolt describes this as a form of material intelligence within arts practice: Material thinking offers us a way of considering the relations that take place within the very process or tissue of making. In this conception the materials are not just passive objects to be used instrumentally by the artist, but rather the materials and processes of production have their own intelligence that come into play in interaction with the artist’s creative intelligence. See Estelle Barrett and Barbara Bolt, Practice As Research: Approaches To Creative Arts Enquiry (New York: 1. B. Tauris & Co. Ltd., 2007), 29-30.


35. This is from Bateson’s research into animal play in which he proposed the theory of the meta message – the meta message is the message about the messages. Simplified it tells us, for example when a dog bites the other dog it knows it is not a bite but play – the playful nip denotes the bite, but does not denote which would be denoted by the bite.” Gregory Bateson, “A Theory of Play and Fantasy,” in Rules of Play Game Design Fundamentals, eds. Salen and Zimmerman (Cambridge, MA: The MIT Press, 2006), 373. Richard Schechner later added that a bite is also not a bite, from Stanislavsky performance theory 746 that a performance can also be the “enactment of a double negative; the not … not [sic].” Richard Schechner, Performance Studies, 2nd edition, (New York: Routledge, 2006), 103.