Ars Electronica 2019, European Forum for Digital Humanism, panel: *Bias Research*
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Names and Myths of Technologies

Abstract: People make sense of technologies by giving them names and by telling stories about them. The current discussion about "Artificial Intelligence" is a struggle around ideologies, ethics, strategies. Its political challenges are better understood when we take into account the mythologies at work in present discourses.

[The text in `Courier font` was only presented in the slides; the two indented sections (Apollinaire, myth of the machine) were skipped during the delivery, due to time constraints.]

I'd like to start by thanking Gerfried Stocker and his team for the invitation to the ars this year; as always, it's great to be here – I learn a lot, not only but especially from the things I disagree with, and I am hugely grateful for this opportunity. In that spirit, I hope that the following will also serve to instill some further productive disagreements.

> *Remember that the railways*
> *Will be old-fashioned and abandoned soon*
> *Look*
> *Victory above all will be*
> *To see well at a distance*
> *To see everything*
> *From up close*
> *And that everything may have a new name*

These lines from a poem by the avantgardist French writer Guillaume Apollinaire (*La Victoire*, 1917)[1] seem precient in more than one way; they suggest that the 19th century's technological victory over physical space – symbolised by the railways – would soon be superseded by the visual regimes of surveillance in which the *vision machine* (Virilio) would collapse distance and proximity, and then – again symbolically – overcome space altogether in the computational non-spaces of operational imaging. As in any revolutionary transformation, the "victory" that Apollinaire describes would be accompanied by the passing out of *new names* for everything.

Of course, Apollinaire was also quite wrong in some ways, because a hundred years later, the railways are still running, and many new things continue to run under old names...

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[1] "*Songe que les chemins de fer / Seront démodés et abandonnés dans peu de temps / Regarde / La victoire avant tout sera / De bien voir au loin / De tout voir / De près / Et que tout ait un nom nouveau.*" Final lines of the poem "La Victoire"; French original at: http://www.toutelapoesie.com/poemes/apollinaire/la_victoire.htm; see also https://www.uni-due.de/lyriktheorie/texte/1917_apollinaire.html; Engl. translation in *The Self-Dismembered Man: Selected Later Poems of Guillaume Apollinaire*. Ed. Donald Revell. Middletown: Wesleyan University Press, 2010, 122-131.

The question of old and new names is my theme this morning. It admittedly addresses only a small part of the discussions that are necessary in a symposium on so-called "artificial intelligence," and on what the title of the event today calls "digital humanism." But there are other people here more gifted in articulating the important technical, technological and political arguments, and yet others not here, whose names and writings I will gesture towards in the slides, as an encouragement to read and engage with them.

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Wendy Hui Kyong Chun
Seda Gürses
Antoinette Rouvroy ["algorithmic governmentality"]
Bernard Stiegler
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My main point will be to put quotation marks around some of the terms that are in use in these excited debates. I will be a little bit more elaborate on the notion of the "machine" which I believe is particularly significant for understanding the relationship between humans and technology. And with all due respect to whoever coined the title of this track, and to their no doubt good intentions, I will also take on some of the issues it raises with regard to identity, and politics. Due to time constraints, I will barely be able to speak about the contribution that artworks can make to this fraught terrain.

It is worth remembering, though, that, despite the current hype, questions of computational cognition and of autonomous machine agency have been topical in the arts ever since the 1950s. Here at the ars electronica alone, we can backtrack from the recent exhibition of Seiko Mikami's *Desire of Codes*, to works by David Rokeby, Lynn Hershman, and Knowbotic Research.

It is worth going back to these older artworks because they were not only technically achieved, but more importantly, they often offer a critical conceptualisation of the aesthetics and the politics of "AI" that some of the more recent artistic and design contributions seem to lack. A general question to ask, I think, is whether such works are exercises of mystification, or exercises of technical optimisation, or whether they are perhaps exercises of critique that resist recuperation.

Names and myths of technologies

The words that we use for naming things, whether concrete or abstract phenomena, these words often come with a history, and sometimes with an ideological baggage that sticks to them and that cannot easily be gotten rid of.

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Oswald Wiener: Probleme der Künstlichen Intelligenz (1990)
Francis Hunger: "Artificial Des-Intelligence or Why Machines Will
Not Take over the World. At Least Not Now" (2017)
A. Broeckmann: "The Machine as Artist as Myth." mdpi/Arts, 2019
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I believe that part of the reason for the current concerns around so-called "artificial intelligence" and "machine learning", is that these words blur the boundary between human and technics. Concepts which have been associated with human cognition for several centuries ("learning", "intelligence") are shifted over to the technical realm. Previously, the meaning of these concepts relied on vague hermeneutic models, models that are now overwritten by the logical models which make them computable, and which have to leave out so many other, incomputable aspects of what it means to be alive, to study, to learn, to communicate.

This is not a new critique. Thirty years ago, Oswald Wiener offered a formal analysis of the foundations and assumptions of artificial intelligence and said that it was probably one of the birth defects and early mistakes to have used the word "intelligence" in the first place.

And Francis Hunger has more recently argued that "... the terms used in the field of Artificial Intelligence are often inappropriate and misleading. It would be worth analyzing them with regards to what kind of wishes, fears, traumata and desires they express." (2017)

I have done such an analysis for the notion of the "machine" which tends to be used affirmatively and quite uncritically. However, we can observe that the "machine" is based on a conception of technology in which technics is pitched against the human; the notion of the machine signifies this antagonistic construction, and the various usages of the term "machine" articulate and reaffirm this structure.

(... and in the interest of time I skip the next section on the myth of the machine which is better explained in the text mentioned on the screen.)

> On the level of human communication and of culture, the machine operates as a myth – "myth" not understood in the polemical sense of an untrue story, but rather in the functional sense of the term. Very generally speaking, a myth is a form of narrative that is engrained in a culture. A myth is collectively held, and repeated and affirmed, and it is powerful. Consider the myth of Oedipus; whenever the name Oedipus is mentioned, the whole complex narrative of the myth, its proponents and tragic twists, is envoked.
>
> I believe that it is possible to identify the narrative kernel of the myth of the machine, which is brought into play, whenever the term "machine" is used. It goes something like this.
>
>> *This is the myth of the machine.*
>>
>> *There is a man-made object. It can be a physical device, or a symbolical representation, related to technics by association or indexicality.*
>>
>> *It is composed of technical elements, it has moving parts, and it has a function which it performs by repetitive movement. And it exhibits a certain formal beauty.*
>>
>> *It is made to function automatically and independent of direct and continuous human intervention.*
>>
>> *Over time, the object attains an increasing degree of autonomy.*
>>
>> *It may provide interfaces for human interaction. These, however, do not determine the functionality: the human interaction can be replaced by technical elements, or by other machines. The interfaces offer the human an illusion of control which can be overridden by the machine. The interfaces are only there to appease the humans, for their play and enjoyment, or for human-machine conviviality.*
>>
>> *The autonomy of the machine becomes threatening for humans who, fearfully, struggle not for their lives, but for self-determination. The threat posed by the machine is existential, but not lethal.*
>>
>> *The narrative tends not to have an ending. If it has one, then the story ends well for the humans.*
>>
>> *This is the myth of the machine.*

Like other myths, the *myth of the machine* can be varied, but it cannot be told completely differently. It is always this one story of something man-made being functional and then gaining a dangerous, non-lethal form of autonomy.

This mythical meaning resonates whenever the word "machine" is used. And when you call a technical procedure "machine learning", you should not be surprised that people are irritated twice, first by the spectre of the autonomous "machine", and then by their disposession of the human faculty of "learning."

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Günther Anders: Die Antiquiertheit des Menschen (1980)
["promethean shame"]
Lewis Mumford: The Myth of the Machine (1967—1968)
Donna Haraway: "A Cyborg Manifesto" (1985) ["informatics of
domination"]
Martin Burckhardt: Philosophie der Maschine (2018)
Apprich / Chun / Cramer / Steyerl: Pattern Discrimination (2018)
Matteo Pasquinelli (ed.): Alleys of Your Mind: Augmented
Intelligence and Its Traumas (2015)
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Such a critical mythological examination can be made for many of the terms in use. And for those of you concerned about the immense skepticism that some people feel towards the promises associated with these technical systems, it is, I believe, worth considering these semantic layers of the language in use.

Other names have, for instance, been proposed for so-called "artificial intelligence":

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enhanced pattern recognition (Francis Hunger)
augmented cognition (Matteo Pasquinelli)
amplify human ingenuity (Harald Leitenmüller/Microsoft)
artificial stupidity (Karen Palmer)
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Personally, I believe that the ones that have the more technical-sounding words in them, tend to work better because they are appropriately alienating for humans and will instill more trust in the skeptical listener, whereas in these cynical times, any sweet affirmation like "amplify human ingenuity" can only provoke distrust.

"We"

The gesture I want to encourage you to make is to put quotation marks around the words that look important, and the ones that are used most casually in such a fraught and obviously difficult social context. Here are some that I thus bracketed yesterday:

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"becoming digital citizens"
"responsibility of the individual"
"primary human desire"
"we as a species"
"sie, die Menschen, — also wir" ("they, humans, — so... us")
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Besides the more technical terminology, the word that irritates most in the present context is the tiny, maliciously inclusive word "we". The "we" is a rhetorical form of strategic inclusion that more often than not seeks to obscure differences. A most problematic assumption is that of a homogeneous humanity. Even when you only think of the people in this room, saying "we": we here at the ars electronica, we *cyborgs*, we *tech-loving people*, we *techno-skeptics*, we *slaves to the machine*, we

whatever, – with each one of these "we's" I will provoke irritation in some of you, and a sense of exclusion in those people who do not identify with that particular label. Importantly, the "we" regularly gives an illusion and a totally false sense of shared ideas, aims, and values.

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Tristan Garcia, "Nous" (2017), "Wir" (2018)
Patricia Reed, "Solidarity without Sameness" (2018)
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It is Patricia Reed who suggested that one should only use the word "we" for a type of solidarity that is coupled with a clear sense of difference; a "we" that does not seek to homogenise and paste over differences, but one that actively presupposes them: "I recognise your differences, let's be in this together." It is a use of the "we" that is conscious of conflicting interests, and aware of the intrusiveness of its own claim.

"European" "Forum" for "digital Humanism"

I want to end with a few remarks and questions regarding the words in the title of this panel. These are meant as suggestions for discussion, and I mainly make them because in my perception these questions should be brought to the table, as should some of the critical thinkers that I have been referencing.

"European"

I share the high spirit of humanism and enlightenment that Roberto Viola expressed in his talk the other day, a spirit that embraces values like democracy, openness, and diversity as core conditions of a prosperous society. I also understand the strategic importance to claim these values as "European" values, both towards the outside as a *unique selling point* of European produce and civilisation, and towards the inside as a bulwark against the populism and authoritarianism that is threatening to erode these very values within Europe.

It will be both interesting and necessary to get into a discussion with people who are more skeptical, both in and outside of Europe. Excuse the polemical short-cut, but how much confidence can there be in the protection of such European principles and values, so long as, – and I use only three examples with direct technical pertinence to our discussions here – so long as in this age of openness Europe militarises its borders, in this age of climate awareness Europe exports its trash to Africa, and in this age of privacy protection, Europe amply uses the cheap, precarious labour of a global workforce of so-called "mechanical turks".

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Achille Mbembe: Critique of Black Reason (2017) ["becoming-black
of the world"]
Frantz Fanon: The Wretched of the Earth (1961)
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The Cameroonian historian and theoretician Achille Mbembe has suggested that the experience of precarity and dispossession that is felt not only outside of Europe, but also in Europe itself, can be understood as the "Becoming Black of the world".

"Under the aegis of racial neoliberalism," Mbembe writes, capitalism's impulse is, "to break all taboos in order to then be able to usher the disappearance of all kinds of species and/or their transformation into myriad other object species. I believe that at its core, capitalism is fundamentally anti-human or at the very least, *anthropophobic*. [...] It might be entirely possible that the transformation of blacks into commodities *or into "object-humans" or humans-with-prostheses* [...] is a process that could be universalized. It could be extended to more than just blacks." [2017: 5-6]

Might this "Becoming Black of the world", the threat of enslavement also affecting white people, be one of the reasons for the profound distrust of the technical means by which this new regime is being implemented? And if yes, might this mean that the "humanism" we strive for should rather be an assertive, a proud and solidary "Black" humanism, one which aligns with Frantz Fanon's "new", "minoritarian", post-colonial humanism?

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        Max Horkheimer
        Theodor W. Adorno
        Erich Fromm
        Günther Anders
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It is of vital importance that this "European" project is reassessed with regard to the critique of technical rationality and the "dialectics of enlightenment" that the thinkers of critical theory have analysed as a foundation of this very concept of European civilisation.

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        Yuk Hui: The Question Concerning Technology in China. An Essay in
        Cosmotechnics (2016)
        Erich Hörl (ed.): General Ecology. The New Ecological Paradigm
        (2017)
        Evgenij Morozov: The Folly of Technological Solutionism (2014)
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In this context it will also be interesting to look more closely at alternative conceptualisations of technology. Hongkong-Chinese philosopher Yuk Hui [or shu'ü] is arguing for an engagement with the Chinese understanding of technology, or "cosmotechnics"; Hui has suggested that this might be a question of life and death of China's civilisation [Hui 2016, p. 197]. What is important in our present context is that Hui's suggestion of an alternative, Chinese cosmotechnics, challenges, or rather qualifies the call for a distinctly "European" type of "digital humanism". If "we in Europe" are looking for alternatives to the technological thinking and inventions that gave us GAFA and their surveillance capitalism, we certainly have to learn to think in alternatives to technical rationality and to what Evgenij Morozov has called "solutionism".

"Forum"

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        Michel Foucault: "The Order of Discourse" (1970)
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The notion of the forum, or platform, appears less frictional. In an interesting way it refers to the types of organisation, the temporal, spatial, institutional and procedural forms of "ordering the discourse" (Foucault). It raises the question of who gets to speak, and what can be said. The fora of Greek and Roman antiquity are examples both of democratic discourse, and of exclusion where only specific people are allowed to speak. The challenge of inclusiveness that comes with the term "forum" is

immense, and I think that it has to be approached with humility and self-critique especially by those who, like myself at this moment, are standing in front (or in the middle), holding the microphone.

An aspect of this is also that, due to the "orders of discourse", people might not say certain things on a public stage like this, certainly not if it is recorded for a YouTube channel, things that they do however say in private conversation. For instance, you're unlikely to hear people who have been in this field for a long time, say that they are extremely worried about the current developments; they are, pardon my English, scared shitless about what is going on. But nobody would say that in a public forum, and this begs the question how the discourse on such a "forum" or "platform" is ordered.

"Digital Humanism"

Finally, the claim for "humanism", and a "digital humanism" at that. While I commend the intent of demanding a form of technical development that gives priority to people over machines, as individuals and as a society, we cannot make such a claim – certainly not here in central Europe –, without thinking about the critiques and amendments that have been mounted against these concepts. And which type of "humanism" is meant here, anyway? The Reformist Christian humanism of Erasmus of Rotterdam? The philosophical and political humanism of the Enlightenment, of Kant and Fichte? Maybe one of the radical communitarian and socialist humanisms of the 19th century? Or is it a yet-to-be-defined "cybernetic humanism"? Erich Fromm talked about the latter and identified its "manipulative intelligence" as particularly dangerous for the survival of humankind – a term which sounds strangely familiar. [1976/1979, 141-147]

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Erich Fromm: To Have or to Be? (1976) ["manipulative
intelligence"]
Max Horkheimer: Eclipse of Reason (1947)
Theodor W. Adorno: "Individuum und Organisation" (1953)
Horkheimer / Adorno: Dialectics of Enlightenment (1944)
Gerald Raunig: dividuum (2015)
Rosi Braidotti: The Posthuman (2013) ["zoe-centred
egalitarianism"]
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I would not say that an affirmative notion of humanism is untenable today, especially one that refers to categories like reason, self-reflection, self-determination, or solidarity, as its political program. It is, however, necessary to come clear on the question whether this "humanism" lays claim to an exclusive, anthropological conception of notions like thinking, learning, understanding, intelligence. It needs to explain where it draws the line of the *anthropos*, or whatever it is that it calls "human", and what is its take on the ongoing erosion of the very type of individuality on which it is founded, an erosion that was diagnosed by Adorno already 70 years ago, – an erosion of individuality that the smartphone, infinite scroll and algorithmic sociality are currently accelerating beyond all measure.

Such new "humanists" lay claim to a concept that has come under a more explicitly "posthumanist" critique ever since the 1960s, not accidentally running parallel to the technological revolution we are celebrating, or lamenting. Rosi Braidotti, for instance, confronts humanism with the ecological, the queer-feminist and the post-colonialist critique, arguing against anthropocentrism, and for a life-affirming, trans-species "zoe-centred egalitarianism". – Braidotti, Mbembe, and Haraway deserve an informed and accommodating response, not because they are right, but because they raise questions which are pertinent to your "humanist" cause.

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Yvan Ilich: Energy and Equity (1974)
Félix Guattari: The Three Ecologies (1989)
Donna Haraway: Staying with the Trouble (2016)
Elizabeth A. Povinelli: Geontologies: A Requiem to Late Liberalism
(2016)
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And even then – and with this I end – even such a refined or sublimated "humanism" that would take these critiques on board, will still face the challenges of an unsustainable, technological way of life that consumes natural resources and depletes the natural environment at a suicidal rate. – Some say, the cause for this crisis is capitalism, others think that it's because of putting humans and their technologies first. I think it's both.

Thank you.

ars electronica, Sunday 8 September 2019

10:00 – 15:00

European Platform for Digital Humanism – A conference by the European ARTificial Intelligence Lab

POSTCITY, Conference Hall

10:00 – 11:00

Bias Research

Introduction: Roberto Viola (IT)

Host: Derrick de Kerckhove (CA)

Eveline Wandl-Vogt (AT), Clara Blume (AT), Andreas Broeckmann (DE)

11:00 – 13:30

Inclusive AI Applied

Birgitte Aga (NO) & Coral Manton (UK), Max Haarich (DE), Vladan Joler (RS), Maja Smrekar (SI), Joana Moll (ES), Aisling Murray (IE), Margherita Pevere (IT/DE)

13:30 – 15:00

Experiential AI: Entanglements – Fair, Moral and Transparent AI

Presented by the Experiential AI group of the Edinburgh Futures Institute: Drew Hemment (UK), Vaishak Belle (IN), Larissa Pschetz (DE), Dave Murray-Rust (UK)