Abstracts and Bios

Robots in Art

Tomi Dufva. Its your data, but my algorithms

Abstract: The world is increasingly digital, but the understanding of how the digital affects everyday life is still often confused. Digitalisation is sometimes optimistically thought as a rescue from hardships, be it economical or even educational. On the other hand, digitalization is seen negatively as something one just can't avoid. Digital technologies have replaced many previous tools used in work as well as in leisure. Furthermore, digital technologies present an agency of their own into the human processes as marked by David Berry. Through manipulating data through algorithms and communicating not only with humans, but other devices as well, digital technology presents new kind of challenges for the society and individual. These digital systems and data flow get their instructions from the code that runs on these systems. The underneath code itself is not objective nor value-free and carries own biases as well as programmers, software companies or larger cultural viewpoints objectives. As such, digital technology affects to the ways, we structure and comprehend, or are even able to comprehend the world around us.

This article looks at the surrounding digitality through an artistic research project. Through using code not as a functional tool but in a postmodern way as a material for expression, the research focuses on how code as art can express the digital condition that might otherwise be difficult to put into words or comprehend in everyday life. The art project consists of a drawing robot controlled by EEG-headband that the visitor can wear. The headband allows the visitor to control the robot through the EEG-readings read by the headband. As such the visitor might get a feeling of being able to control the robot, but at the same time the robot interprets the data through its algorithms and thus controls the visitor's data. The aim of this research projects is to give perspectives to the everydayness of digitality. It wants to question how we comprehend digital in everyday life and asks how we should embody digitality in the future. The benefits of artistic research are in the way it can broaden the conceptions of how we know and as such can deepen one's understanding of the complexities of the world. Furthermore, artistic research can expand the meaning to alternative interpretations of the research subjects. As such, this research project aims at the same time to deepen the discussion of digitalization and to broaden it to alternative understandings. The alternative ways of seeing a phenomenon, like digitality, are essential in the ways future is developed. The proposed research consists of both the theoretical text and the interactive artwork, which would be present in the conference.

Maija Tammi. A case study: the android portrait

Abstract: An excellent photographic portrait is sometimes though to capture "essence" of the sitter and provide deep psychological insight of the person in front of the camera. But what if the sitter just looks like a human but is, in reality, a robot?

British Taylor Wessing Photographic Portrait Prize is the largest portrait competition in the world. In 2017, controversially, a portrait of an android (human-looking robot), taken by me, won two prizes in the competition.

The android portrait broke (or bent) the rules of the competition, which state that the photograph "must have been taken by the entrant from life and with a living sitter." However, the National Portrait Gallery, who organizes the competition, decided to keep the photograph in the competition because the judges were intrigued by the questions the portrait arouse. Shortlisting the android portrait for an award became an international news story.

The robot portrait revealed difficult aspects of the photographic portraiture as the image questioned what does an image actually tell of the sitter, especially in the context of the Taylor Wessing award, which describes itself to be "concerned with portraying people with an emphasis on their identity as individuals". And even more uncomfortably the android portrait questions what is it to be a human or alive.

The android portrait drew attention to the modern (and postmodern) view that a photographic portrait of a human face does not reveal as much as often hoped for (shown for example by Francis Galton 1880s and Lev Kuleshov in the early 1900s). However, the fantasy that a photographic portrait tells "who" one is, still persists and is in the most basic sense, tied to our identity (passports and identity cards). However, it is also debated in an artistic context, when, for example, photographer Thomas Ruff stated that his deadpan portraits tell nothing about a person's character.

This presentation scrutinized the android portrait and the discussion around it from the perspective of portraiture revealing "truth" of the sitter.

BIO

Maija Tammi (b. 1985) is a Finnish artist and Doctor of Arts. Tammi's photographs and sculptures converse on topics around disgust and fascination, science and aesthetics. Her work has been exhibited in Europe, North America, and Asia. Tammi has a Masters in visual journalism and she worked as a photojournalist for six years before her artistic career. She has three published books Leftover/Removals (Kehrer Verlag, 2014), White Rabbit Fever (Bromide Books, 2017), and Sick Photography (Aalto Arts Books, 2017). More info: www.maijatammi.com

Murat Germen. Is crafted materiality enough to disturb digitality?

Abstract:

I created a lot of fictional digital artworks, taking advantage of glitch aesthetics and potentials of inadvertent, stochastic processes of software usage. However, one must not forget that there are pitfalls, as software used can sometimes leave foreseeable, recognizable traces in a designer / artist's production, when effects / filters are overused. I call this as the 'signature of the software' and this fact may fade, reduce uniqueness. This concern lately led me to experiment with mixing analog and digital creation processes, to be able to see if physical

collaging of digitally produced material will make a difference. As I started to construct, sculpt the works materially; the above-mentioned predictability of digital fabrication processes turned into a rather more unanticipated and vague making mode, as most decisions were made in situ according to qualities of materials used; enabling human agency and minimizing non-human agency.After I thought I got a grasp of what 'techno-ontology' (Broeckmann) could somehow mean and bring, I decided to try to translate it into a 'craft-ontology' in order to see how my understanding of digital creativity could help improving, transforming analog creativity and vice versa. This paper will focus on the stages of this ontological examination.

BIO

Murat Germen is an artist using photography as expression / research tool. Born 1965, currently lives / works in Istanbul / London. Has an MArch degree from MIT, where he went as a Fulbright scholar, received AIA Henry Adams Gold Medal. Works as a professor of art, photography, new media at Sabanci University, Istanbul. Having many papers, photo series published on architecture / photography / art / new media; he has lectured at tens of conferences internationally.

His oeuvre focuses on impacts of overurbanization and gentrification, civic rights, documentary sustainability of local cultures, human devastation of nature. Has two monographies published by Skira (Italy) and by MASA (Turkey). Has opened/joined over eighty inter/national solo&group exhibitions. More than 300 editions of artist's several artworks are in personal collections of collectors inter/nationally, in addition to Istanbul Modern, Elgiz Museum of Contemporary Art (Istanbul), Centre of Contemporary Art, Toruń (Poland), Benetton Foundation's collections.

Nicole Koltick. Tangible Philosophies: Experiments in Post-humanist Robotics

Abstract: In the realm of robotic research, there are several dominant technological paradigms which govern expectations relating to interactions towards and with robots, including the appearance of robots. These can be broadly classified as humanoid robots, "industrial style" robots and the increasing emergence of "friendly" robots who display childlike anthropomorphic features and behavior. These paradigms are reinforced over time and develop into a "dominant style of technological research", exerting a cumulative influence on both research and the reception of said research in this area, leaving little room for philosophical inquiry or diverse perspectives (Peine, 10). These paradigms presuppose an underlying anthropocentric stance in which the robot is positioned as actor or performer in relation to a set of expectations or demands from a human. How can the development of robots from a non-human philosophical point of view challenge existing technological paradigms? This body of work seeks to disrupt normative assumptions of the role robots play or notions of robotic "performance". A series of synthetic material ecologies were developed which included several new species of interactive robots to examine an entangled set of overlapping non-human agencies. This speculative art/design research project involved the design and development of tangible non-human entities which can be described as robots yet with forms, behaviors and capabilities falling outside of normative conventions. Performance is critical here as it aligns with ideas of standards / metrics/ and behavioral expectations as well as an implied audience (dramatic performance, film performance). Rather than carrying out pragmatic tasks (assembling cars, vacuuming floors, distributing packages, assisting

surgery) these autonomous agents are developed to interact with each other, with colorful mineral based crystals and a robotic interactive habitat, each subset agent embodying distinct behaviors, capacities and tendencies. Conceived as "wild" machines, there is a clear interest in amplifying the blurred boundaries between instinctual behavior, motivation and performance as it might pertain to a machine.

The underlying philosophy borrows heavily from recent post human philosophical thought including speculations on computational phenomenology. This project presupposes that philosophically oriented art/design speculation is best realized through experimentation with, and development of, tangible technological artifacts. Working from the assertion that "artifacts are the hub of a technological paradigm" (Peine, 8), the production of new species of real robots moves beyond speculation, strengthening the proposition that these litany of objects and interactions have validity and carry further weight in their attempt to disrupt existing technological paradigms. Timothy Morton contends "that brushing against, licking or irradiating are also access modes as valid (or as invalid) as thinking" (10). The robots in this project enact new exchanges and relationships which occur outside of human systems of behavior and thought. A non-human orientation towards the development of robots seeks to provide validity and sensitivity to the machine's experience both within its own embodiment and orientation to the world, including novel capacities to affect and be affected.

References:

Peine, Alexander. "Technological Paradigms Revisited – How They Contribute to Contribute to the Understanding of Open Systems of Technology ..." Berlin Technical University, Technology Studies Working Papers, Technical University Berlin, 2006.

Morton, Timothy. Humankind: Solidarity with Non-Human People. Verso, 2017.

*Note- this project has extensive visual assets, built prototypes including robots and environments, as well as a short film. The final paper and conference presentation will incorporate these items.

<u>Jonas Jørgensen</u>. Enacting the Soft Automaton

Abstract: In the past ten years soft robotics has become a thriving subfield of technical robotics research. The benefits of constructing robots from soft materials include safe interaction, adaptation, control through morphological computation, and reuse of stored energy. Soft robotics technology, however, also affords a specific expressivity and meaning making potentials than their rigid counterparts –aspects that have recently begun to be explored in a number of artistic appropriations of the technology.

The paper seeks to unpack "softness" as it relates to soft robots through the lens of new materialist philosophies and ANT-inspired analysis. Departing from the assumption that ontology (understood not as that which is, but as how things are) is entwined with ethics and politics into onto-epistemic practices, the paper explores the practices of designing, constructing, and thinking about soft robots within technical robotics research and media art. How are soft robots "being done" and by which means are different versions of soft materiality enacted? What tendencies and capacities of soft matter do soft robots actualize, how are these situated within a multi-scalar ecology of materials? In what sense does soft materiality condition or gain traction on experience, practices, knowledge and politics and

rearticulate them in different contexts?Bio:

Jonas Jørgensen is a Danish researcher, media artist, and educator. He is formally trained as a physicist (BSc) and an art historian (BA, MA) at Copenhagen University and Columbia University (New York). Jonas is currently a PhD fellow at the IT University of Copenhagen with a project that interrogates soft robotic technology through art and aesthetics. Jonas' writings have appeared in a peer-reviewed and popular outlets including edited volumes, artist monographs, exhibition catalogues, art pedagogical journals, and conference proceedings. He has given lectures, presented papers, and organized workshops related to his research on soft robotics and robotic art at a number of international conferences and festivals including MediaArtHistories, ISEA, Pixelache, MOCO (Movement Computing), HRI (Human-robot interaction), and Aesthetics of the Posthuman. His artistic output has been exhibited at international institutions including Chronus Art Center (Shanghai, China), Forum Box (Helsinki, Finland), Kunsthal Grenland (Porsgrunn, Norway), and Nikolaj Kunsthal (Copenhagen, Denmark).

http://www.jonasjoergensen.org

Richard Carter. Reading the Waveform: Deterritorializing the Sensory in Drone Art

Abstract:

In an age of mass surveillance, the strata of the contemporary world—national borders, economic infrastructures, environmental indicators—are defined increasingly by the perceptual thresholds of different sensory technologies. As a remote sensory node, the drone embodies how these technologies operate as part of an actor-network, with human and machine enacting a joint performance in which signals are gathered and interpretations established. Much research is being conducted into the ethical and political consequences of airborne sensing in the context of drone warfare. However, there exists less work on whether drone sensing can be deployed to facilitate new modes of transgressive, oppositional practice in the arts. This paper will describe an ongoing project that seeks to explore this potential. Entitled 'Waveform', the project utilises drone imaging, in conjunction with tools of image analysis, to perform a novel kind of sensory practice in which environmental data is parsed into a form of free-verse poetry. The aim here is to deconstruct the interlocking performances through which sensory data is made available for interpretation, and how this affects the understandings that emerge subsequently—a means of undercutting the prevailing discourses of precision, omniscience, and control so often associated with airborne imaging and machinic sensing.

Bio

Richard Carter is an Associate Lecturer in Digital Culture at the University of York. His research is on mapping the modes by which human and nonhuman agencies come together in works of digital art and literature, considering what this reveals concerning digital activities, artefacts, and infrastructures more generally. Carter's artistic practice represents an extension of this research, and is concerned with developing techniques of writing that, at various levels, enact and interrogate issues concerning meaning-making in an age of proliferating machine communication.

Ian Ingram. Robots Performing for Animals and Vice Versa

Abstract:

A facet of my artwork over the last twenty years has been attempts to create messy webs in the Umwelts of specific non-human species and humans by creating behavioral systems that-in scale, form, materiality, signal, agency, and gesture--become meaningful to the non-human species, usually, however, inserted into playful narratives built from human conceits as, arguably, part of the human Umwelt is the application of extra meanings and narratives, especially anthropomorphic ones, on other animals' activities. Many of the robots use visionor sound-processing to search the world for the signals of target species and then attempt to respond. They mean to communicate with the animals and, in part, allow human communion with those animals in ways that our own bodies and Umwelts won't allow. I will discuss the non-deterministic performativity of the robots and the animals--in their short-term entanglement of signals, perceived agency, and mixed messages--and observations from the robots' time in their adopted environments, suggesting that they reveal the insufficiency of the feedback loops of cybernetics and even the post-modernish reflexiveness of second-order cvbernetics and reviewing initial findings in a search for contemporary theory matching these entanglements of embodied agents, built or grown, in their environments, built and wild.

BIO:

Ian Ingram is an artist who builds robotic objects that borrow facets from animal morphology and behavior, from the forms and movements of machines, and from our stories about animals.

The resulting works-often intended to cohabitate and interact with the animals in their own places-explore the human-made body's future as a willful entity, our relationship with nonhuman animals, behavior and object performance as artistic media, and the interface between the built and the wild.

Ingram has exhibited internationally, including at the Andy Warhol Museum (Pittsburgh, U.S.A); the Museum of Modern Art (Toluca, Mexico); Yada Gallery (Nagoya, Japan); Eyelevel Gallery (Halifax, Canada); Nikolaj Kunsthal (Copenhagen, Denmark); the Victoria and Albert Museum (London, U.K); and currently the Beall Center for Art + Technology (Irvine, U.S.A). Ingram has a BS and MS from the Massachusetts Institute of Technology and an MFA from Carnegie Mellon University. He lives in Los Angeles, California.

http://www.ianingram.org.

Katsiaryna Suryna and C. Rodrigo Guzman. Delete 'persons', insert 'information processing systems': art and the machinistic discourse of computationalism

Abstract: The recent hype over artificial intelligence (AI) and artificial creativity (AC) has produced a variety of books, conferences, and art projects around the globe. Discussions over AI, as noted by Stephen Wilson (1995) are always rooted in issues about "the nature of being human, the nature of intelligence, the limits of machines, and our limits as artifact makers." Current cognitive sciences, neuroscience, and AI research put forward conceptions of personhood that conflict with our ordinary, pre-theoretical understanding of ourselves and

attempt to eliminate it as primitive and theoretically untenable. Based on the prevalence of an unfortunate computer metaphor that equates 'brain' with 'person', they regard our cognitive abilities as mere varieties of information processing, with trajectory 'input-computation-output,' thus effectively imposing an equivalence between brain and machine. Yet, this is purely a conceptual decision, as there cannot be any empirical evidence that, for example, for a person to perceive is for a brain to 'interpret' the incoming information and create an image of the world. In claiming that to explain what our abilities are is to explain how the brain works, these sciences attempt to replace our constitutive understanding of our abilities with an explanation of their causally enabling conditions. Our pre-theoretical understanding of abilities and personhood is a constitutive understanding, i.e. understanding of what constitute these phenomena and an expression of the conditions of meaningful application of our concepts. In terms of artistic practice, the 'input-computation-output' model cannot account for the whole of the experience of artistic creation, as the artist is not only a 'producer'.

Ideas about artificial creativity seem to embody this mechanistic conception of what our abilities are: to create an artwork is for an information-processing system to perform certain manipulations with input information and produce a certain output. Drawing from authors like Bennett and Hacker (2004), Trigg and Kalish (2011), Crowell (2012), Ratcliffe (2012), and Noë (2015), we propose that artificial creativity ought not to be mistaken for artistic creativity for the following reasons:

(i) our understanding of artistic creativity necessitates a perspective of a person/subject, i.e. a perceiving and cognizing human being that is immersed in the lifeworld and carries her stance towards the world and her self-understanding. When I perceive a teapot I apprehend a variety of possible actions with it. This, in turn, is available only in a holistic context of what I am trying to do—a cup of tea or a work of art—and what I am trying to be—a craftsman, a waitress or a creative artist;

(ii) artificial creativity is an embodiment of our conceptions of what might happen in and around the brain to enable us to create a work of art—to perceive and generate meanings and we think about these processes in a reductionist and mechanistic way as 'inputcomputation-output' in view of certain goals. Therefore, to recognize artificial creativity is not to identify it with an artistic creativity; rather, it is to create a new notion of creativity and art.

Louis-Philippe Demers and **Bill Vorn**. Performing the machine: the Inferno paradox.

Abstract: This paper describes the Inferno project, a participative robotic performance project inspired by the concept of control and the representation of hell. The specificity of this piece resides in the fact that the machines involved in the performance are retrofitted on the body of raptured audience members cum performers. A select group of the public therefore becomes an active part of the performance, giving a radical instance of immersive and participative experiences. Shifting the exoskeleton's command from the authors, to the computer, to the audience and to the performers, Inferno questions the nature of control, either machinic or human, either coerced or voluntary, where utopian and dystopian futures radiate, both real and fictional.

The establishment of a subsumed body at the mercy of an invisible punisher chimes with our anxiety of post-apocalyptic visions of our existences becoming under the control of machines. Inferno translates the automation of control and communication into an apparent infinite process of sins and punishments. The unification of man and machine is, in a certain way, an expression of the punishment for the technological sins committed for the sake of progress. The more we blend with technology, the more it drives us through the inner circles of a state of loss.

Bio. L-P Demers.

Louis-Philippe Demers makes large-scale installations and performances. He participated in more than seventy artistic and stage productions and has built more than 375 machines. Demers' works have been featured at major venues such as Theatre de la Ville, Lille 2004, Expo 1992 and 2000, Sonambiente, ISEA, Siggraph and Sonar. He received six mentions and one distinction at Ars Electronica, the first prize of Vida 2.0, mentions at Vida 12.0 and 15.0, two jury recommendations at the Japan Media Arts Festival, the Interactive prize for Lightforms 98 and six prizes for Devolution including two Helpmann Awards. Demers holds a Ph.D. on robotic performances. He was Professor at the Hochschule für Gestaltung Karlsruhe, affiliated to the world renowned Zentrum für Kunst und Medientechnologie (ZKM, Germany). Afterwards, Demers joined the Interaction and Entertainment Research Centre of the Nanyang Technological University (NTU). He is currently professor at NTU's School of Art, Design and Media.

Bio. Bill Vorn.

Based in Montreal, Bill Vorn is working in the field of Robotic Art since more than twenty-five years. His installation and performance projects involve robotics and motion control, sound, lighting, video and cybernetic processes. He pursues research and creation on Artificial Life and Agent Technologies through artistic work based on the "Aesthetics of Artificial Behaviors". He holds a Ph.D. degree in Communication Studies from UQAM (Montreal) for his thesis on "Artificial Life as Media". He teaches Electronic Arts in the Department of Studio Arts at Concordia University (Intermedia program) where he is Full Professor. His work has been presented in many international events, including Ars Electronica, ISEA, DEAF, Sonar, Art Futura, EMAF and Artec. He has been awarded the Vida 2.0 award (1999, Madrid), the Leprecon Award for Interactivity (1998, New York), the Prix Ars Electronica Distinction award (1996, Linz) and the International Digital Media Award (1996, Toronto).

David Kadish. Machines at the Intersection of Art and Agriculture

Abstract: This paper explores artistic and speculative practices that are situated at and around the intersection of machines and agriculture. It explores work from the mid-20th century such as Dennis Oppenheim's Directed Seeding - Cancelled Crop and the Harrisons' Survival Pieces through to recent and ongoing projects such as the Avena+ Test Bed (Benedikt Groß) and the MIT OpenAg Food Computer. These projects and others provide a solid base for the analysis of critical perspectives on agricultural machines both in the present and the recent past. They also form the context for the presentation of a ongoing artistic research project called Evolving Robot One, which undertakes the evolution of the first species of robot that will inhabit an agroecosystem.

Questions of agency and control are almost invariably bound up in art by, for, and about machines (Latour, 1987); agriculture further complicates this discussion by necessitating the consideration of the agency of plants, soils, microbes, and other ecosystemic actors (Harman, 1999 and Wright, 2016). These factors are treated differently in each project - with the OpenAg Food computer, for example, privileging the agency of the human actor, desiring food with a particular flavour - which, in turn provides a view of the work's stance on food systems as they exist.

The degree to which the work exists in an open system - with the machine in question as part of a larger ecology - is also central to the consideration of the work. Closed systems such as Allison Kudla's Capacity for (urban eden, human error) are bounded in their reach and thus present a different space for exploration of agricultural machines than an open system as in the Avena+ Test Bed.

Evolving Robot One is also considered in the discussion of these works. The project is an attempt to evolve a species of robot that is envisioned as the first of many that will form a hybrid bio-technological fauna in a food ecosystem. The intention is for the robots to become part of the ecosystem, finding an ecological niche to fill and helping to shape the growth of the ecosystem through activities such as finding and harvesting food, spreading seeds and nutrients, and physically shaping its habitat.

Together with the other projects presented, Evolving Robot One asks critical questions about past, current and future agricultural systems and through this paper addresses some of the important questions about the roles of technology in society (Nye, 2006) in an agricultural context.

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Bojana Romic. Robotic Art and Cultural Imagination

Abstract:

This presentation aims to accentuate the importance of cultural imagination of robots, observing the robotic research 'as a mixed register of fantasy and an actual practice.' (Kakoudaki, 2007).

The emphasis will be put on the robotic art which, I argue, is in the fluid state of exchange with other areas of robotic research. It is important to acknowledge robotic research taking place outside the centers and labs that pursue research for instrumental purposes, namely in the area of art and cultural practices (Penny, 2013: 146), as well as in DIY robotics. Unconstrained by the demands of the industry, robotic art offers a valuable commentary on this growing field (e.g. Norman White's Helpless Robot (1987), Robotlab's The Bible Scribe (2007)). Such research offers a broader place for a dialogue and rethinking HRI approaches,

iconic stereotypes and ethical concerns. One can even say that robotic art and culture has an additional quality of a 'testing space' for the outspread cultural imagination of robots.

The article aims to accentuate the importance of cultural imagination of robots, observing the robotic research 'as a mixed register of fantasy and an actual practice' (Kakoudaki, 2007). The term cultural imagination is used in anthropology, cultural studies and philosophy (e.g. Åström, B. (2017); Ricoeur P. (1976)), but here I depart from Despina Kakoudaki's premise that, apart from existing robots, 'the robot is [also] a figure of fiction and science fiction which, despite its un-reality channels feelings about culture and technology, difference and justice, often in indirect ways' (ibid, 2007).

In this article the emphasis will be put on the robotic art which, I argue, is in the fluid state of exchange with other areas of robotic research. It is important to acknowledge robotic research taking place outside the centres and labs that pursue research for instrumental purposes, namely in the area of art and cultural practices (Penny, 2013: 146), as well as in DIY robotics. Unconstrained by the demands of the industry, robotic art offers a valuable commentary on this growing field (e.g. Norman White's Helpless Robot (1987), Robotlab's The Bible Scribe (2007)).

Such research offers a broader place for a dialogue and rethinking HRI approaches, iconic stereotypes and ethical concerns. One can even say that robotic art and culture has an additional quality of a 'testing space' for the outspread cultural imagination of robots: the example is Rodney A. Brook's six-legged insect robot Ghengis (1988), which he described as 'an artificial agent with a 'wasplike' personality', who 'chased and scrambled according to its will' (Dixon, 2004, 31).

The aim of this paper is to contribute to the discussion around the complex field of cultural robotics (Šabanović et al. 2014; Samani et al., 2013). Understanding that "robots are playing an increasing role in the production of culture", Koh et al. define cultural robotics as "the study of robots in culture, cultural acceptance of robots, and robot-generated culture." (Koh, et al. 2015, 3). Following this thread Simon Penny notes: 'cultural robotics is a highly charged interdisciplinary test environment in which the theory and the pragmatics of technical research confronts the phenomenological realities of physical and social being in the world, and the performative and processual practices of the arts.' (Penny, 2013: 147) In this definition, Penny introduces arts as a fairly broad field: as an outlet of human expression, including a range of creative practices – within which the actual contemporary art practices take place.

Using visual methodology (Rose, 2012) I analyse a selection of robotic artworks as means of addressing the issues above.

Short bio:

Bojana Romic, Ph.D. is a Senior Lecturer at ComDev, K3, Malmö University, Sweden. She is a member of the following groups: ROCA (Robot Culture and Aesthetics) group University of Copenhagen, TRANSOR (Research Network for Transdisciplinary Studies in Social Robotics and CEDAR (Consortium of Emerging Directions in Audience Research). Her research foci lie

within the fields of cultural robotics, media and communication studies and audience research.