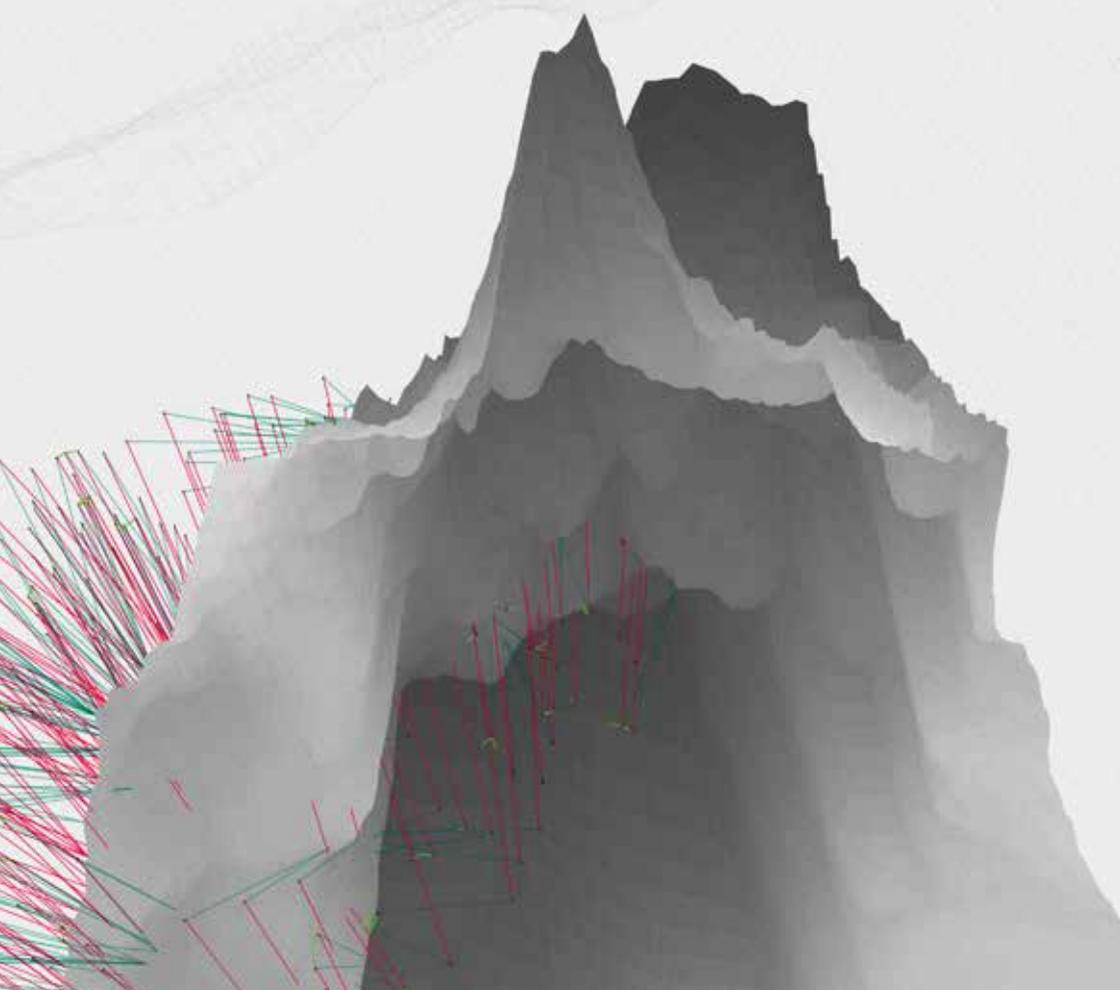


ISMAR 2015 Exhibition

# DATA BODY AS ARTIFACT

Curated by Julian Staddon  
Exhibition Catalog



# EVENTS

All events are included as part of ISMAR Main Conference Program

## MAIN EXHIBITION

September 29th – October 4th

Fukuoka City Museum  
Open 9.30-17:30

## DATA BODY AS PERFORMANCE

September 29th

20:00-21:00 Fukuoka City Museum

## ALGORAVE

September 30th

19:00-21:00 Fukuoka International Congress Center

## STELARC - PROPEL/EAR ON ARM & PROPEL/EAR ON ARM ON ARM

September 30th – October 4th

Special Screening October 4th  
Streaming September 30th - October 3rd  
Robotic Performance Live Stream from DeMonstrable Exhibition

## KEYNOTES

September 30th

9:30-10:30 - Dr. Gudrun Klinker

October 1st

9:00-10:00 - Mr. Julian Oliver

October 2nd

15:50-16:50 - Dr. Masahiko Inami

# MASH'D PANELS

## September 30th

13:30-15:30 - Data Body as Artifact Artist Panel 1. Bodies of Matter

15:50-17:50 - Data Body as Artifact Artist Panel 2. Matters of Embodiment

## October 1st

15:50-17:50 - Contextual Engineering

## October 2nd

10:45-12:15 - Experiencing AR in Public Environments

13:30-15:30 - 5th Anniversary MARart Aesthetics Panel: Bodies, Embodiment and Data Aesthetics

# PAPER PRESENTATIONS

## September 30th

10:50-12:30 - Meaning

10:50-12:00 - HMDs

13:30-14:45 - Depth Cams

## October 1st

10:20-12:00 - Materiality

10:20-11:50 - Tracking

15:50-16:55 - Applications

16:55-18:05 - Closed-Loop Visual Computing

## October 2nd

9:00-10:15 - Media

9:00-10:00 - Medical AR

10:20-11:30 - Perception

# DATA BODY AS ARTIFACT

## Julian Staddon - Introduction

This exhibition presents a range of artists that explore disruptive or alternative strategies for representing the relationship between body as material organism, embodied data/interaction and body as artifact (data body). The exhibition explores what reality is in relation to we humans as organisms and how digital technologies, particularly networked interactive systems have shifted our understandings of what it means to be human in an age of post-biological, post-digital existence.

The artworks range from traditional augmented reality marker based sound compositions, to bio-art interventions, identity obfuscations, network jammers and data miners, to autonomous robotic identity thieves, to augmentations of the body, such as bodily augmentation, dream documentation, cellular and nano-scale interventions or examinations of how we negotiate these new spaces, quantum time and identity.

The exhibition this year will be held at the Fukuoka City Museum, a place famous for historical Japanese artifacts. In response to this history, this exhibition questions what artifacts we leave behind from embodied mixed reality interaction. Recent developments in hardware and software input/output systems along with the evolution of digital fabrication methods have revolutionised the ways in which artists work with technology, particularly in relation to the body. Such approaches have shifted the ways in which we perceive ourselves, in relation to our online identities (data bodies) and their positioning within the various socio/political/economic networks that they traverse. As our online presence consolidates, what happens to our material presence? What traces, shadows, echoes and footprints from digital presence become materialised and how do we develop an object-orientated ontology for such phenomena?

The Data Body as Artifact Exhibition seeks to investigate these questions, along with challenging popular notions of what mixed and augmented reality art is, how we frame such an openly diverse field and most importantly, what contribution can creative discourse offer towards a broader understanding of how we humans situate ourselves within these constantly evolving multiple realities and finally what effect/affect this has on our bodies.

Exhibition and MASH'D Program at ISMAR 2015 organised and curated by Julian Staddon.

MASH'D Chairs: Julian Staddon, Ian Gwilt, Carl Smith  
Conference General Chairs: Hirokazu Kato, Hideo Saito  
Local Organisers: Hideaki Uchiyama, Ryoko Ueoka  
Catalogue Editor: Julian Staddon  
Catalogue and Poster Design: Jan-Nahuel Jenny  
Graphics: Jorge Ramirez  
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The Mixed and Augmented Reality Art Organisation and the Artists.

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# ISMAR

## IEEE International Symposium on Mixed and Augmented Reality

ISMAR 2015, the premier conference for Augmented Reality (AR) and Mixed Reality (MR), will be held in beautiful Fukuoka, Japan.

The theme of this year's conference is "Augmentation Without Boundaries". ISMAR is responding to the recent explosion of commercial and research activities related to AR, MR, and Virtual Reality (VR) by continuing the expansion of its scope that started last year. ISMAR 2015 will cover the full range of technologies encompassed by the MR continuum, from interfaces in the real world to fully immersive experiences. This range goes far beyond the traditional definition of AR, which focused on precise 3D tracking, visual display, and real-time performance. We specifically invite contributions from areas fundamental to AR/VR/MR, including Computer Graphics, Human-Computer Interaction, Psychology, Computer Vision, and Optics.



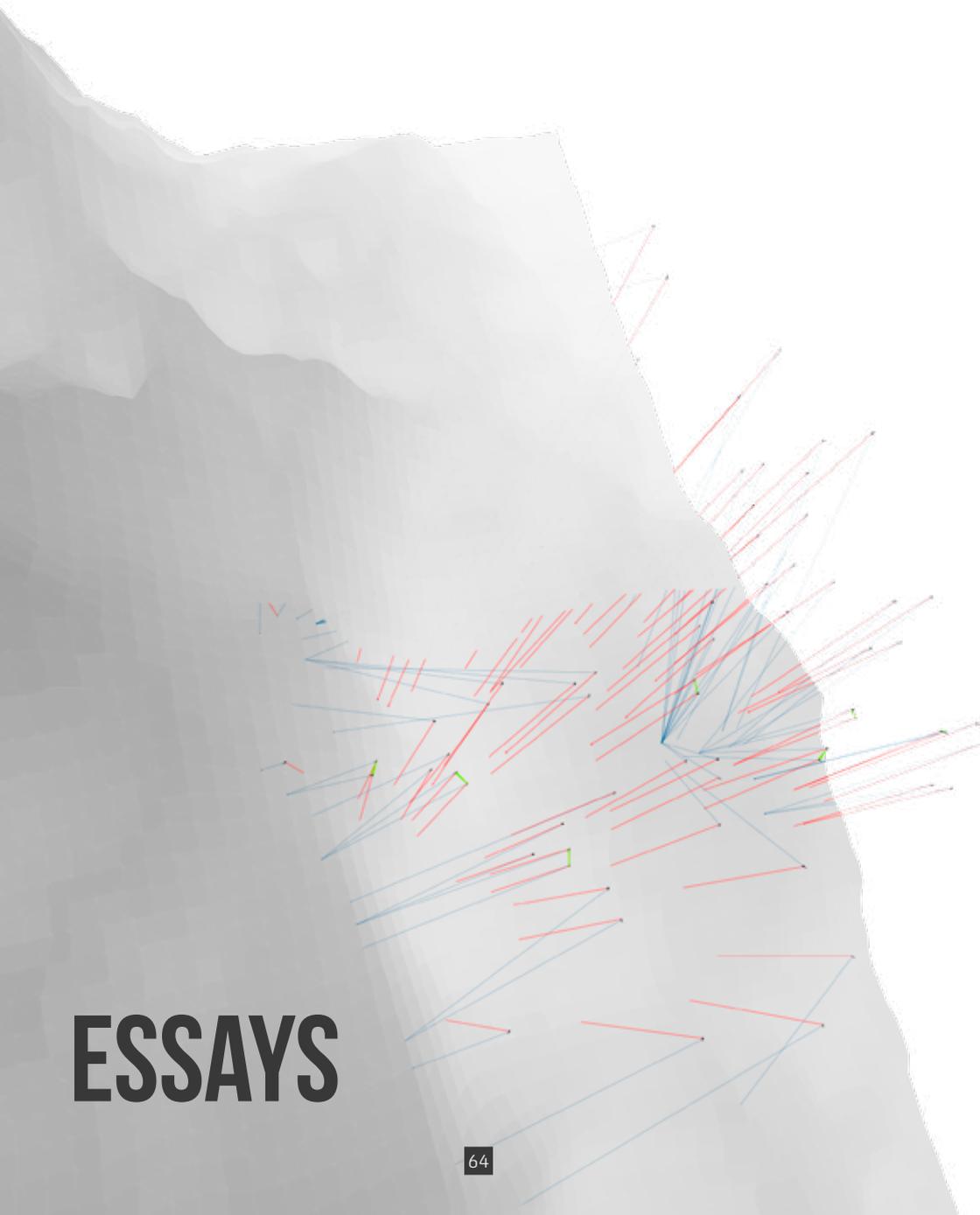
## ISMAR 2015

# FUKUOKA CITY MUSEUM

## Venue

Fukuoka City faces the Genkai-nada Sea in the northern part of Kyushu. It is at the western tip of the crescent-shaped Japanese archipelago and draws near to the Eurasian continent and the Korean peninsula. The ancestors of the city kept this area rich and lively by coming into contact first with cultures the rest of Japan was unaware of, by developing forms of production and economic activity never experienced before and by overcoming threats not encountered in the past. Subject matter of our permanent exhibitions addresses the history of Fukuoka and the lifestyle of the people of this area, which served as a gateway to foreign interchange.





# ESSAYS

# NAKED EXPERIENCES: A PHENOMENOLOGY OF EXPERIENTIAL ART

Brigitta Zics

The human body gained a new precedent in art once technologies allowed integration and reciprocity between viewer and artwork. In this article I will focus on aesthetic experiences that present the body as an interface for utilising our intrinsic, deep-rooted nature of being human. I mean by this artworks that exploit the characteristics of the embodied nature of our existence, determining our body as the facade of our conscious and unconscious acts. 'Performativity' is integral to these experiences and the agency of the artwork shaped by the 'now and then' actions of the viewer-performer, often triggering unforeseen reactions and a journey of interception. I will argue that these experiential artworks create their own aesthetic claim whilst interrogating universal questions of being human that challenge the social, political and cultural constructions of the now; the experience that such artworks facilitate will be presented herein as Naked Experiences.

How and why are Naked Experiences different from other aesthetic experiences? A phenomenological comprehension, one that places a paramount importance in how the body interacts with the world around us, is where I believe the answer is to be found. As our bodies acquire new knowledge, 'meaning' arises through our actions. It is this that Mark Johnson (2007 p. ix.) referred to when he wrote "meaning grows from our visceral connections to life and the bodily conditions of life... the bodily sources of meaning". Such meanings are embodied, visceral elements to our everyday being and they exist at a subconscious level; we act them out without a conscious perception whether prompted by internal or external triggers. Such embodied infrastructures are set constructs and are rarely challenged or revised in life. Pioneering pragmatist John Dewey thinks that 'esthetic

experiences' retain the potential to do so. He illuminates this as following:

*...experience become conscious, a matter of perception, only when meanings enter it that are derived from prior experiences. Imagination is the only getaway through which these meanings can find their way into a presence interaction... (Dewey 2005 [1934] p. 283 -284)*

Dewey's viewpoint is that imagination can make us aware of the experience itself; the artist's role, in this sense, is to design with and for the embodied capacity of being and to facilitate a new meaning. Mark Johnson's (2007) insight into visual perception in relation to conscious action provides us with further insight. He explains that the "mechanisms of our vision are not, and cannot be, the focus of our awareness and attention. We are aware of what we see, but not of our seeing". Through Dewey's lens we can interpret that an aesthetic experience allows us to draw our attention to the act of seeing, by which our embodied infrastructure is challenged and their meanings revealed. For example, we may start actively thinking about how we move our eyes, why we look away from bright light or what happens when we excessively focus on any one given point for an extended period of time. These actions are all attached to particular meanings (although not necessarily aesthetic ones) in order to act in the world effectively. Alva Noë (2002) exemplifies the 'paradox of perceptual transparency' through a painter's conflicting desire of depicting the scene that can only make a representation of the room but not able to depict the actual visual perception of the room. Beyond this 'mode of transparency', he explains, there is another option, where we reflect on our experiences through a 'mode of activity' or how things in

the world afford themselves in motion and action. He explains, that the content of an experience is not given all at once — as it is presented on a representational image — but rather, it evolves through 'enaction': an exercise of knowledge through sensorimotor contingency. Like Dewey, Noë emphasises the exclusive nature of aesthetic experiences by confirming that art lends itself to the application of the 'mode of activity'. He illustrates this through sculptures that encourage viewers to actively explore while exposing them to distorted spatial perceptions; another artwork used is a large format portrait that plays with viewer perception by dissolving patterns that reappear in various scales. Dewey, Johnson and Noë refer to experiential artworks that make the experience the subject of the art. These artworks do not attempt to represent experience itself but rather facilitate self-aware explorations and active engagement.

In this respect Naked Experiences are enactive, aesthetic experiences that are designed by an artist with a comprehension for meanings of embodied sensorimotor action. These experiences challenge everyday accounts of life - in which the mode through which we perceive the world is transparent, encouraging actions of the viewer-performer to create a journey of self-exploration. Naked Experiences, with its constantly evolving process, is a significant departure from aesthetic experiences that aim to merely depict. Nigel Thrift's (1996) Non-representational Theory (NRT) provides further insight into the characteristics of just such a 'self-aware experience'. He explains the human body and its interaction within the world as an evolving distribution of different hybrids that constantly provide emergent capacities to act and interact. For Thrift representational accounts of existence are merely a mode of presentation that disregard the embodied and open-ended processes of life. Challenging this dogma within Human Geography Thrift proposes a holistic knowledge production practice that enacts life to understand it. NRT emphasises the pre-cognitive aspect of embodied life and gives importance to the subconscious actions that are 'practices of subjectification'. These

practices are the results of a series of irretrievable and indeterminate events that form performative manifestations of the world. Performativity refers to iterability of visceral action, "...pure forces, dynamic lines in space with act intermediary upon the spirit... gestures which develops before organised bodies..." (Deleuze 1994 p.10) that facilitate chance to happen. It is a conscious and continuous enactment of the present moment and its uncertain happenings that lead to transformative experiences. These practices for Thrift (2007 p. 8) are "material bodies of work or styles that have gained enough stability over time, through, for example, the establishment of corporeal routines and specialized devices, to reproduce themselves". In other words actions become part of the embodied infrastructure and not temporary. Artworks usually present a temporary infrastructure, simply because they do not have the chance to provide a long-term facilitation of the experience to become habitual.

Naked Experiences go beyond the representational view of the making of art and challenging the established forms of meaning creation. It introduces a body-centric approach that intends to recreate the dynamic characteristics of life by making the experience the core focus of aesthetics. Similar to Thrift's paradigm change in Geography, Naked Experiences aim to strip off aesthetic values from social, political and cultural constructs and grounds them in Human Ontology. With this the desire is to move back to the very basic questions of what the inherent characteristics of an aesthetic experience are or how aesthetic pleasure may be located in the vascular structures. Naked Experiences embraces performativity, constructs of actions in space and time that facilitate irretrievable and indeterminate events with productive and transformative knowledge production. Instead of non-representations, Naked Experiences create 'performative presentations' (Anderson and Harrison 2010) of a Human Ontology; they are deeply rooted in the intrinsic, biological body ('Body One', Don Ihde 2002) but they also offer a new insight into how to see the socially and culturally manufactured constructions of the

body differently ('Body Two', Don Ihde 2002). It is suggested that designing for such experiences can provide a valuable proposition to aesthetics that struggled to find a cohesive answer to technology in art.

Somaesthetics by Richard Shusterman builds on pragmatist traditions (like Dewey) and is concerned with the "critical, meliorative study of the experience and use of one's body as a locus of sensory-aesthetic appreciation (aesthesia) and creative self-fashioning' (Shusterman 2014 p. 302). Shusterman's claim is focused on the pleasure within the body; a visceral experience whilst perceiving beauty and not purely the perceived representation. He claims that somaesthetics is to 'correct the actual functional performance of our senses by an improved direction of one's body since the senses belong to and are conditioned by the soma.' (2014 p. 302). Somaesthetics' focal interest is self-knowledge rather than knowledge of worldly facts. It is not only concerned with the body as an external form (representational pragmatic somaesthetics) but also with the lived experience itself (experiential pragmatic somaesthetics); it works to improve the awareness of our body, its states, our changes modes and lasting attitudes. It focuses on the "aesthetic quality of its "inner" experience" and "to make the quality of our experience more satisfyingly rich, but also to make our awareness of the somatic experience more acute and perceptive." (Shusterman 2014 p. 305). A significant contribution that somaesthetics can bring to Naked Experiences is the understanding that the conscious versus subconscious bodily action can create meaning and how these are interconnected. By exploring similar ideas to Dewey's esthetic experience Shusterman (2012 p. 91) introduces "embodied implicit memory that unconsciously helps us perform various motor tasks we have somehow learned through habitation" (earlier we referred to this as sensory-motor coupling). He sees this memory not merely as an uneducated body reflex but as a skilful intelligence that has the capacity to step into the foreground for critical reflection and possible reconstruction to become a conscious part of our experience.

In general our attention is habitually directed to the world. Like Noë's notion of the paradox of perceptual transparency Shusterman concludes that full transparency of our actions is impossible and unnecessary. He goes on to argue that fluidity between the implicit (conscious) and explicit (unconscious), the ability to bring our unconscious to the foreground of our own perception is highly desirable as it facilitates mindfulness with the ability of enhanced enjoyment and awareness of our feelings. Shusterman's somaesthetic awareness or 'intelligently focused somatic introspection' does bear similar characteristics to Noë's mode of activity; both of them concern themselves with a skilful perceptual activity, a choice of attention in action. Shusterman exemplifies such fluidity with the pianist who plays with spontaneity but has an aesthetic sensitivity of mindfulness. He explains that most of us however are unaware of habitual modes of bodily behavior and that inhibitory power is needed to break our habits of attending other things; this is simply because the hardest thing to attend to is what is closest to ourselves and constantly presented to us. Earlier Dewey explained that such a break might be facilitated through imagination when meaning enters into the presence, making us attend the action as it is evolving. Naked Experiences in this sense facilitate a break with our somatic habits, exercises critical reflection, makes an effort to implement changes and reconstruct our actions, or as Shusterman refers to them, positive actions. Naked Experiences are systematic somatic reflections, a mastery of inhibitory control; the results are a constant learning process and somatic adjustment achieving critically focused awareness.

In conclusion, Naked Experiences are body-centric comprehensions of aesthetic experience. They present a unique proposition in the way that they consider the body as an aesthetic platform to understand what it means to be human. Its central philosophical arena is Human Ontology and the understanding of human aesthetic pleasure as it reveals itself through the visceral intrinsic capacity. Embodiment through Somaesthetics, Dewey's pragmatist

aesthetics, Non-representational Theory, and views of Embodied Cognition provide rich, multifaceted insights into the phenomenology of Naked Experiences. They explain how natural dimensions of experience of being in the world facilitate a priory action capacity of the viewer-performer that if attended through imaginative rationality creates embodied subjectification and focused somatic introspection. A break from old visceral meanings and habits expedited through bringing the unconscious to the foreground and making viewers aware of the actual act of perceiving provides them with an opportunity to enact new meanings. The method to create Naked Experiences is (i) performativity as an act of repetition (often simple movements) and (ii) performativity as enabling chance through irretrievable and indeterminate events; in the experience this can take a variety of forms as disorientation, distorted space and time, perceptual confusion and novel embodied sensations etc. The result is performative presentations; (i) on one hand meanings and routines of the body that for temporary or for long term becomes part of the viewer-performer embodied infrastructure, (ii) on the other hand objects and technologies that are facilitators of an experiential journey. The experience of self-fashioning in Naked Experiences is an active self-exploration and introspection that promises increased mindfulness and enhanced awareness of emergent feelings. Naked Experiences facilitate an aesthetic turn; altering the experience into the subject of the art. It configures aesthetic experiences as presented in life and constructs the viewer-performer's thought by making him/her enact everyday life and beyond. Naked Experiences re-acquire the intrinsic and a priory of our existence; it provides us with access to a pleasure state residing in our visceral capacity.

#### **Characteristics of Naked Experience:**

1. Resides in Human Ontology.
2. Makes the experience of the subject of art.
3. Breaks habitual modes and visceral meaning of the bodily.
4. It is a 'practice of embodied

subjectification'.

5. Facilitates 'intelligently focused somatic introspection' through self-fashioning.
6. Creates 'performative presentations'.
7. A 'mode of activity': making viewers fully aware of the actual act of perceiving
8. Facilitates mindfulness, enhanced enjoyment and awareness of our feelings.

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# MARART.ORG

## Mixed and Augmented Reality Arts Research

The Mixed and Augmented Reality Arts Research Organisation (MARart.org) seeks to develop new dialogues in regards to high-end research methodologies, cultural inquiry and representation in the increasingly immersive and pervasive field of mixed and augmented reality art. We aim to do so independently of any institutional involvement as we value a (non hierarchical) networked community approached to research and discussion.

This initiative aims to scope the field of MARart, through the presentation and analysis of particular research outcomes, in order to develop criteria that can assess MARart's production and position within the media arts.

The research endeavours to develop flexible strategies for hybridised research practice, in a number of open platforms that will scope current trends and exemplary models from a variety of approaches. Artistic practices in MARart will be discussed in order to locate new research (paradigms?) that address issues including cultural absorption, post-biological identity, social codes and systems, mobile computing, commercialization and intellectual property, with particular regard to the media art field.

This is an open group for researchers dealing with mixed reality art focusing on augmentation as a medium. It has a specific (conceptual) focus on convergent realities as art mediums and the theoretical discourses that surround this field.

We are not a commercial/advertising group, in fact we strive to be the opposite of this- an open community for free exchange of ideas, projects and discussion relating to this really cool media art field.

### MARart Friends & Advisers

Mónica Bello, Zach Blas, Gerhard Blechinger, Jay Bolter, Mez Breeze, Nick Briz, Paul Brown, Heath Bunting, Ruth Catlow, Oron Catts, Sean Cubitt, Nina Czegledy, Boris Debackere, Annette Doms, Marc Garrett, Oliver Grau, Raphael Grasset, Ian Gwilt, Ross Harley, Jens Hauser, Alan Hook, Troy Innocent, Wolf Lieser, Mike Phillips, Pierre Proske, Kate Richards, Jorge Ramirez, Jill Scott, Hartmut Seichter, Paul Sermon, Vicky Sowry, Carl Smith, Christa Sommerer, Julian Stadon, Christopher Stapelton, Stahl Stenslie, Nathaniel Stern, Mike Stubbs, Paul Thomas, Pontus Wärnestål, Adam Zaretsky, Brigitta Zics



# THX

## Special Thank You from the Organiser/Curator:

For the last 3 years I have organised and curated the ISMAR/MARart.org exhibition and as usual, there are many people to thank for helping make this show into a reality this year. To Hirokazu Kato, Ryoko Ueoka, Hideaki Uchiyama and the rest of the general chairs for ISMAR this year, plus the chairs from previous years, thank you for believing in me and trusting in my ability to create suitably appropriate exhibitions for the yearly themes and program content. You have all been integral to the organisation of this exhibition and I cannot thank you enough for your assistance! I'd also like to thank Mark Billinghamurst and Raphael Grasset for getting me involved with ISMAR and Gudrun Klinker for her continued support also.

To all the MARart.org friends and advisors, I would like to give you special thanks for your continued support and advice throughout the last 3 years since we launched MARart.org @ ISEA Sydney. I would like to thank my employer, Salzburg University of Applied Science for their support and understanding throughout each year of this endeavour. In particular I would like to thank Gerhard Blechinger for his advice and endless support and encouragement of my wider research interests. To my fellow chairs, Ian Gwilt and Carl Smith, thank you for a very enjoyable experience establishing this year's themes and directions. To my main man Paul Thomas, you are always my first point of advice and I thank you for 11 years of mentoring and inspiration. To the production team, Jan-Nahuel Jenny, Jorge Ramirez and our helpers, to our host at the Satoya house Kaz Iwanaga, thank you for so much local advice and constant assistance getting us all organised for this year!

To all my friends, thank you for keeping my feet on the ground and my perspective clear during the process of organizing this show! Each year sees new challenges and the same issues and each year sees new rewards, and most importantly, this is due to the group of fantastic artists that have participated in the last 3 years of this show. Too all of the artists: I thank you for your fantastic ability to identify meaningful topics of discourse, thoroughly investigate them and then be able to present them in interesting ways that challenge our understandings of our world and being.

Thanks lastly to the human ability to represent itself through artist means.



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