Gurov, O. N. 2025. "Beyond Boundaries: A Conversation with Stelarc on His Vision of Human-Machine Integration" [in English]. *Filosofiya. Zhurnal Vysshey shkoly ekonomiki [Philosophy. Journal of the Higher School of Economics]* 9 (4), 245–264.

Oleg Gurov*

Beyond Boundaries**

A Conversation with Stelarc on His Vision of Human-Machine Integration

Abstract: For over fifty years, Stelarc has radically explored the fusion of human biology and technology through his provocative artistic practice. This paper draws on a 2024 interview with the artist and examines how his work challenges our fundamental assumptions about human identity and capability. Through analysis of his pioneering projects — from the iconic Third Hand to the Ear on Arm and his internet-enabled performances — we see how Stelarc's art embodies emerging posthumanist and transhumanist philosophies. His artistic work addresses the idea that humanity has moved beyond natural selection into an era where technological engineering drives our development. The research traces his artistic evolution from early body suspensions to recent explorations of distributed embodiment and AI integration, including insights from our 2024 conversation. By merging art, philosophy, and technological innovation, Stelarc creates not just theoretical frameworks but visceral demonstrations of possible human futures. His bold experiments spark crucial dialogue about consciousness, embodiment and identity in our world, which gets to become more and more technological.

Keywords: Stelarc, Cyborgization, Posthumanism, Transhumanism, Body Modification, Performance Art, Human-Machine Interface, Distributed Agency.

DOI: 10.17323/2587-8719-2025-4-245-264.

These days the boundaries between human and machine grow increasingly fluid, and no artist embodies this transformation more literally than Stelarc (Stelios Arcadiou). This research delves into the mind and work of an artist who has spent over half a century challenging our preconceptions about the human body and consciousness. At the heart of this study lies an exclusive conversation with Stelarc, conducted on September 2, 2024 in a remote mode through the Zoom platform. The purpose of the interview

*Oleg Gurov, MBA, PhD in Philosophy; Research Fellow at the Center for Artificial Intelligence at MGIMO University (Moscow, Russia); Associate Professor at the State Academic University for the Humanities (GAUGN) (Moscow, Russia), o.gurov@inno.mgimo.ru, gourov.oleg@gmail.com, ORCID: 0000–0002–8425–1338.

Acknowledgements: The article was prepared at the State Academic University for the Humanities within the framework of the state assignment of the Ministry of Science and Higher Education of the Russian Federation (topic No. FZNF–2023–0004 "Digitalization and Methods of the Modern Information Society: Cognitive, Physical, Political and Legal Aspects").

was to explore Stelarc's current philosophical perspectives on the relationship between humans and technology, as well as his vision for the future of humanity in the context of technological evolution.

Our conversation with Stelarc reveals new perspectives on his philosophy, creative process, and vision for humanity's technological future. Stelarc's provocative performances and bodily modifications serve as radical experiments that challenge our understanding of human potential. By analyzing Stelarc's boundary-pushing work with cyborgization and human augmentation, we gain crucial insights into how technology reshapes human identity. His artistic research serves not just as art, but as a window into possible futures where the distinction between human and machine becomes increasingly meaningless.

Stelarc is a Cypriot-Australian performance artist and body modification pioneer born in 1946. For over five decades, Stelarc has pushed the boundaries of human physiology, technology, and art, becoming a seminal figure in the field of cyborgization and posthuman exploration (Fistrek, 2024). Since his early work in the 1970s, Stelarc has consistently developed innovative approaches to merging human biology with technological systems, creating functioning prototypes of human augmentation (Baudrillard, Glaser, 1994).

Stelarc's journey into cyborgization began with his radical internal body explorations from 1973 to 1976. Using medical endoscopy equipment, he filmed three meters of his internal space, including his stomach, lungs, and colon. This intimate exploration of the body's interior was really innovative, not only as an artistic statement but as a precursor to his later work in extending and augmenting human physiology.

In the early stages of his artistic journey, Stelarc turned to medical technology to reveal the hidden symphony of the human body. Performing as a scientist-artist hybrid, he transformed clinical tools into instruments of revelation. Brain waves danced across screens through EEG recordings, heartbeats thundered through amplified ECG signals, and ultrasound sensors mapped the rushing rivers of blood beneath the skin. Through EMG readings, even the subtle whispers of muscle movement became visible, turning the body inside-out for all to witness.

The 1980s brought what many consider Stelarc's masterpiece — the "Third Hand." This was more than a prosthetic; as it was a glimpse into humanity's cyborg future. Custom-built and attached to his right arm, this robotic appendage could perform feats beyond natural human capability, including a striking 290-degree wrist rotation. The following made it a really revolutionary project: its control system, the hand responded to EMG

signals from Stelarc's abdomen and leg muscles, was effectively rewiring his body's natural control systems. It can be regarded as a working prototype of human augmentation, demonstrating how technology can extend physical capabilities beyond biological limits.

Handswriting. Maki Gallery, Tokyo (1982). Photograph: Keisuke Oki. © Stelarc.

Each performance operated like a live experiment and demonstrated a human-machine synthesis, with Stelarc's body functioning both as experimental subject and as artistic medium. The work pushed into uncharted territory and challenged notions of what it means to be human. It was innovative in exploring human-machine interfaces and the potential for a closer integration of prosthetic devices with the human body. Through his performances, Stelarc demonstrated novel possibilities for distributed agency and remote embodiment, fundamentally challenging traditional notions of bodily autonomy. They also raised important ethical questions about the nature of identity and agency in a technologically-mediated world.

Stelarc works advance practices in remote control, and wearable biofeedback and have fostered interdisciplinary collaborations between art, science, and engineering. They prompt concrete philosophical questions about durability, access, and the social distribution of enhancement, rather than

making broad claims about human evolution. His work continues to provoke discussion among artists, scientists, and philosophers about posthuman possibilities.

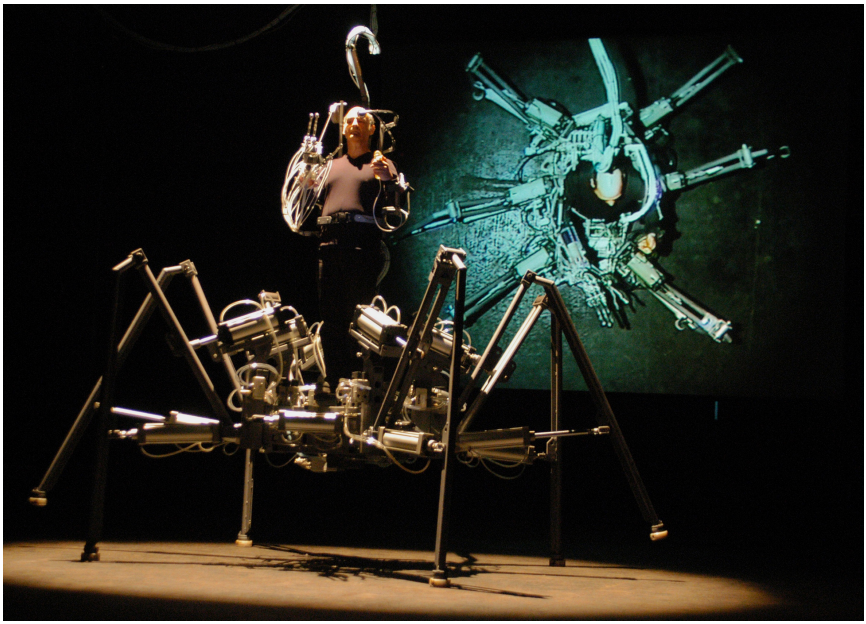
Stelarc's transformative artistic interventions have been generating significant academic discourse across disciplines, from performance studies to bioethics, sparking intense debates about the nature of human embodiment, the increasingly blurred lines between organic and artificial, and the trajectory of human evolution in our rapidly advancing technological landscape. At the heart of Stelarc's oeuvre is a provocative reimagining of the human body as subject to technological augmentation and redesign. This perspective has drawn significant attention from researchers in fields ranging from performance studies to bioethics, cybernetics, and posthuman theory, each bringing their unique lens to interpret and analyze the profound implications of his work.

Central to Stelarc's practice is the concept of cyborgization, a theme increasingly pertinent in the digital age. His famous declaration that "the body is obsolete" serves as a provocative call to embrace technological enhancement as a means of transcending biological limitations (Stelarc, 1991: 593).

The research "Cyborg Art and Bioethics: Stelarc and The Third Ear" by Valeria Radrigán discusses Stelarc's work as exploring the possibilities of extending and modifying the human body through technology (Radrigán, 2013). According to her position Stelarc challenges conventional perceptions of the human body in the technological age. Through his provocative work, he argues that our biological form has become outdated and insufficient for modern technological demands. His creative endeavors involve dramatic corporeal alteration, including his famous suspension performances where he explores the structural capabilities of human skin. As she considered, Stelarc's most controversial piece, the "Third Ear" project, featured a surgically constructed ear on his forearm, designed to function as an Internet-enabled acoustic device. Through boundary-pushing experiments, the artist explores novel anatomical configurations and technical amplification of human capabilities.

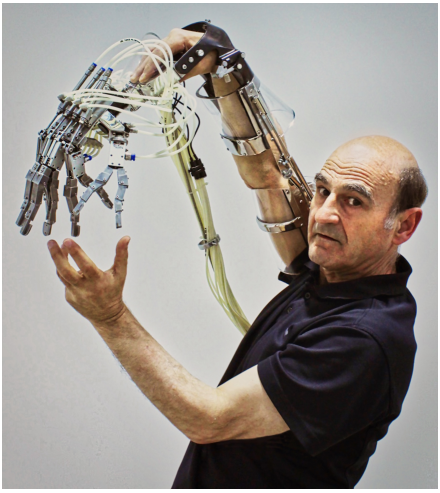
Art theorist Vid Simoniti offers a detailed analysis of Stelarc's artistic philosophy, particularly focusing on his investigation of technological body modification and enhancement (Simoniti, 2019: 177–178). Simoniti examines how Stelarc's performances challenge our understanding of bodily limitations and technological integration. The scholar particularly emphasizes how Stelarc's work, including his suspension pieces and the third ear implant,

serves as a practical demonstration of his theoretical framework regarding human obsolescence and technological necessity.

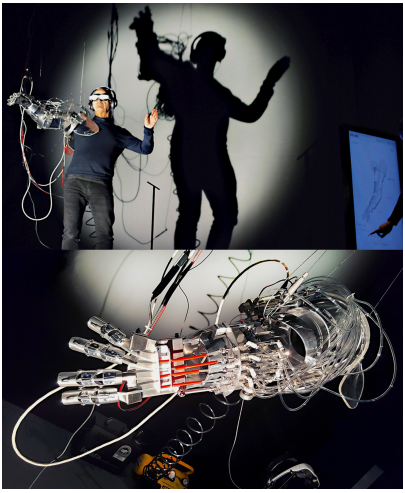


Exoskeleton. Cankarjev Dom, Ljubljana (2003). Photograph: Igor Skafar. © Stelarc.

Catherine Voison approaches Stelarc's work through the lens of bio-art, examining how biotechnology becomes both medium and message in his creative endeavors. She argues that Stelarc's conceptualization of the body as a malleable machine represents a fundamental shift in how we understand human physicality (Voison, 2019: 54). His performances, according to Voison, point toward a post-human future where biological and technological boundaries become increasingly blurred. She introduces the concept of "anthropotechnology" to describe Stelarc's radical physical transformation, suggesting they represent a fundamental reimagining of human nature. Both scholars ultimately view Stelarc's work as a groundbreaking exploration of human-technology synthesis that fundamentally challenges our traditional understanding of embodiment and identity. His performances and body modifications serve as provocative demonstrations of posthumanist ideas about transcending biological limitations through cyborgization.



Extended Arm. Melbourne, Hamburg (2000). Photograph: Dean Winter. © Stelarc.



Re-Wired / Re-Mixed. Radical Ecologies, Perth Institute of Contemporary Art, Perth (2017). Photograph: Steven Aaron Hughes. © Stelarc.

In relatively recent interview with Stelarc taken by Sophia Lawler-Dormer, the artist elaborates in detail on his views on post-humanism and cyborgization (Lawler-Dormer, 2018). In this interview, Stelarc expresses the opinion that the human body in its current form is insufficient and inadequate for modern conditions. He envisions a future in which nanotechnologies will "re-colonize" the body from within, significantly altering its functions and capabilities. Stelarc describes the contemporary human body as a "chimera of flesh, metal and code," emphasizing the already existing fusion of the biological and the technological. The artist also expresses the view that technologies are gradually erasing the traditional distinctions between male and female, which may ultimately lead to the obsolescence of traditional modes of reproduction. He sees the potential of technologies in significantly extending human life, possibly even to infinity, through the replacement of organs with artificial analogues. Stelarc emphasizes that the goal of his work is to explore "alternative anatomical architectures" and broaden the horizons of understanding what constitutes the human body. His experiments are aimed at challenging traditional notions of corporeality and identity, offering radically new possibilities for human existence in the era of technological progress.

Thus, although the sources differ in their emphases and depth of analysis of specific aspects of his work and philosophy, for example, examining Stelarc's works in the context of "bio-art," paying particular attention to the use of biotechnologies to modify the artist's body, or focusing on the influence of the artist's works on perceptions of bodily integrity and individual identity, all sources agree that Stelarc's work represents a radical exploration of the integration of human and technology. The authors unanimously note that his performances and body modifications challenge traditional notions of the human body and identity. Moreover, all sources emphasize that Stelarc views the body as obsolete and inadequate for the contemporary technological environment. There is also a common emphasis on the fact that Stelarc's works demonstrate post-humanist ideas about overcoming biological limitations through cyborgization.

Our conversation with Stelarc allows a comprehensive epistemological reading of the artist's contemporary practice and philosophical stance. The dialogue clarifies Stelarc's sustained inquiry into the limits of corporeality and consciousness against the backdrop of accelerating technological change.

We have attempted to present the Stelarc interview not merely as documentary material that exemplifies these transformations but as a methodological resource of a particular quality: in the artist's self-interpretations the problem vectors highlighted in our theoretical treatment are clearly manifested. Among these themes are hybridity, distributed agency, the politico-ethical questions surrounding bodily modification, and the epistemic function of performance. Because of this, the interview enables the translation of theoretical categories into concrete empirical propositions. This, in turn, makes it possible to identify pressing, practice-relevant issues, including the practical limits of technological bodily modification and the non-obvious but critical risks that such projects entail, which ultimately delineate the boundaries of permissible and feasible intervention (McLuhan, 1964; Stiegler, Beardsworth & Collins, 1998).

From these observations, we draw the study's principal conclusions. First, Stelarc's artistic practices correlate strongly with posthumanist concepts and can be treated as research cases for analyzing technology's relational agency. Second, performance in Stelarc's work functions not simply as demonstration but as a method for producing empirical data about human experience under technological integration and, more broadly, about the social effects of such processes (Simoniti, 2019). Third, Stelarc's projects show that networked interfaces and communication protocols reconfigure perception

and agency, transforming human identity into a multidimensional, extended phenomenon (Hayles, 1999; McLuhan, 1964).

These findings imply that theory divorced from material and practical concerns, especially in the context of complex techno-social bodily processes, remains incomplete. When scaled to political and humanitarian levels, issues such as access entitlements, legal responsibility, cybersecurity, and related matters demand institutional responses (Agamben, Attell, 2004). Declarative ethical codes alone are insufficient because they frequently fail to account for the concrete practices in which these problems arise.

In sum, Stelarc's oeuvre largely affirms central posthumanist intuitions while directing attention to the necessity of applying those theories in practice. His work lays a foundation for a grounded and competent understanding of emergent forms of real human-machine integration, an understanding that combines conceptual rigor with sensitivity to technical, organizational, and perceptual realities (Filas, 2019; Haraway, 1985; Stelarc, 1991; Stiegler, Beardsworth & Collins, 1998).

***

Oleg Gurov: Let's start with the question: What does cyberization mean to you? How would you define this phenomenon both as an artist and as a scientist, since you are much more than just an artist? Is it a reality that is actually taking place in th world, or is it something speculative?

Stelarc: Firstly, the body has always been a prosthetic body — a body that has always been in excess of its biology. From the beginning of human civilization, there was a necessity to construct artifacts and engineer instruments and machines. So, technology has always been coupled with the body. The body has always been prosthetic, as philosophers, including Stiegler have discussed. I lived in Japan from 1970 to 1989. I was quite naive when I went there soon after art school. I hadn't read about or was familiar with the concept of the cyborg. But in Japan, three things really impressed me about the culture: Japanese Sumo wrestling, Butoh dance, and Japanese robotics. These exposed the problematics of what a body is and how it operates — the materiality of the body and how we can be embodied in different ways, whether through a biological body, an athlete, a dancer, or robotic humanoid robots. This exposed me to extreme embodiments and materiality. It also allowed access to technology I wouldn't have had in Australia, like the latest medical, laser and robot technologies. In 1976, for example, I made three films of the inside of my body using endoscopic technology. This would not have been possible had I remained in Australia.

The original meaning of "cyborg" goes back to before the 1970s, maybe to the 1960s. It combined the words "cybernetics" and "organism" — a cybernetic organism. But I think in terms of popular culture, it didn't really come into common use until the 1980s. Then it was understood as a kind of hybrid cybernetic system, a biological body with mechanical parts or machine attachments. I like to counterpoint notions of cyborgs with notions of zombies. A Zombie is a body that performs involuntarily, which does not have a mind of its own. A Cyborg is a human-machine system that becomes increasingly automated. There has always been a fear of the involuntary and an anxiety of the automated. Of the Zombie and the Cyborg. But we fear what we have always been and what we have already become.

O. G.: That's great. I completely agree it really came to mass culture in the '80s. How do you think this concept has changed from the '80s to nowadays? Are there similarities or differences?

S.: Well, much of Donna Harraway's original "Cyborg Manifesto" is still relevant in its challenge to go beyond traditional feminism, the fluidity of identity, an emphasis of an ontology of hybridity and the blurring of boundaries between the human, the animal, and the machine. Since the mid-1980s, cyborg constructs have undergone further nuanced change from a purely mechanical, instrumental kind of embodiment to now even incorporating genetic interventions and surgical modifications. So, the idea of the cyborg is not simplistically machinic, but rather a construct with much broader range of interventions, augmentations and enhancement that can generate what I call a contemporary chimera of metal and code — of biology, technology, and virtuality. With the introduction of AI, you have more complex cybernetic feedback loops occurring that generate a more sophisticated and subtle hybrid machine system. Having said that, the word "Anthropocene," like the word "cyborg" is not so commonly used now. It reached its peak impact maybe a decade or two ago. In terms of critical theory, the word cyborg now has become somewhat banal in its use and interpretation. But it remains a convenient concept to apply to this kind of techno-organic system.

O. G.: In my research, I write about Marshall McLuhan's idea of the extended sensorium, which originated in the '60s or '70s. It implies that humans are constantly evolving, which you also mentioned at the beginning of our conversation. Does your own sensory experience change when you do your technological experiments with your body in your art?

S.: Firstly, I think Marshall McLuhan hasn't received enough credit as a philosopher. I read McLuhan when I was in art school. His work goes back to Whitehead and has influenced Baudrillard and Virilio, who focused on

particular aspects of McLuhan's ideas and developed them further. What interested me about McLuhan is the idea that technology is an extension of the body. But he says more than this — that we externalize and extend our nervous system, and the internet can be seen as a kind of external nervous system of the body. Also, his very seductive statement that technology can be seen as the external organs of the body. We have evolved as biological bodies with soft internal organs, but now, inhabiting a technological terrain of fast and powerful machines, we need to develop additional external organs to better interface with our new technologies. For me, I'm neither utopian nor dystopian about technology. I think technology is the trajectory of human civilization and it is certainly not an alien other. Technology is what has always been coupled to the body and has been primarily responsible for our humanity and our civilization. It's also important to note that evolution is probably the wrong word to use for what's happening now. There's no evidence to indicate that evolution has ceased with the human body, but because evolution is such a slow process, taking millions of years, what's happening now is different. We've gone from the process of evolution to a process of engineering, applying human design ideas and methods, and generating much more accelerated change. Contemporary technological development creates complex systems of mutual influence between biological and synthetic elements, catalyzing rapid transformations in human capability. So, it can be argued that the process now is not a Darwinian evolution but rather one of Lamarkian change.

O. G.: Let's talk about how humans are changing within technological means. What do you think about the change of consciousness and human identity? Can we see some preservation of a coherent self, or is there something else happening?

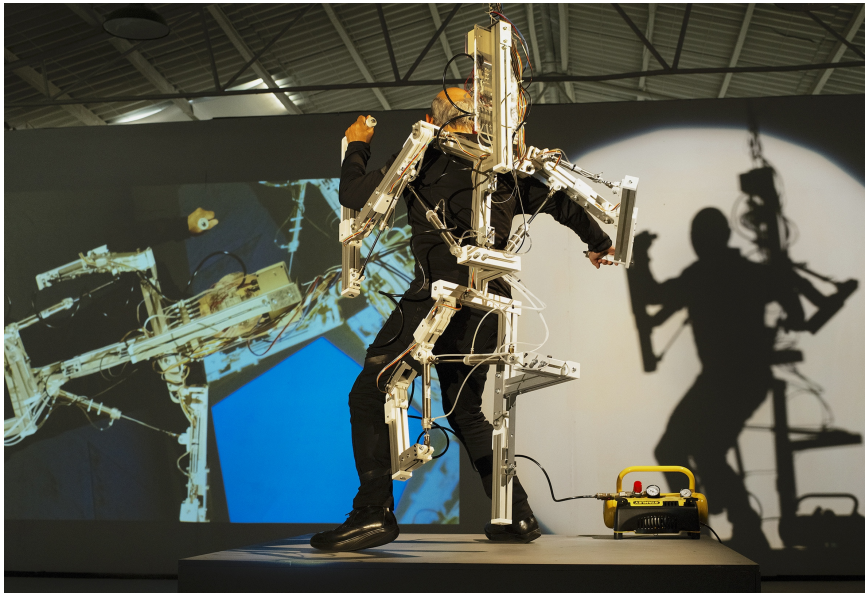
S.: Changes, even though they're accelerating, are happening incrementally and in a multiplicity of different ways. It's not one direction, but a multiplicity of directions and unexpected possibilities. Some will be beneficial, some will not, some will succeed, and others will not. We know that technology alters human behavior. It radically alters our personal habits and social behaviors. Take the example of wireless technologies like mobile phones. This has allowed us a certain mobility that comes with connectivity, allowing us to project our physical presence and instantly connect with people in other places in ways we couldn't before. We're extruding our sense of self beyond our skin and beyond the proximal location we inhabit. In more significant ways, because of this dilemma of what a body is and how it operates, and ambivalence about gender, we've developed surgical

techniques that can even modify our gender. With CRISPR technology, we can now intervene genetically more effectively and accurately altering our DNA. These technologies change us both psychologically and physically. The human construct is somewhat unstable and historically positioned. What it means to be human today might not have been considered human even a few hundred years ago. What it means to be human now will be very different in a thousand or two thousand years. We might look the same, we might have a similar form with similar functions, but all technology in the future might be invisible because it's micro-scaled and nano-scaled, inside the human body. We will be able to recolonize the human body, augmenting our bacterial and viral population. The body, once contained by technology, now incorporates it as a component.

O. G.: You've already answered a question regarding the body and technology. I also wanted to include one more factor such as ESG, which is very relevant in today's world. What about the relationship between the body, technology, and the environment? Can we speak of the emergence of new forms of environmental consciousness? Is it real science or fiction? If it's real, in what forms? How do you reflect this in your work?

S.: I've always been skeptical about subjective reporting and speculating. What I have to say is determined by my projects and performances, and of course what I've read, which is often prompted by what I do. For example, with the Rewired Remixed performance, for five days, six hours every day, I could only see with the eyes of someone in London, I could only hear with the ears of someone in New York, but anyone anywhere could access my right arm and remotely choreograph its movements. It was a kind of distribution of agency to remote people in other places, but also sharing of visual and acoustical senses. The body was virtually in two places and physically in another place at the same time. The performance was done with a kind of posture of indifference — not having any expectations, allowing the performance to unfold in its own time with its own rhythm, and just experiencing the possibilities. I didn't know what I was going to hear or see at any moment, or when someone was going to throw me off balance by moving my right arm. This was a performance where you tried to experience what it means to be a body that performs beyond its skin and beyond its subjective agency. These are aesthetic experiences rather than illustrations of a particular idea. For me, the definition of art is the slippage that happens between what the artist intends and what the actual outcome is. This slippage between intention and outcome is the realm of art, which can incorporate the accidental and the unexpected. Generally, people now

are operating in radically different ways than they were even 50 years ago. We take the internet for granted, but it's a very potent external nervous system. It connects bodies, (nodes, these bodily nodes,) brains, arms, and hands, and it allows collaboration between these nodes of interactivity, which are human bodies connected to terminals globally. Teilhard de Chardin's concept of the noosphere is relevant here. As well as our biosphere, we now have a Chardinian noosphere — a mental sphere. Marshall McLuhan's notion of the "global village" also comes from that. And this is really what the Internet has become, this kind of additional operational, cognitive and collaboratively interactive layer between bodies, between humans. But we need to remember that the digital is not only about the virtual, is not only about information archives but rather it allows for alternative embodiments. In an age of information overload what becomes important is not freedom of information but rather freedom of form, freedom to modify your body.



StickMan. Chrissie Parrot Arts, Perth (2017). Photograph: Toni Wilkinson. © Stelarc.

O. G.: Stelarc, what you are talking about sounds very provocative, even now when I think no one can be surprised by anything. You are a world-famous artist who does such radical artistic performances, which involve

things that were previously prohibited or just not really common, connected with extension of the body in public. How would you describe your art or performances? And how does it help us, the people who are watching and admiring you, to overcome the fear of human-machine fusion? Or, on the contrary, do you just want to attract attention to this and make people feel responsible?

S.: To give a specific example of the physical changes and the changes in our psychology and social and cultural acceptances now, I was asked to give a keynote at a body hacking conference in Austin, Texas. There was a woman who attended who had an artificial leg. This artificial leg was 3D printed with an intricate and aesthetic design. She didn't hide it and was very proud of the fact that she had an artificial leg. She didn't try to make it cosmetic in appearance. Another person, a male, had an artificial arm made of carbon fiber and aluminum, but he didn't cover it. He was quite proud of it and wanted to show off his cyborgian arm. He could even remove the hand and put on different attachments. These examples show that increasingly now, socially, we accept bodies that are patched up with prosthetic replacements. Not only are we comfortable socially and culturally accepting them, but these prosthetically augmented individuals are not self-conscious. They're quite proud of being part biology, part technology. In terms of what these projects and performances do, firstly, one must understand that art is not about illustrating or demonstrating some kind of ideology. Art is not ordinarily about any kind of propaganda, whether political or ideological. What these projects and performances do is expose the problematics of what a body is and how it operates, the hybridization of the body with technology. Interestingly now, there are two parallel happenings. On the one hand, we have robots becoming more and more human-like, in their machine musculature and dexterity. On the other hand, we have bodies that are becoming more and more machinic and automated in their behavior. At a certain point in time, perhaps these two trajectories will converge where it's going to be meaningless to distinguish between the two. If a robot speaks like me, looks like me, is socially adept and responds to unpredictable situations like me, who am I to deny its intelligence or even its ethical rights in the world? The philosopher Daniel Dennett indicates that you can have competence without comprehension. We do not need to attribute consciousness and feeling to robots if they can effectively emulate human behavior in the world.

O. G.: Stelarc, as usual, you predicted my next question. Thank you very much. I wanted to ask your opinion regarding personal boundaries.

In your experiments as an artist, do you have any limitations that must be present in your art?

S.: Well, the process of art is a more intuitive method that is more about affect than being informative. That generates an ambivalence, an uncertainty and sometimes even an anxiety. That is not about providing solutions but keeps asking questions. As a performance artist, I don't sit down and think, "What radical action will I do next?" Rather, each performance generates other alternative possibilities. As a performance artist, what's meaningful is not simply to speculate, but to actualize an idea, to perform the idea, to experience it and hopefully have something meaningful to articulate afterwards. For example, with the Ear on My Arm project, people ask, "Why not an eye?" But to engineer an extra eye, at this point in time, with our technologies and medical expertise, it's just not possible. But to construct an ear that is an external structure of an ear was plausible. It was pushing the boundaries, but it was plausible. It took 10 years to find three surgeons and to get funding to do the first surgery. I'm only interested in actualizing ideas that are plausible, that are possible. I'm not just interested in speculating. I think it's easy to have an idea. What's difficult is to actualize the idea and to physically experience it. But the artist has to take the consequences for those ideas. If you want to suspend your body, you have to stick 18 hooks into your skin. Or if you want to insert a sculpture or a machine inside your stomach, there are medical problems and risks to take. I think we have to think of boundaries in a different way now. In this present age of Circulating Flesh, Fractal Flesh, and Phantom Flesh, we shouldn't think of being bounded so much as occupying transitory states. We're in liminal states of transition. A boundary is no longer applicable if we're performing beyond the boundaries of our skin, if we're performing beyond the boundaries of the local space that we inhabit, if we perform beyond the boundaries of our biosphere. We're no longer defined by our boundaries. We're now in an age of liminality.

O. G.: Thank you very much. The next question is extremely theoretical, but with your scholarly background, I think it will be easy for you. I wanted to ask you about the post-humanistic and transhumanistic approaches. From my point of view, the post-humanistic approach means that humanity is going to overcome humanity and become something else. The transhumanistic approach means that we, as humans, are developing within technological means. In my work, I try to research your art, and at one point I think you are a transhuman artist, and at another point, I think you promote other

ideas. What do you understand by this, and in your art, what do you want to express? In what state is humanity moving?

Reclining StickMan. Monster Theatres, Biennial of Australian Art, AGSA. Adelaide (2020). Photograph: Saul Steed. © Stelarc.

S.: Oh, there is no desire to promote particular ideas nor to be categorized as Transhumanist or Posthumanist. Categories are convenient but can also prove simplistic. What might be meaningful is whether we prioritize the human species as such or we perpetuate more intelligent life-forms. If our post-evolutionary direction is to perpetuate intelligence then this vulnerable body in this form and with these functions might not be the best way of achieving it. Is intelligence better perpetuated in some kind of redesigned, reimagined, differently embodied intelligent agent? For example, in some hybrid human machine, robot or chimera or whatever. If our goal as an intelligent species is to perpetuate intelligence, to guarantee intelligence is not only disseminated but survives, then perhaps remaining on this planet is a bad survival strategy. Perhaps it's necessary to go beyond this body and go beyond this planet. Taking a more immense timescale, and if we realize that all living things are destined to vanish forever, then perhaps in realizing this, we should plot an elegant exit. What's important is not necessarily

the survival of the human species, but if evolution does have a higher purpose, it's to generate and disseminate higher forms of intelligence.

O. G.: That's nice to hear that you are also optimistic about it. What do you think about artificial intelligence in this meaning? What do you think about the prospects for integration of human intelligence within artificial intelligence systems? You already mentioned this, but what do you think are the risks and opportunities within such a collaboration?

S.: The kind of research now is developing an artificial general intelligence, so that this AI is not only capable of performing particular tasks, but can interact with the world, learn from its interactions, and perhaps develop in some interesting way. For me, what would be meaningful about artificial intelligence is if it ever becomes an alien intelligence. I don't mean that in some kind of dystopian way, but it would have certain consequences that we would have to accept and become complicit with. Do we privilege human intelligence or are willing to incubate a machine intelligence that performs with greater cognitive capacity and with greater processing speed and with instantaneous access of vast online archives of information can be much better pattern recognition and analysis. With our 1400cc brains, with our metabolic speed, with our malfunction memories and unreliable retrieval we would not be able to match the performance, nor even comprehend information generated by our AI computational systems. This might be worrisome and sounding dystopian for people who are obsessed with perpetuating the human species, but again, if the human species is a kind of step towards a more intelligent agent, then I see this as a positive direction, a positive future. Of course, we're speculating, for if there is a future, there are scientific theories, like the block universe, where past, present, and future are existing simultaneously. William Gibson's statement that "the future is already here, it's just not equally distributed" is relevant here. Of course, he's also alluding to issues of access, priority, and privileging, but in terms of the construct of time-space, it doesn't have to be this linear progression of the past to the present and onto the future. We can characterize the past as memory, the present as understanding, and the future as imagining. So, we can characterize past, present and future as a purely human construct, as a purely bodily construct. In fact, the philosopher Kant points out that time and space don't exist objectively, they are not real properties of the world. Rather they are categories of human understanding. Time and space are the means by which the body experiences reality. As a forward-facing body with two eyes and two ears to navigate, and two hands and limbs to manipulate with, we construct the self

as an intentional agent. And being forward facing the body subjectively is future oriented. The self-experiences the world as what it has forgotten, what it now comprehends and what it might imagine.

O. G.: If space and time are changing within all these processes we're talking about, what do you think new art forms or new kinds of art can emerge in this situation? I mean, in the next decades, because it's obvious that humans will be more and more immersed in virtuality and with artificial intelligence. How will it affect the arts?

S.: Again, speculating, but if we look at the present, I'm performing with prosthetics, I'm performing with exoskeletons, I'm performing with robots, I'm performing remotely and interactively online, I'm performing with actual-virtual interfaces. So, I think new instruments, new machines are always seductive for artists because they generate new conceptual and aesthetic possibilities that can be problematized and explored. There is this feedback loop between the zeitgeist, the technologies of the time, and the generation of new artists who come up with unique ideas. This will result in unexpected art forms and modes of expression. I don't necessarily think that the digital age will only be a virtual age. The digital has also resulted in humanoid robots and surgical sex change operations. We have to be open to different possibilities that will be both conceptually surprising and aesthetically novel. Art is not interesting if it's not surprising in some way. And it's the same with the future — if the future can be predicted, then by definition, it's not a future at all. The future is not a future if it is not of the unexpected. So, we may see art forms emerging that blend the physical and virtual in new ways, that incorporate AI and robotics, that play with notions of embodiment and consciousness. But the specific forms are impossible to predict — that's what makes the future of art exciting. Art is not what happens of necessity but rather what is contingent and contestable.

O. G.: Thank you for those fascinating insights into how technology might shape future art forms. As we wrap up, is there anything else you'd like to add about your vision for the future of art and the human body?

S.: I think the key is to remain open to possibilities we can't yet imagine. As artists, we need to keep taking conceptual and physical risks, asking difficult questions, and exploring alternative modes of embodiment and expression. It is time to question whether a bipedal, breathing body with binocular vision and a 1400cc brain is an adequate biological form. The body is neither a very efficient nor very durable structure. It malfunctions often and fatigues quickly; its performance is determined by its age. It is susceptible to disease and is doomed to a certain and early death. Its survival

parameters are very slim — it can survive only weeks without food, days without water and minutes without oxygen. The body's lack of modular design and its overreactive immunological system make it difficult to replace malfunctioning or failed organs. In the early 1970s I wrote that the body artist of the future will be a genetic sculptor. We need to reconsider how we conceive of the body, consciousness, and reality itself. The dead, the brain dead, the yet to be born, the cryogenically preserved, the prosthetically augmented, the plasticated, synthetic life and artificial life all now share a material and proximal existence. Art has a vital role to play in helping us navigate and make sense of these unexpected juxtapositions. So, we must continue to experiment, to provoke, and to imagine new ways of being bodies in a world of rapidly evolving technology that radically shapes our humanity. Being human is perhaps not remaining human at all.

O. G.: That wraps up our talk on a meaningful note. Stelarc, I can't thank you enough, this has been really an eye-opening conversation. Your work keeps sparking new ideas and inspiring people, whether they're seasoned artists or just discovering your work.

S.: Thank you, I enjoyed it too. I am excited to see what the up-and-coming artists will do with all this. I wish they will come up with ways to explore these themes that we haven't even imagined yet.

REFERENCES

Agamben, G. 2004. *The Open [L'Aperto]: Man and Animal [L'uomo e l'animale]*. Trans. from the Italian by K. Attell. Stanford (CA): Stanford University Press.

Baudrillard, J. 1994. *Simulacra and Simulation [Simulacres et simulation]*. Trans. from the French by S. F. Glaser. Ann Arbor (MI): University of Michigan Press / Semiotext(e).

Filas, M. 2019. "My Dinner with Stelarc: A Review of Techno-flesh Hybridity in Art." *The Information Society: An International Journal* 35 (4): 188–199.

Fistrek, L. 2024. "Stelarc and the Post Human Body Performance in Contemporary Art." Academia.edu. Accessed Dec. 2, 2024. https://www.academia.edu/34546795/STELARC_AND_THE_POST_HUMAN_BODY_PERFORMANCE_IN_CONTEMPORARY_ART.

Haraway, D. J. 1985. "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s." *Socialist Review*, no. 80, 65–108.

Hayles, N. K. 1999. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press.

Lawler-Dormer, S. 2018. "Redefining The Human Body As 'Meat, Metal and Code': An Interview with Stelarc." Sleek Magazine. Accessed Dec. 2, 2024. https://www.sleek-mag.com/article/stelarc-interview-posthumanism/.

McLuhan, M. 1964. *Understanding Media: The Extensions of Man.* New York: McGraw-Hill.

Radrigán, V. 2013. "Cyborg art y bioética: Stelarc y The third ear" [in Spanish]. *Aisthesis* 54.

Simoniti, V. 2019. "The Living Image in Bio-Art and in Philosophy." *Oxford Art Journal* 42 (2): 177–196.

Stelarc. 1991. "Prosthetics, Robotics and Remote Existence: Postevolutionary Strategies." *Leonardo* 24 (5): 591–595.

Stiegler, B. 1998. *The Fault of Epimetheus [La faute d'Epiméthée].* Vol. 1 of *Technics and Time [La technique et le temps]*, trans. from the French by R. Beardsworth and G. Collins. Stanford: Stanford University Press.

Voison, C. 2019. "L'art biotechnologique: une anticipation d'un au-delà de l'humain?" [In French]. *Journal International de Bioéthique et d'Éthique des Sciences* 30 (4): 51–68.

Gurov O. N. [Гуров О. Н.] Beyond Boundaries [Преодоление границ] : A Conversation with Stelarc on His Vision of Human-Machine Integration [беседа со Стеларком о его видении интеграции человека и машины] // Философия. Журнал Высшей школы экономики. — 2025. — Т. 9, № 4. — С. 245–264.

Олег Гуров
MBA, к. филос. н., научный сотрудник, Центр искусственного интеллекта МГИМО МИД России (Москва); доцент, ГАУГН (Москва); orcid: 0000-0002-8425-1338

Преодоление границ

беседа со Стеларком о его видении интеграции человека и машины

Аннотация: На протяжении половины столетия художник Стеларк проводит радикальные художественные эксперименты, разнообразными способами совмещая аспекты человеческой биологии с технологическими системами. Данная работа, в основе которой лежат материалы эксклюзивного интервью с художником, взятого в сентябре 2024 года, а также результаты анализа его творчества, представляет собой попытку систематизировать художественные практики Стеларка с точки зрения динамики определения человеческой идентичности и возможностей человека. Путем детального исследования его различных проектов и перформансов показывается, как работы Стеларка воплощают развитие постгуманистической и трансгуманистической философии. Радикальный взгляд художника направлен на то, что человечество уже вступило в постэволюционную фазу, в которой развитие человека обусловлено в большей степени технологическим проектированием, нежели естественным отбором. В рамках исследования сделан обзор художественного пути Стеларка, его творчество представлено в хронологическом порядке: от ранних перформансов с подвешиванием тела до современных роботизированных инсталляций, что позволило наглядно показать последовательность исследовательских проектов художника в части изучения разных аспектов интеграции человека и маши-

ны. При этом отдельное внимание уделяется недавним работам Стеларка, посвященным проблематике распределенной телесности и интеграции искусственного интеллекта в общественную жизнь и природу человека. В статье показано, что творчество Стеларка объединяет искусство, философию и технологические инновации беспрецедентным образом, в результате чего новые концепции сопровождаются осязаемой и нередко провокационной демонстрацией возможных перспектив «человеческого». Делается вывод, что посредством смелых перформансов и физических модификаций Стеларк вносит вклад в междисциплинарную дискуссию о сознании, телесности и идентичности человека в мире, становящемся все более технологизированным.

Ключевые слова: Стеларк, киборгизация, постгуманизм, трансгуманизм, модификация тела, перформанс, человеко-машинный интерфейс, распределенная агентность.

DOI: 10.17323/2587-8719-2025-4-245-264.