

Cyber and my body - Is there a sp@ce without the body?

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I.

In 1914, the young T. S. Eliot spent a quiet Christmas Eve with his schoolfellow, describing him later in his correspondence as *»a veg*etarian and the lightest eater I have ever seen.«¹ The description pertained to no other than the young Norbert Wiener, the future father of cybernetics, a genius of weak body, and of amazing mind.² In this presentation, I would like to use the description of Wiener's body as an eloquent anecdotal and metaphorical example of the typical position of the body as viewed by the western rationalist tradition namely, as "always in its opposition to the mind."³ The same attitude towards the body is shared by a number of contemporary body notions hich, along with the development of high technology, further radicalise the modified concepts of materiality, subjectivity and the body itself. At first sight, it seems that Wiener's "weak body" was just one of the first signs of the cybernetic omnipotence of the mind, communication and mediatisation, and become a theoretical, aesthetic and cultural token of the last decades of the 20^{th} century, one clearly reflected in the post-modern obsession with the body. Could it really be that the body is not only turning into "the lightest eater" (so popular a notion nowadays in terms of eating disorders), but also into a thing denoted as incompetent, dysfunctional, unreliable, inefficient, a loser compelled to eventually surrender the battle with machinery, after having lost the battle with the Cartesian mind? The question has been answered affirmatively by a number of important authors (artists, scientists and theorists who deal with contemporary

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technological reality). Some are more enthusiastic, others less. Gradually disappearing from the stage, the body is viewed as obsolete, dissolved, displaced, as being transferred into the transparent digital field of computer data. Two Canadian theorists, Arthur and Marie Luise Kroker, interpret the body's disappearance as the main symptom of high-tech reality: with the advent of the new communication forms that take place in the virtualization of flesh, we are sort of becoming redeemed from our bodies.⁴ Hans Moravec, author of Mind Children, a very influential work of the eighties, asserts that "we will simply be outclassed"5, and describes man's withdrawal from the organic body in sci-fi manner. What remains from the body is only meat.⁶ This is the notion used for the body by William Gibson, too. He therefore uses the word that "expresses the frustration felt in the contact with the endlessly expendable sphere of information due to the limitations of bodily needs implemented by the travelling consciousness."7 Performance artist Stelarc strictly refers to his body as obsolete material that needs to be manipulated, upgraded and gradually replaced with technological prosthesis, claiming that the conviction about "the body being obsolete in its form and agency may be the peak of technological madness, but it might as well become the highest form of man's realization. It is only after the body has become aware of its momentary situation that it will be able to form post-revolutionary strategies. "8 As the most radical and utopian movement advocating the fantasy of the disappearing body, cyber-punk exerts significant influence upon the body stereotypes of popular culture. One of its main characteristics is the ecstatic belief in the digital, virtual body, one set free from its traditional limitations (gender, sex, race, biology), and willing to inhabit and fuse with a thoroughly mediated reality matrix. "Technology was invented only to hide the terrible secret of our decaying bodies."9 Inevitable distopian consequences of the disappearing body are disclosed especially by two theorists - Jean Baudrillard and Paul Virilo, both making use of fairly critical, even moralistic argumentation.¹⁰ Baudrillard critically describes the body of metastasis, one defying any kind of subjectivity, the lobotomy of the body oblivious to metaphor, or meaning. $^{\mbox{\tiny 11}}$ Virilio deals with the invalid body of modernity, one that lost its primary biological functions in its battle with the infinite abilities and rapidity of communication/cognitive systems; he discloses the character of technological/scientific fundamentalism which, by means of the reconstruction of the human body, transmutes natural selection into artificial.¹² Baudrillard and Virilio explore the distopian image of modern posthuman technological reality characterized not only by the disappearance of the body, but also by that of biology, nature and society - the phenomena remaining as transparent, manipulative and simulated images generated by technology and science. II.

This yielding to the fantasy of the disappearing body in a new technological reality can be dealt with from several perspectives and could be followed all through the history of modernity. The wish for transcendence of the flesh is of course no novel notion but rather the perhaps most consistent and continuous idea in western philosophy. The contemporary redeemed body seems to be reached today in its digital surrounding - a body without excesses, gender, orifices, or fluids, a clean, empty body prepared to be transferred to a pure cognitive surface which would finally fulfil our immortality wish. At the exciting prospect of the body's disappearance, the image of the body (or non-body) comes to mind, which no longer succumbs to the mortality of nature, and to natural reproduction as the only possibility for it to live on; capable of endless replications of its conscience, the body would finally achieve transcendence and immortality. What is even more important is that this "wish" received its philosophical argumentation and scientific validity in the rationalist foundation of modernity. The exclusion of the body seems to promise the achievement of autonomous subjectivity - separate, selfsufficient as to its reflexivity (representability), in other words, finally set free from its dark, irrational, biological, unclassifiable, and unhierarchical limits and determinations. Therefore, the body could be seen only through the procedure of the "evacuation of consciousness from the world"13, with the latter occupying the position over and above nature, including above that of the body, and thus parading as "the prerequisite for founding any knowledge."14 The relevant (body) knowledge is produced only when the real body is finally expelled - we could observe such a way of knowledge production all the way through the history of modernity and especially the

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history of modern medical science.¹⁵ The more secrets of the body we uncover, the more empty and artificial it becomes, subjected to systematization, generalization, control and universal anticipation. It is turned inside out for us just to be able to catch a glimpse of something Other than Body itself. $^{\rm 16}$ What seems to be so alluring in contemporary technological and scientific reality is the illusive possibility for us to transcend the most troublesome and traumatic limitation that has always pursued and threatened the rationalist argumentation of modern subjectivity: to reach this "other" which is on the other side of the fact that man has always been but part of unpredictable nature, and has thus inevitably been defined as a "transient structure with limited capacity for adaptation and achievement."17 The disappearance and replacement of the body in the scope of the all-embracing technological reality can also be understood as a direct consequence of one of the two poles constituting modernity as defined by Bruno Latour - that of purification that constantly differentiates between "two distinctive ontological zones, i.e., the human on one side and the non-human on the other."18 To put it differently: purification is another name for the radical boundary thinking »which always leaves out the body to develop the mind. $\ensuremath{^{\mathrm{N}^{\mathrm{19}}}}$ The main characteristic of the body viewed through the prism of boundary thinking is that, undergoing the anatomic, scientific, aesthetic and technological procedures imposed by purification, the body is gradually becoming a place of non-life, a plain object of scientific interest and that of representation, and a discursive, binary, digital net, finally.²⁰ Exactly this purified position of the body is the position which looks seemingly realisable with the contemporary technology and it's celebrated or criticised by authors I mentioned in the first part of the presentation. What such statements seem to overlook, however, is that this is not the only known "bodily history" of modernity. Throughout its course, the desire for a replaced, re-modulated, disciplined, non-living body has been clearly accompaby pointing to the histories of different utopias and distopias, but by disclosing the fundamental illusion - the one that characterizes the body/technology relationship all the way from its rationalist argumentation to its so-called "postmodern omnipresence" through which, according to Jameson, technology finally succeeds to the place of the other - that of vanished nature.²⁴ This illusion is a real basis of the disappearing body, but it's not really a part of the contemporary debates, mentioned in the first part of the presentation. Both the advocates of the utopian fusion of the mind and the technological reality and the distopians Baudrillard and Virilio talk as diagnosticians of the symptoms exhibited by the body/technology relationship. On the level of symptoms, this relationship always confronts us with the opposing standpoints For and Against, with their alternation always proving a matter of politics.²⁵ In relation to technology, the disappearance of the body is recognised as a symptom, without us actually going into its causes.²⁶ Or, if I paraphrase Deleuze, in relation to the technology, body functions as a badly constructed common name for a variety of dysfunctions. At this point the feminist perspective (feminist reading of the history of modernity) could be helpful to touch the kernel of the aforementioned illusion. It could be observed throughout the history of modernity how the dialectics between the utopian/distopian approaches to the body/technology relationship is strictly gendered. With the aesthetic and scientific imagination the woman's body is placed precisely upon the point that discloses the basic fear of the artificial, the point where the artificial strikes back and the horror of body engineering discloses the distopian side of modern progress.27 There is always a fear present that the technological venture with the woman's body will not be successful. The fear of the body-overdose drives others, especially infatuated lovers, to madness and death. The consequences of this kind of attitude also come to light if we consider the aesthetic and cultural images of the female body in relation to the processes of modernization and technological

nied by the fear of revived machinery - e.g., in the romantic tale of Olympia, the myth of Frankenstein, avant-garde reformulations of the body. In all these cases, the remodulated, recultivated and reformed body and nature are threatened by the unpredictable character of hybrid mutations (this standpoint can also account for the modern fear of genetic technology, cloning, or biotechnology). Striving to go beyond life and nature, the purified body produces real monsters indeed. The notion of modernity therefore can not be imagined without the other pole which Latour defines as »traduction« (translation) - "the mixing of genres present as something entirely novel, a hybrid between nature and culture."²¹ The understanding of modernity (and accordingly, that of post-modern reality) is only possible with the co-existence of both these praxes - a co-existence governed, however, by the paradoxical fact that "the more forbidden it is to think of hybrids, the more realizable they become."22 To put this in the contemporary perspective: "Commonplace is that, in cyberspace, the ability to download consciousness into a computer fi-



development in the 20th century. We should ask ourselves what kind of body actually emerged from the "cultural liberation" introduced by modernization and high technology. The answer could lie in Susan Bordo's notion of "the body of unbearable weight" - the term Bordo views as a symptom of "the gendered nature of mind/body dualism".²⁸ As a result of boundary thinking, the body of unbearable weight performs the procedure of purification as well as that of the regulation of the aforementioned fear. The main supposition concealed in this understanding is that technology, or the history of it and that of science, is not really the matter of woman; even if regulated by force, woman inevitably carries the burden of the body, a part of unpredictable nature. The distopian representation of the female body is neither just a warning against the failure of the utopian idea of progress, nor the sign of nature; it reveals something much more important for the understanding of the organic/technological relationship. Researching the history of technology, Sadie Plant revealed a connection between computer programming, cybernetics, and weaving.29 The most important fact resulting from her insight is that weaving could be interpreted as a body technique, a forerunner of contemporary networking and digital matrices. The demarcation line dividing body techniques and mind operations thus evaporates; the fact that "the computer was always a simulation of weaving"³⁰ reveals embodiment

nally frees people from their bodies - but it also frees the machines from "their" people."²³ III.

To put it differently: modernity always reflects the body within the dialectics between the utopian and the distopian. At this point, it is essential for us to consider this problem from a different perspective and rephrase the question about the "disappearing body" without trying to provide answers solely

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in the very heart of programming, and remains a factor disrupting any attempt to thoroughly differentiate between life and non-life. The demonic in the female body mocks the basic illusion inherent in the modern understanding of technology - the belief that technological reality is essentially bodiless, non-physical, non-material in character. Or, as American theorist and historian of cybernetics Katherine N. Hayles states it, what is the origin of the belief in nonphysicality, or in the non-material character of information? Or, more specifically, as asks Canguilhem, whence the modern illusion that machines originate in the rational? With its place in the very history of the self-understanding of modernity, technology is always represented as the constituent part of the purification process, so that the inevitable presence of hybridity (materiality, body, nature) is expelled into the terrifying domain of distopia. The disappearance of the body is not the symptom (dysfunction) of contemporary technological reality but just an illusionary reflection of the modern instrumental wish to win over the ghost in the machine; the ghost that is and was always the body.

IV.

At the conclusion let me just focus on the one essential characteristic of this changed perspective and the theoretical options I find acceptable to actually disclose the multi-layer characters of the body position in the contemporary technological reality, especially with the late 20^{th} Century machines which "made thoroughly ambiguous the difference between natural and artificial, mind and body, selfdeveloping and externally designed."³¹ Let us once again remember Norbert Wiener and add another meaning to the initial anecdote about "the weak body". Besides establishing a common front of subjectivity and computer programming, Wiener made another important discovery which never ceased to haunt his scientific work with humanistic doubts and concern. Wiener realised that cybernetics explicitly exposed the problem of the demarcation line dividing the human and the artificial. This was the most important implication inherent in his theory of cybernetics - the proposition that the boundaries of the human being are constructed rather than a solid fact, $^{\scriptscriptstyle 32}$ which immediately brings us to another, much more interesting problem of today: if boundaries are indeed constructed, why have they been placed as they are?

Not only is Wiener's "weak body" a symptom of modern utopian technological reality and the distopian uproar; it can additionally be understood as a situation, a new intermediacy revealed to us by contemporary technological strategies and ways of representation, the most successful of which are contemporary artistic praxes and several feminist theoretical approaches towards technology. Technology symbolises neither a bright nor a dark side of modernity, nor is it the Other of postmodern aesthetisation; the fact that "machines become disturbingly alive,"33 primarily reflects the need for a different (forgotten) understanding of the subject, nature and identity.³⁴ German artist and theoretician Peter Weibel summoned up this proposition very clearly: "Showing that machines can perform mental activities, we unveil the illusory character of the latter: thinking reveals nothing about the nature of the subject. This is the radicality of the matter." $^{\rm s5}$ If it indeed seems that the old anthropological question "Am I a man or a machine?" can no longer be answered, if it is no longer possible to determine a clear border between the former and the latter, this does not mean we are going to disappear due to the more advanced machinery and be drowned in the all-embracing technological reality. This does not mean that the body should be left outside, (as, for example, it happens to Gibson's character Case in Neuromancer), or indicate the end of anthropology, as Baudrillard claims. $^{\rm 36}$ Quite the contrary, it suggests to us to reconsider the side of modernity that reached incredible proportions in the age of postmodernism - "traduction" as defined by Latour -, but try to observe it without its distopian mark. Hybridity constitutes a part of the original meaning of techne, which was forgotten by the modern instrumental usage of technology and has been criticised already in Heidegger's work. The development of the high technology, which no longer serves the sole purpose of functionality and prosthesis, but essentially contributes to the establishment of new realities, enables us to stop searching for a hierarchically organised organic wholeness - and recode the human body anew. To be the ghost (body) in the machine - this is not a distopian reminder, but one aware of its continuous presence that has always mocked the traditional perception of technology and the self-sufficient status of the latter. When the machine is understood as embodied, when we become aware of the continuous presence of the body playing its game in-between, there also appears the possibility to verify the social inscription of technology, and to establish critical strategies we can employ in the future.

This direction has been taken today by several feminist theorists in terms of embodied subjectivity $^{\mbox{\tiny 37}}$ – a notion several theorists have also inscribed into that of modern hybrids. In this way, we can also read the discussion between technology and art, which, making use of new ways of referring to identities, deals with the ambivalence of the formulation of the body, and perhaps offers new trust into the individual and its power to design its own self. Faced with new fronts of representation, the need for $openness^{38}$, transparency, and fluidity, the body reveals itself as it has always been when not seen as something Other - the place where "new epistemological anxiety is evoked, not over loss, but by the memory, or suggestion of union: sympathetic, associational, bodily response obscures objectivity."³⁹ Or as Katherine N. Hayles says: "Teleology is replaced by emergence, objectivism by reflexive epistemology, autonomous will by distributed behavior, the body as the supporting system of reason by embodiment, and the liberal humanist manifest of control over nature by the dynamic partnership between nature and intelligent machinery."40 The human being thus becomes part of a distributed system, with man's power lying precisely in his dependence. This dynamic partnership does not turn the body into a disrupting remnant of nature, but is revealing the "forgotten" body disturbing to the system, identity and order, one that, according to Kristeva, "does not respect boundaries, positions, rules. The in-between, the ambiguous, the composite." $^{\prime\prime 41}$ What is important is to understood that this is not an utopian story anymore (as it is still with the cyborgs) but a story about interdependence, the story about a very demanding "companion relationship." $^{\rm 42}$ Or to put it differently: Our artificial partners in this very demanding "companion relationship" are paradoxically the one who are reminding us on the fact, that we should overturn the traditional believe that a man has a body and rather say that the body has a man.

Notes:

"Eliot's letter to Eleanor Hinkley", January 3rd 1915, in: The Letters of T. S. Eliot, vol. I 1898-1922, ed. Valerie Eliot, Harcourt Brace Jovanovich, London, 1988, p. 77.

As we know, Wiener developed the cognitive framework in which people, animals and machines function as information-process devices transmitting and receiving signals, and displaying goal-oriented behaviour. For the first time in human history, subjectivity and computer programmes shared a common field of agency and operation, enabled to co-operate and eventually (not yet, but as a logical step into the future) fuse with one another. The most important work of Wiener's in this field is the book Cybernetics or On Control and Communication in Animal and Machine, J. Wiley and Sons, New York, 1948.

³ Andrew Benjamin: "Introduction", in: The Body, Journal of Philosophy and the

Visual Art, Academy Editions, 1993, p. 6. ⁴ Arthur Kroker: The Possessed Individual: Technology and Postmodernity, Macmillian, London 1992.

⁵ Hans Moravec, from: P. Weibel: "Virtualni svetovi: cesarjeva nova telesa", in: CKZ; XX, No. 150-151,1992, pp. 69-91.

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m 6}$ "In the final stage, the robot raises its hand. Suddenly, the abandoned body dies. For a brief moment, one is surrounded by silence and darkness. And then, one can open his or her eyes once more. The perspective has been changed. The cable connecting the computer simulation with the robotic brain of the surgeon's hand re-connects itself from the robot to a brand new body, the style, colour and material of which one had previously selected. The metamorphosis is ended. From: Hans Moravec: "The Universal Robot", in: Out of Control: Ars Electronica 1991, ed. by Gottfried Hattinger and Peter Weibel, Landesverlag, Linz 1991, p. 25.

⁷ A User's Guide to the New Edge, Harper Perennial, New York, 1992, in: Mondo 2000. p. 170.

⁸ Stelarc, in: Virtual Futures, Cybererotics, Technology and Post-human Pragmatism, edited by Joan Broadhurst Dixon and Eric J. Cassidy, Routledge, 1998, pp.

116-123. ⁹ This is a thought of one of the characters in the novel by John deLillo, in: White Noise, Picador, London 1986.

¹⁰ Interestingly, neither of them avoids the paradox of moralism: in popular discussions on high technology, they are usually quoted by the most ardent of high-tech enthusiasts.

¹¹ "Once a metaphor for the soul, and later for the two sexes, the body lost metaphorical connotation in the present time, turning into a place governed by metastasis, mechanically engineered chain links between all kinds of processes, infinite programming without symbolic organization and transcendent goals, and a promiscuous relationship with its own self.", in: Jean Baudrillard: Transparence du Mal, Essai sur les phénomènes extrêmes, Galilée, Paris, 1991. English: The Transparency of Evil : Essays on Extreme Phenomena, Verso Books, 1993 (transby J a Benedict and

J. St John Baddeley)

¹² Paul Virilio: L'art du moteur, Éditions Galilée, Paris, 1993. English: The Art of the Motor, University of Minnesota Press, 1995 (translated by Julie Rose). $^{\rm 13}$ Elizabeth Grosz: Volatile Bodies, Indiana University Press, Bloomington & Indianapolis, 1984, p. 6. "What Descartes accomplished was not really the separation of mind from body (a separation which has been long anticipated in Greek philosophy since the time of Plato) but the separation of soul from nature.", adds Grosz in ibid. p. 6.

ibid. p. 6.

¹⁵ Phenomena could be read in isolation from their context: this was not just the basic methodological principle of medical science but stands behind the entire history of computation.

¹⁶ Through the darkness of the morbid anatomical theatre, there always pierced the light of the ideal body: "Isn't it all but a surface and content? Body and soul? The outward effect and the ability of the inside? Invisible principles and the visible results?" Johann Caspar Lavater: Essays on Physiognomy, Designed to promote the Knowledge and the Love of Mankind; 1792; in: Barbara Maria Stafford:

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Body criticism, Imaging the Unseen in Enlightenment Art and Medicine, MIT Press, 1991, p. 79.

 17 Sigmund Freud: Civilisation and Its Discontents, W. W. Norton, New York 1961, p. 33. ¹⁸ Bruno Latour: Nous n'avons jamais été modernes, Essai d'anthropologie

symétrique, Éditions La Découverte, Paris, 1991, p. 21. English: We Have Never Been Modern. Harvard University Press, 1993 (translated by Catherine Porter). ¹⁹ Elizabeth Grosz: Volatile Bodies, Indiana University Press, Bloomington & Indianapolis, 1984, p. 7.

2° The body as a site of non-life is understood as the basic paradigm of the beginnings of modern scientific medicine. Michel Foucault deals with epistemological shifts that brought about the birth of modern medicine - e.g. the work of Xavier Bichat, the father of modern anatomical pathology. The modern scien-tific approach is thus governed by a paradox - it has been enabled by a different view of the dead, with man providing his existence with the dissection enabled by his own elimination. In: Michel Foucault: Naissance de la clinique, Presses Universitaires de France, p. 146. English: The Birth of the Clinic : An Archaeology of Medical Perception, Vintage Books, 1994. ²¹ Bruno Latour: Bruno Latour: op. cit., p. 20.

²² ibid. p. 22.

²³ Slavoj Zizek: "The Matrix, or, the Two Sides of Perversion", <http://</p> www.nettime.org/nettime.w3archive/199912/msg00019.html>.

²⁴ Frederic Jameson: Postmodernism, Or, The Cultural Logic of Late Capitalism, Duke University Press, Durham, 1999.

²⁵ This is also the platform for the contemporary popular debates about technological and scientific achievements.

I hereby paraphrase Gilles Deleuze: »...illnesses are named after their symptoms, and only later after their causes.«, in: Predstavitev Sacherja - Masocha, Analecta, Ljubljana, 2000 p. 99.

²⁷ The same fear is reflected in the history of monsters, especially in that of conjoined twins. Dealing with their status in the course of time, Margrit Shildrick analyzes the causes of "self-evident" medical demand for them to be divided: "Above all it is the corporeal ambiguity and fluidity, the troublesome lack of fixed definition, the refusal to be either one thing or the other, that marks the monstrous as the site of disruption.", in: Margaret Shildrick: "This Body Which Is Not One: Dealing with Differences", in: Body Modifications, edited by Mike Featherstone, Sage Publications, London, 2000, p. 77. ²⁸ Susan Bordo: Unbearable Weight Ferminder Marture 7.

²⁶ Susan Bordo: Unbearable Weight, Feminism, Western Culture and the Body, University of California Press, 1993, p. 14. The fluidity and contractions of the body of modern dance can also be interpreted in this perspective. No story is more symbolic than that of Isadora Duncan who broke her neck with the symbol of lightness and freedom – a scarf fluttering in the wind, which made a mortal pact with her car. The image of the courageous pilot Amelia Echardt – a tall, slim and aerodynamic body came to stand for women's liberation in the U.S. in 1930. Not to mention the weightlessness of bodily images of modern women which seek to remodulate and reformate their bodies to the factors "compatible" in day-to-day reality by means of cosmetics, physical training, diets, etc. ²⁹ Sadie Plant: "The Future Looms, Weaving Women and Cybernetics", in: Cybersexualities, A Reader on Feminist Theory, Cyborgs and Cyberspace, edited by Jenny Wolmark, Edinburgh University Press, 1999, p. 100. Byron's daughter Ada Lovelace is the first woman in the history of computing; Plant analyses her work through the perspective of the connection between the computing and weaving. ³⁰ ibid. p. 116. It was not a mere coincidence that, during and immediately after WWII, women were prominently employed in computer programming. We have to bear in mind, however, that at that particular time, programming was regarded as "tedious clerical work of low status". With the development of cybernetics science, programming again became a male domain. In: Waycman J.: Feminism Confronts Technology, Polity Press, Oxford, 1991, p. 158.

Donna Haraway: Simians, Cyborgs and Women, Routledge, New York, p. 152.

<http://www.digbody.spb.ru/dl.htm>
³² This idea is implemented in Wiener's famous question: "Is the stick of a blind man part of this man?"

³³ Donna Haraway: op. cit., p. 152.

³⁴ Or as Slavoj Zizek says: "it is crucial to maintain open the radical ambiguity of how cyberspace will affect our lives: this thus not depend on the technology as such but on the mode of its social inscription." in: "The Matrix, or, the Two Sides of Perversion", <http://www.nettime.org/nettime.w3archive/199912/ msq00019.html>.

³⁵ Peter Weibel: "Vecstranska obmocja individualnosti in spremenljiva obmocja vidljivosti", Interview with Peter Weibel, in: M'ARS, 4, 1-4, 1994, pp. 9-15. ³⁶ "Am I a man or a machine? The answer upon this ontological question exists no more. In some way, this represents the end of anthropology which was imperceptibly abolished by the latest machinery and technology.", Jean Baudrillard: op. cit., p. 55. $^{\rm 37}$ I hereby refer to Elisabeth Gross, Moira Gatens, Rosi Braidotti.

 $^{\scriptscriptstyle 38}$ Walter Benjamin compares technological procedures with those of surgeons. ³⁹ Susan Bordo: "The Cartesian Masculinization of Thought", In: From Modernism to Postmodernism, An Anthology, ed. by Lawrence Cahoone, Blackwell Publishers, 1996, p 649.

 $^{
m 40}$ Katherine N. Hayles: How We Became Posthuman, The University of Chicago Press, Chicago & London, 1999, p. 288.

⁴¹ Julia Kristeva: The Powers of Horror: An Essay on Abjection, Columbia University Press, New York, 1982.

This is the notion of Don Haraway from her lecture at the 4th Eur Conference for Feminist Research, Bologna, 28.9.-1.10.2000 (private notes).

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