STELARC: Posthuman Bodies

Stelarc

Born 1946, Limassol, Cyprus
Resides Melbourne, Australia

Stelarc is an Australian-based performance artist who engineers and experiments with body architectures, probing the physical limits of human experience. His work has incorporated bodily interventions and extensions including prosthetics, robotics, virtual reality and biotechnology. Stelarc has exhibited and performed nationally and internationally in Asia, North America, South America and Europe; he has featured in many overseas biennial exhibitions and other major projects and festivals. Since 1995 Stelarc has been the recipient of three awards from the Australia Council for the Arts and earned the Prix Ars Electronica Hybrid Art Prize, Austria (2010).

Stelarc was appointed Honorary Professor of Art and Robotics at Carnegie Mellon University, Pittsburgh (1997). He was a visiting artist in the Faculty of Art and Design, Ohio State University, Columbus (2002-2004); Principal Research Fellow and Visiting Professor in the Performance Arts Digital Research Unit, The Nottingham Trent University, United Kingdom (2006); Senior Research Fellow and Visiting Artist at the MARCS Lab, University of Western Sydney, Australia (2006-2011); and Chair in Performance Art, School of Arts, Brunel University, Uxbridge, United Kingdom (2006-2011). More recently, Stelarc was Distinguished Research Fellow in the School of Design and Art, Curtin University (2013-2018) and worked in collaboration with the Australian Industrial Transformation Institute, Flinders University for the Art Gallery of South Australia's *2020 Adelaide Biennial of Australian Art: Monster Theatres*. Stelarc holds an Honorary Degree of Laws from Monash University, Victoria (2000); and an Honorary Doctorate, Audio and Visual Arts from the Ionian University, Corfu (2017). Stelarc's artwork is represented by Scott Livesey Galleries, Melbourne.
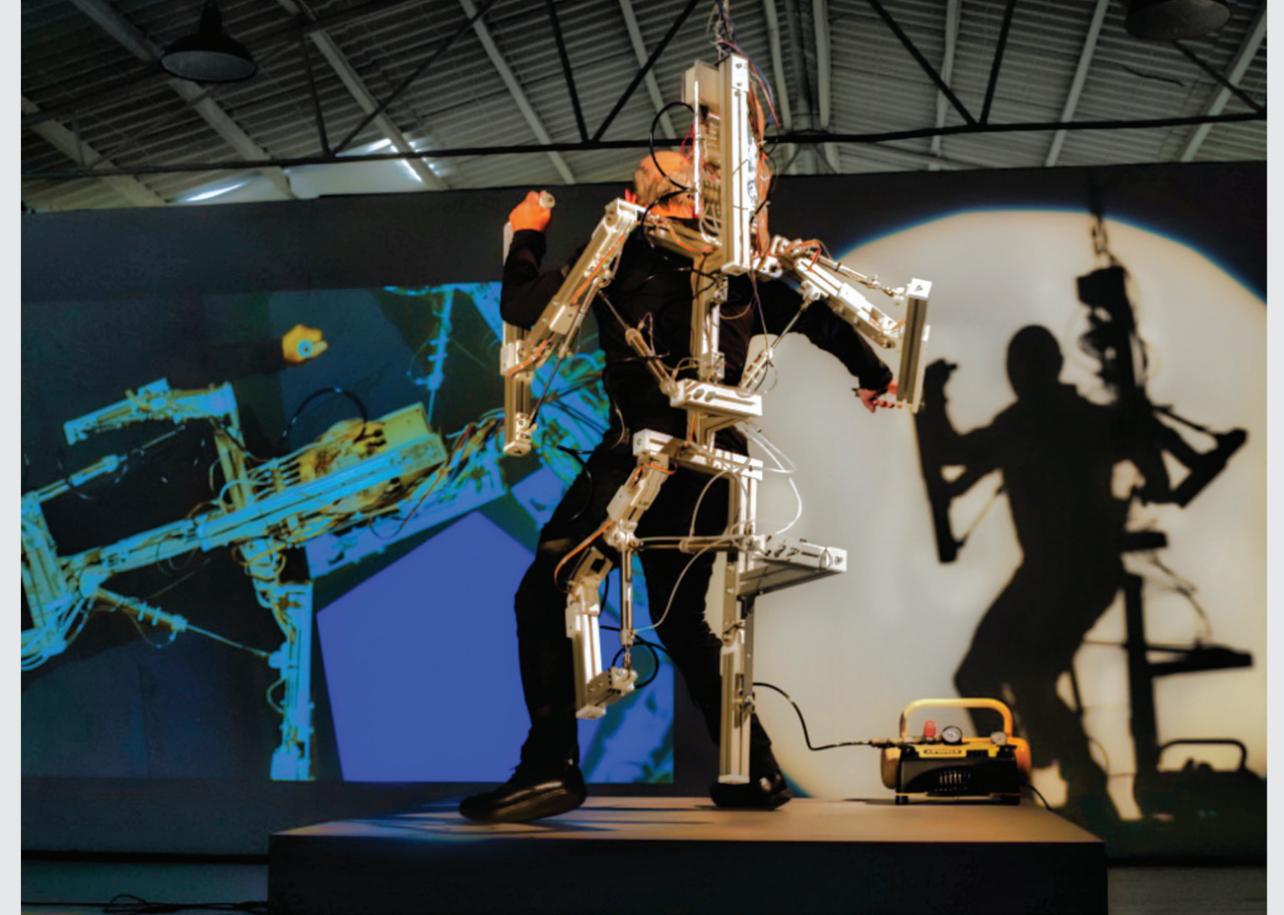
We are at the beginning of a new industrial age, characterised by the presence of increasingly sophisticated cyber-physical systems in our workplaces, homes and communities. All of this is enabled by exponential improvements in computing power, more affordable digital hardware and high-speed internet. Rapidly evolving technologies like additive manufacturing (3D printing), photonics, robotics, automation and artificial intelligence, nanotechnology and biotechnology are enabling us to rethink the way we design, make and maintain machines and ourselves. We shape and are in turn shaped by technological change, often taking for granted the ubiquitous influence of technologies on our lives.

Stelarc helps us explore the complex relationship we have with technology – our fascination, fears and hopes. This is an age-old inquiry where art and science are inseparable. Possibility and threat must be considered, and disciplinary boundaries breached in the process. Stelarc does all this and much more through his work.

Flinders University's Australian Industrial Transformation Institute welcomed the opportunity to collaborate with Stelarc, the Art Gallery of South Australia and the University's College of Science and Engineering, as well as Adelaide-based leaders in engineering and innovation Ternay and Festo Australia – on the artist's most recent creation, *Reclining StickMan*.

Supported by our engineering and technical team, the work has emerged from the floor of the former Mitsubishi assembly plant at Tonsley, South Australia, to feature in the *2020 Adelaide Biennial of Australian Art*. Now home to computer science, engineering and mathematics at Flinders University together with cutting-edge technology companies, this innovation precinct gathers engineers, scientists and social scientists. Connected by our mutual drive to explore the social, economic and environmental applications of advanced and emerging technologies, art helps us imagine new possibilities by broadening our perspectives and enabling us to see things in fresh light.

Stelarc's extraordinary vision for *Reclining StickMan* and his enduring investigations of body architectures presented in this exhibition radically disrupt understandings of human capability and invite us to imagine a futuristic world of augmented human anatomy. As the leader of a multi-disciplinary team focussed on technological change and innovation, the opportunity to work with Stelarc and explore novel ideas through the eyes of an artist has been deeply appreciated.

Professor John Spoehr
Director, Australian Industrial Transformation Institute
Flinders University

Experimental Adaptations: Stelarc's Posthuman Performances

As many of our non-human companions and natural environments have been wiped out this past summer, the behaviours of our species are in question as never before. The privilege of humanity has become a trap for other species and for ourselves. For many of us it is well passed time to rethink and react to the posthuman as one of the names we may give to the next phase of homo sapiens. This posthuman life will not make us feel better, it will not do the work of mourning, it is not backward looking. Instead it is aimed at identifying what design principles will enable us to live more effectively and sustainably in an increasingly denatured environment.

As Rosi Braidotti (2008, 206) suggests, this future focus of the discourse is partly to help make the present more liveable as we imagine a future that can sustain us in an environment we have damaged now beyond repair. Across a range of fronts the posthuman must locate a more permeable boundary for species in a future era in which the world will be of necessity, technically reproduced and, as Sloterdijk (2011, 245) argues, 'artificial from the ground up.' He insists that in the coming years, even the 'air that, together and separately, we breathe can no longer be presupposed. Everything must be produced technically'.

Of the fundamental characteristics of this discourse, the idea that biological embodiment is contingent and subject to creative mutation is the key to the insistence on an emergent cyborg materiality, in which the humanist concept of 'subject' fades away, and the body assumes the role of a host organism or biological peripheral interconnected with mobile devices to extend the range of its performance parameters.

As this exhibition shows, this entity has been extensively modelled by Stelarc over nearly 50 years of an art practice that demonstrates ways in which the posthuman may be imaginatively engineered and experienced in the physical world.

In his performances Stelarc has continually addressed this challenge at a bodily level, inserting shark hooks to enable the suspension of his body, amplifying it with electrodes and sensors, swallowing sculptures and avoiding killer industrial robots, something he has been doing since his performance, *Event for Scanning Robot and Involuntary Arm*, in May 1992 in London and later Melbourne, Sydney and elsewhere. In that year his early performance work with robots featured the artist situated adjacent to the robot arm sometimes synchronising, sometimes counterpointing the gestures of both the robot arm with its precoded sequencing and the artist's electronic third hand actuated by the artist, whilst his left arm performed involuntarily with muscle stimulation.

In the more recent works Stelarc's body becomes a single node in a technical assemblage, choreographed by a robot arm in *Propel* and then prosthetically manipulated in *StickMan*. The experience of being manipulated through space by an industrial robot is one the piece cannot adequately convey (one of the limits of this mode of art making) but the sight of the artist's body in its support structure being moved upside down and through the air made me feel a little nauseous in sympathy. Stelarc himself remains serene in the frame. The machine's choreography has been determined so that its capacity for considerably more violent and potentially injurious movements is avoided. The system is designed to show a body moving but without any intention on its part, devoid of interiority and motivation, a zombie body. It also inescapably reminds us of the fragility of this body, which Stelarc insists should be seen as impersonal, a metonym for every other body.

The technical complexity and dramaturgy of these events should not be understated, these are as much works of cybernetic performance as much as technical demonstrations of new system features. *StickMan* features an exoskeleton attached to Stelarc's body with a smaller, mini stickman interface which allows the participants in the audience to generate the body's actions in the space. The piece shares some design similarities with the 'inverse motion capture system' of *Movatar* in 2000, where an avatar, rather than the stickman, accessed the artist's body to perform in the physical world.

In all these works the posthuman body does not independently determine its motion. It works as part of a technical system, perhaps most complexly rendered in *Re-Wired / Re-Mixed*, a development of internet enabled performance the artist first

Ear on Arm Suspension,
2012, performance,
Scott Livesey Galleries,
Melbourne.
Photographer: Polixeni Papapetrou.

Propel, 2016, performance, Lawrence Wilson Gallery, Perth. Photographer: Steven Alyian.

explored in *Fractal Flesh* (1995). In this latest version of a distributed performance, the artist's vision was determined by subjects in London, his hearing was directed by participants in New York and his right arm could be made to gesture by anyone with an internet connection anywhere, at any time.

Interconnectivity and interaction are only partly what is at stake here as the work also shows how disabling such systems can be to the freedom of movement and perceptual capacities of an individual. But that's also the point of the work to have us reflect on how the changes in the world feed back into, and problematise the human system.

As Braidotti (2013, 190) argues, a posthuman ethics must include 'concerted efforts at experimenting with and actualizing potential or virtual options; and a new link between theory and practice, including a central role for creativity'. Stelarc's works are ethical in this sense of accepting the responsibility for the changes around us, for imagining and attempting to model future technical interfaces with dynamic ecologies. They also enact a posthuman corporeal futurity in an increasingly technical ecology. In doing this he produces a version of Braidotti's 'thresholds of sustainability' in the production of what she describes as 'effective cartographies of how much bodies can take'. Stelarc's uncompromising exploration of the threshold states of physical being in the world (are we zombies and/or cyborgs?), also continually reminds us that our sensory apparatus always loops back into a world in which we are increasingly not in control of events.

Professor Edward Scheer
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Works Cited
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Cover image
Ear on Arm, 2006. Photographer: Nina Sellars.

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