

HUAS 7305-001 Critical Studies in Art and Science
Science Fictions: Art and Science Hybrids
Dr. Charissa N. Terranova
University of Texas at Dallas
Fall 2014
Monday 4:00-6:45

BEYOND CONSCIOUSNESS

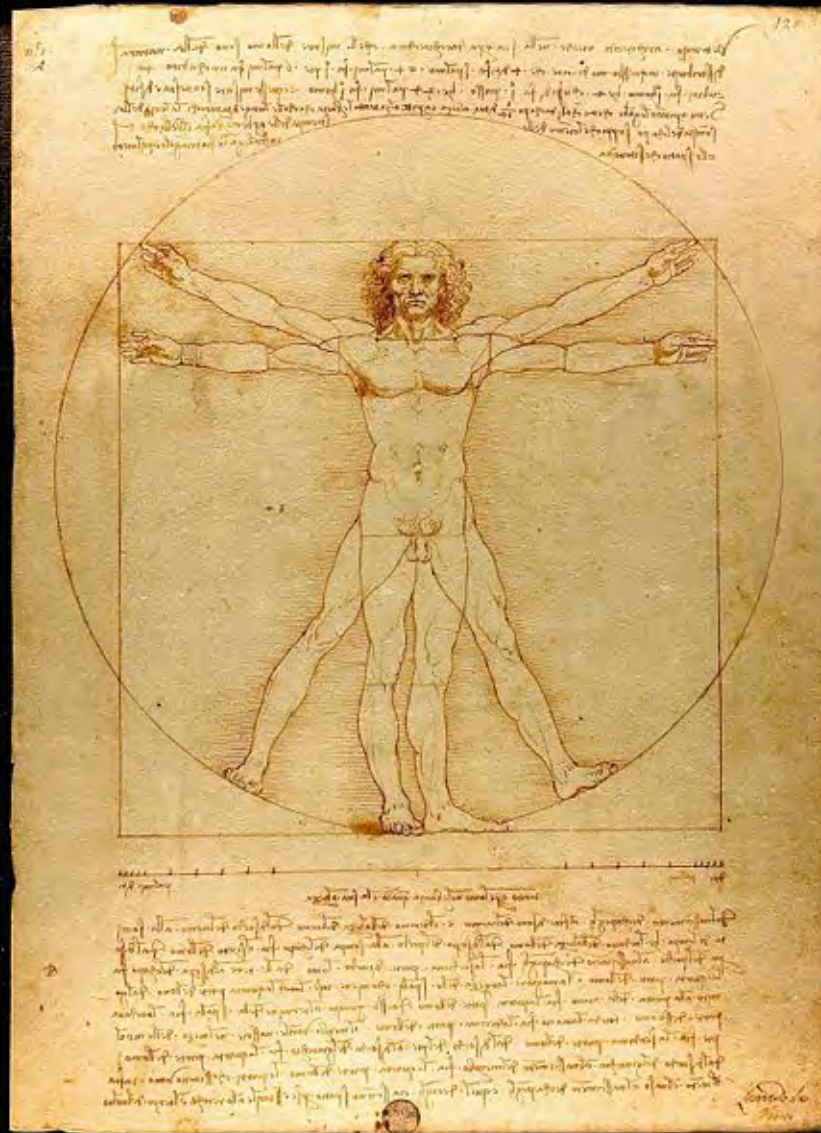
N. Katherine Hayles, *How We Think: Digital Media and Contemporary Technogenesis*

He who possesses art and science has religion; he who does not possess them needs religion.

Johann Wolfgang von Goethe

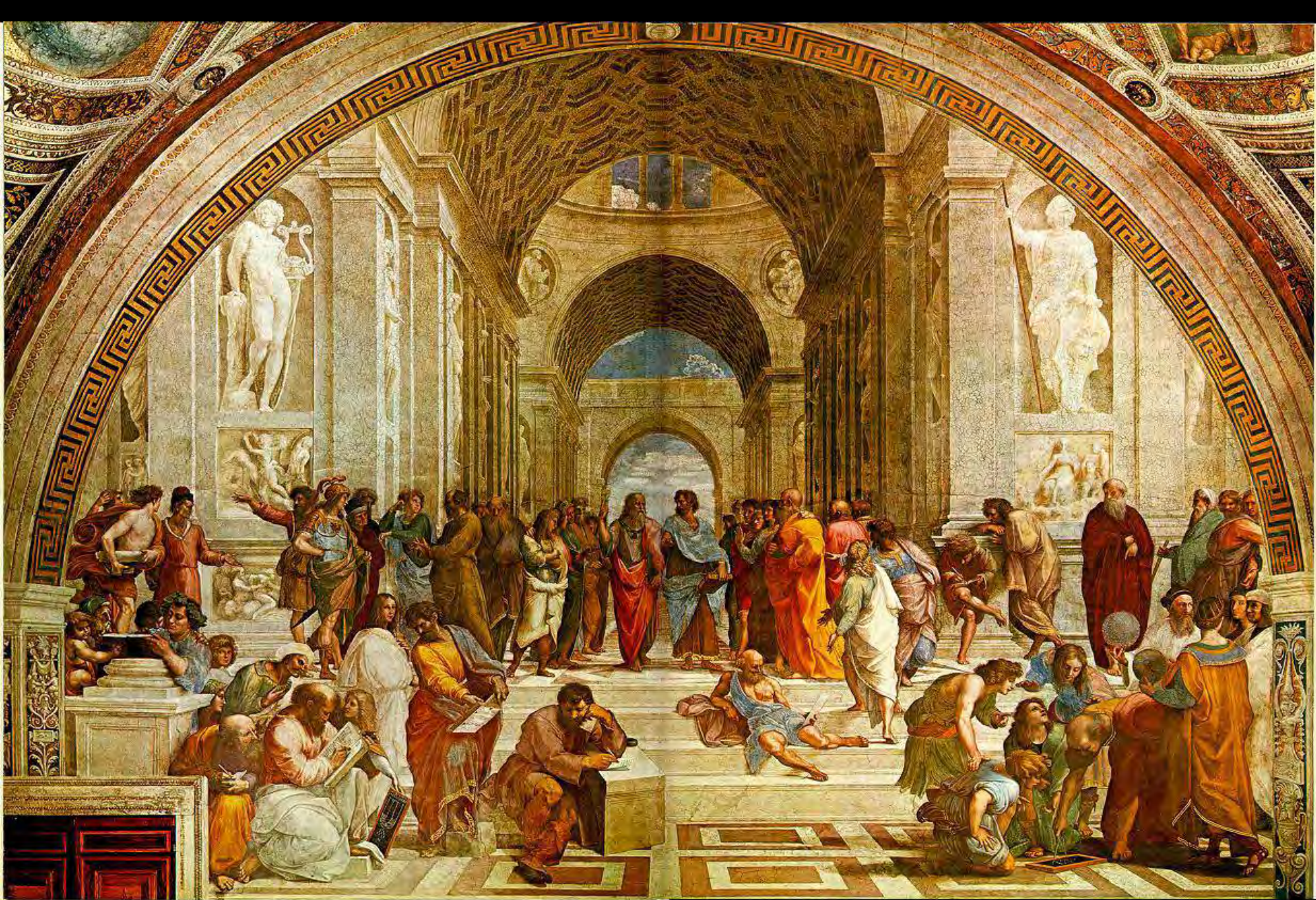
- humanism
- humanities
- print humanities
- digital humanities
- digital humanism
- technogenesis
- posthumanism
- posthuman

HUMANISM + UNIVERSAL BODY + CENTERED SUBJECT



Leonardo da Vinci, Vitruvian Man, c. 1487

- canon of proportions
- proportions of man
- man centered in circle and square
- art and science during Renaissance
- Classical Humanism



Raphael, School of Athens, 1509-10

Ancient Atomism

Epicurus and Democritus



Epicurus 341 BCE – 270 BCE (from Raphael, *School of Athens*, 1509) Democritus 460 – 370 BCE (also identified as Heraclitus from Raphael, *School of Athens*, 1509)

HUMANITIES

- “The humanities can be described as the study of how people process and document the human experience.”
<http://shc.stanford.edu/what-are-the-humanities>
- “Disciplines of the humanities such as philosophy, history, and literary studies offer models and methods for addressing dilemmas and acknowledging ambiguity and paradox.”
-- Lyn Maxwell White
- Study of human culture
- Qualitative
- Critical/Self-reflexive
- Speculative
- Trivium: grammar, rhetoric, and logic
- Quadrivium: arithmetic, geometry, astronomy, and music

PRINT HUMANITIES

- PRINTING PRESS
- Han China 11th Century
- Korea 14th Century
- Johannes Gutenberg 1450
- 1480s Printing Revolution in Europe Starts



Movable Type

Print, in turning the vernaculars into mass media, or closed systems, created the uniform, centralizing forces of modern nationalism.

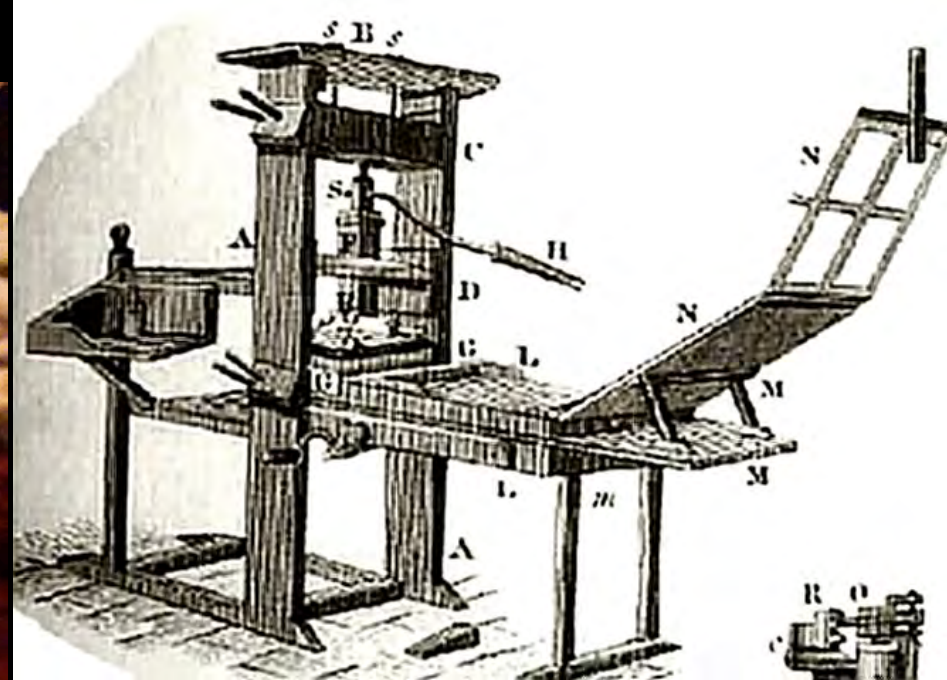
* The French, more than any other modern nation, have felt the unifying force of their vernacular as a national experience. It is fitting that they should be the first to record the break-up of this typographically created unity under the impact of non-verbal media. In the electronic age Simone de Beauvoir and Jean-Paul Sartre declaim in tragic mode in *What is Literature?* the dilemma of "For whom does one write?"

An editorial comment on Simone de Beauvoir in *Encounter* (August, 1955) helps very much to relate the new clamorous voices of the Gutenberg era with the phenomenon of nationalism. The editor is considering the nature of fame and enduring reputation:

... and to obtain this it is almost necessary, in our age, to be a member of a national community that has, along with whatever moral and aesthetic excellences, the quite vulgar quality of being in some degree powerful—of being regarded attentively by the world and, most important, listened to. The existence of such a community seems to be a precondition for the emergence of a national literature sufficiently large in extent and weighty in substance to fix the world's eye and give shape to the world's imagination: ... it was the writers themselves who helped call into being this thing called "national literature". At first, their activity had a pleasing artlessness about it, ... Later under the spell of the Romantic movement, moribund languages were revived, new national epics were composed for nations that as yet barely existed, while literature enthusiastically ascribed to the idea of national existence the most supernatural virtues. ...

Closely interrelated, then, by the operation and effects of typography are the outlying or uttering of private inner experience and the massing of collective national awareness, as the vernacular is rendered visible, central, and unified by the new technology.

It is quite consistent that Chaucer, as much as Dryden, should have preferred the couplet as an intimate mode of conversation among friends. In this way the Chaucerian couplet would have struck St. Thomas More as quite close in character to the scholastic dialogue, much as the couplet of Pope and Dryden preserved the character of the Senecan amble. The important text of



***The Gutenberg Galaxy: The Making of Typographic Man* , Marshall McLuhan (1962)**

- Oral Tribe Culture
 - "Village"
- Manuscript Culture
 - "Movable Type"
- Gutenberg Galaxy
- Electronic Age
 - "Global Village"



DIGITAL HUMANITIES + DIGITAL HUMANISM

HUMANITIES COMPUTING

- [http://www.digitalhumanities.org/
companion/view?docId=blackwell/
9781405103213/9781405103213.xml&chunk.i
d=ss1-2-1](http://www.digitalhumanities.org/companion/view?docId=blackwell/9781405103213/9781405103213.xml&chunk.id=ss1-2-1)

how we think

Digital Media and
Contemporary Technogenesis

N. KATHERINE HAYLES

TECHNOGENESIS + DISTRIBUTED COGNITION + HYPERATTENTION + EXTERIORIZATION + DISTRIBUTED COGNITIVE ENVIRONMENT

[Http://howwethink.nkhayles.com](http://howwethink.nkhayles.com)

BODIES AND SUBJECTS

How do you understand the “body” to relate to
subjectivity?

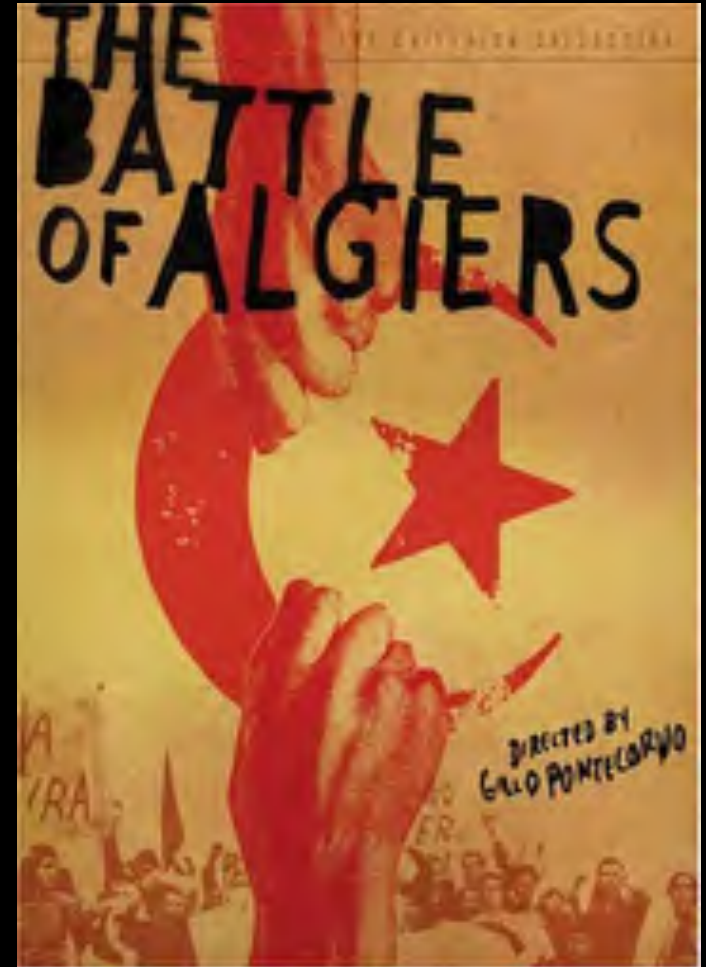
To epistemology?

FRENCH UNIVERSALISM

Naomi Schor, "The Crisis of French Universalism," Yale French Studies, No. 100, France/USA: The Cultural Wars (2001), pp. 43-64

"In most accounts French universalism is seen as intimately bound up with the universal revolution of 1789. It is the French appropriation of the universalism that lies at the heart of Enlightenment philosophies such

as Rousseau's and Voltaire's...Universalism, and never more so than in its Enlightenment incarnation, was grounded in the belief that human nature, that is rational human nature, was a universal impervious to cultural and historical differences...What the French Revolution crucially instituted was the association of universalism and human rights; what was missing from pre-Revolutionary accounts of universalism was the modern humanistic doctrine of universal human rights. Modern French universalism represents the convergence of three separate streams of universalism: the religious, the linguistic, and the ethical, for as Etienne Balibar remarks, where ethics there is universalism."



PARTICULAR BODY + DECENTERED SUBJECT



- Identity Politics
- Civil Rights
- Feminism
- Gay Rights
- Postmodernism
- Fragmented Subjectivity

PROGRESSIVE UNIVERSAL BODIES

- Jonathan Katz on “Eros”
- Herbert Marcuse, *Eros and Civilization* (1955)

“The basic experience in [the aesthetic] dimension is sensuousness rather than conceptual; the aesthetic perception is essentially intuition, not notion. The nature of sensuousness is ‘receptivity,’ cognition through being affected by given objects. It is by virtue of its intrinsic relation to sensuousness that the aesthetic function assumes its central position. The aesthetic perception is accompanied by pleasure...The discipline of aesthetics installs the order of sensuousness as against the order of reason. Introduced into the philosophy of culture, this notion aims at a liberation of the senses which, far from destroying civilization, would give it a firmer basis and would greatly enhance its potentialities. Operating by basic impulse—namely the play impulse—the aesthetic function would ‘abolish compulsion, and place man, both morally and physically, in freedom.’”



Yoko Ono, *Bottoms or No. 4*,
1966

PROGRESSIVE UNIVERSAL BODIES



- Carolee Schneeman, Meat Joy, 1964: "Meat Joy has the character of an erotic rite: excessive, indulgent, a celebration of flesh as material: raw fish, chickens, sausages, wet paint, transparent plastic, rope brushes, paper scrap. It's propulsion is toward the ecstatic-- shifting and turning between tenderness, wilderness, precision, abandon: qualities which could at any moment be sensual, comic, joyous, repellent."



RETHINKING UNIVERSALISM

VIGILANT HUMANISM

Edward Said, *Humanism and Democratic Criticism* (2004)

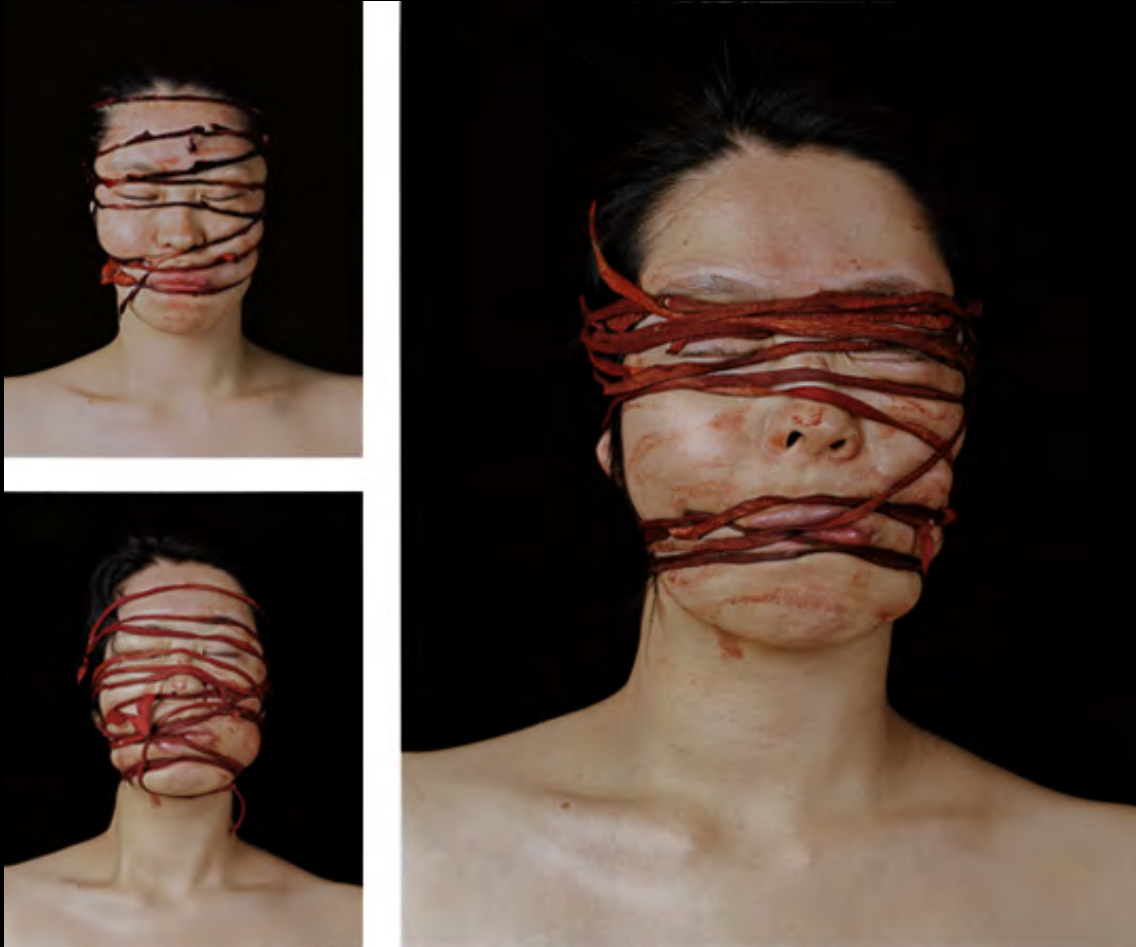
“Humanism is disclosure; it is agency; it is immersing oneself in the element of history; it is recovering what Vico calls the topics of mind from the turbulent actualities of human life, “the uncontrollable mystery on the bestial floor,” and then submitting them painstakingly to the rational processes of judgment and criticism. There is then considerable merit to restoring the idea or image of a heroic, unusually dignified effort to the humanistic enterprise, from which in recent years the very suggestion of this effort has slipped almost unnoticed. Discussions of what literary education, research, and discourse ought to be about essentially skip the stage of commitment and human agency that for me was symbolized in Freud's pen and his carefully, intensely written papers. Moreover, the heroic ideal in humanism is principally neither an act of conformism, of expressing and consolidating what is already known, nor an act of amiable respect for the powers that be.... For what is crucial to humanistic thought, even in the very act of sympathetically trying to understand the past, is that it is a gesture of resistance and critique-Freud's stubborn belief that the struggle is not yet, is never, over. Adorno says that:

the uncompromisingly critical thinker who neither signs over his consciousness nor lets himself be terrorized into action, is in truth the one who does not give in. Thinking is not the intellectual reproduction of what already exists anyway. As long as it doesn't break off, thinking has a secure hold on possibility. Its insatiable aspect, its aversion to being quickly and easily satisfied, refuses the foolish wisdom of resignation. The utopian [and, I think one can add, the heroic] moment in thinking is stronger the less it-this too is a form of relapse-objectifies itself into a utopia and hence sabotages its realization. Open thinking points beyond itself.”

PROGRESSIVE UNIVERSALS

GLOBAL FEMINISMS

Brooklyn Museum (2007)



Ryoko Suzuki, Bind, 2001

Global Feminism: Transnational Women's Activism, Organizing and Human Rights

eds. Myra Marx Ferree and Aili Mari Tripp

“Feminism in the twenty-first century has unmistakably global dimensions but is also ever less obviously one, single movement. Diversity and difference, not only by race and class but also by national culture and policy, shape the interests that women define as their own. The demands that feminists raise are increasingly being articulated in transnational forums and with the support of international organizations. In this book we define “feminism” as the broad goal of challenging and changing gender relations that subordinate women to men and that thereby also differentially advantage some women and men relative to others.”

VIRTUAL CYBORG BODIES

Second
Life

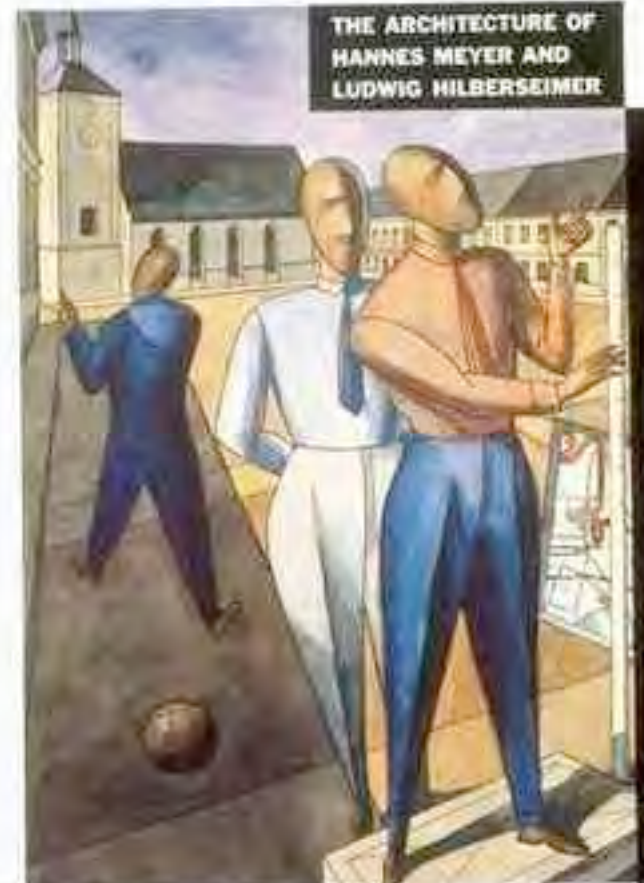


POSTHUMANISM

- After humanism
- Beyond humanism

Architecture of the Post-Humanist Subject

modernism and the
posthumanist subject



K. Michael Hays

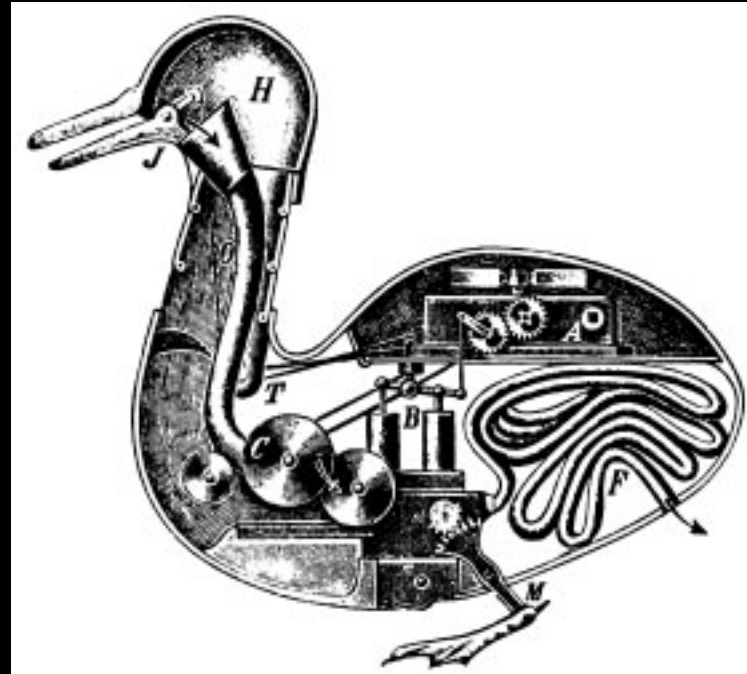
Posthumanism is the conscious response, whether applause or regret, to the dissolution of psychological autonomy and individualism brought by technological modernization; it is a mobilization of aesthetic practices to effect a shift away from humanist concept of subjectivity and its presumptions about originality, universality, and authority.

K. Michael Hays

*Modernism and the Posthumanist Subject:
The Architecture of Hannes Meyer and Ludwig Hilberseimer*

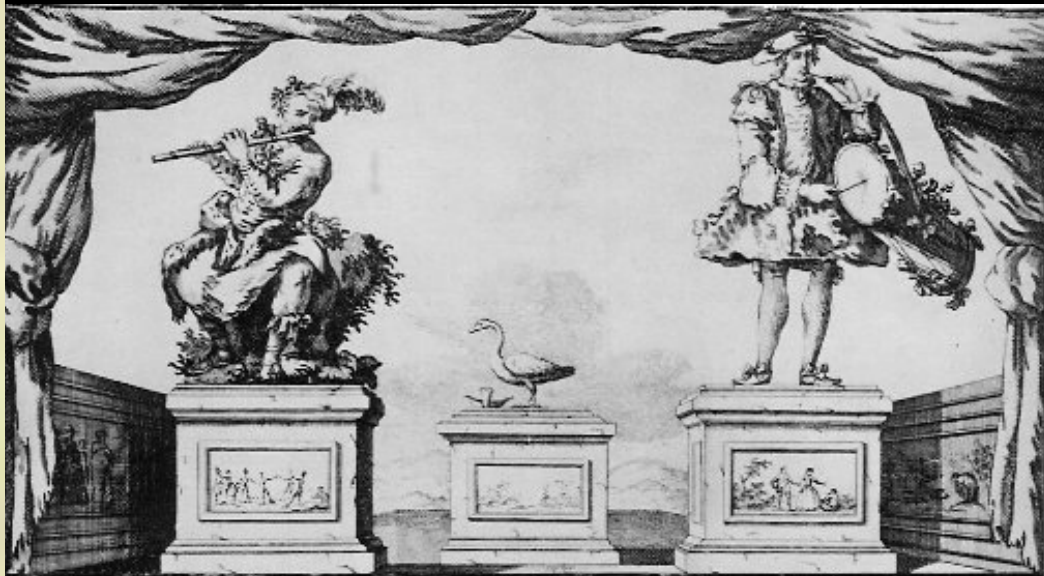
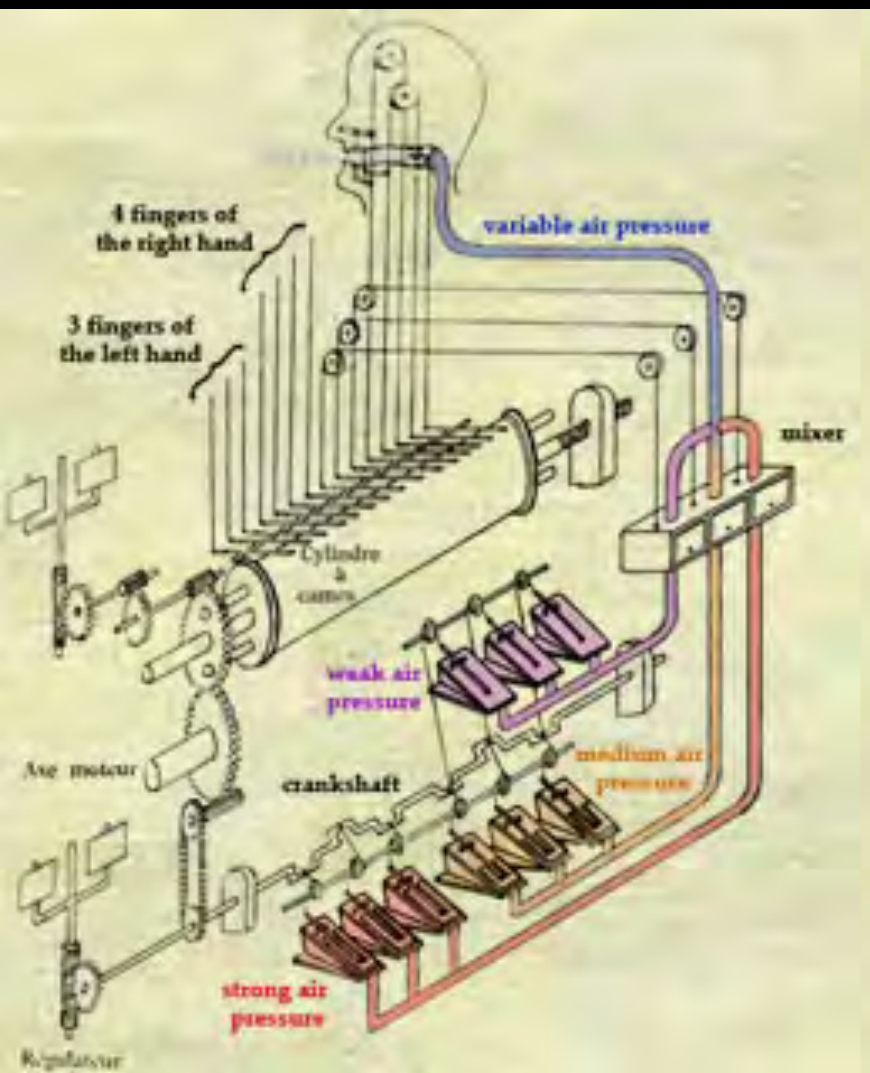
POSTHUMAN

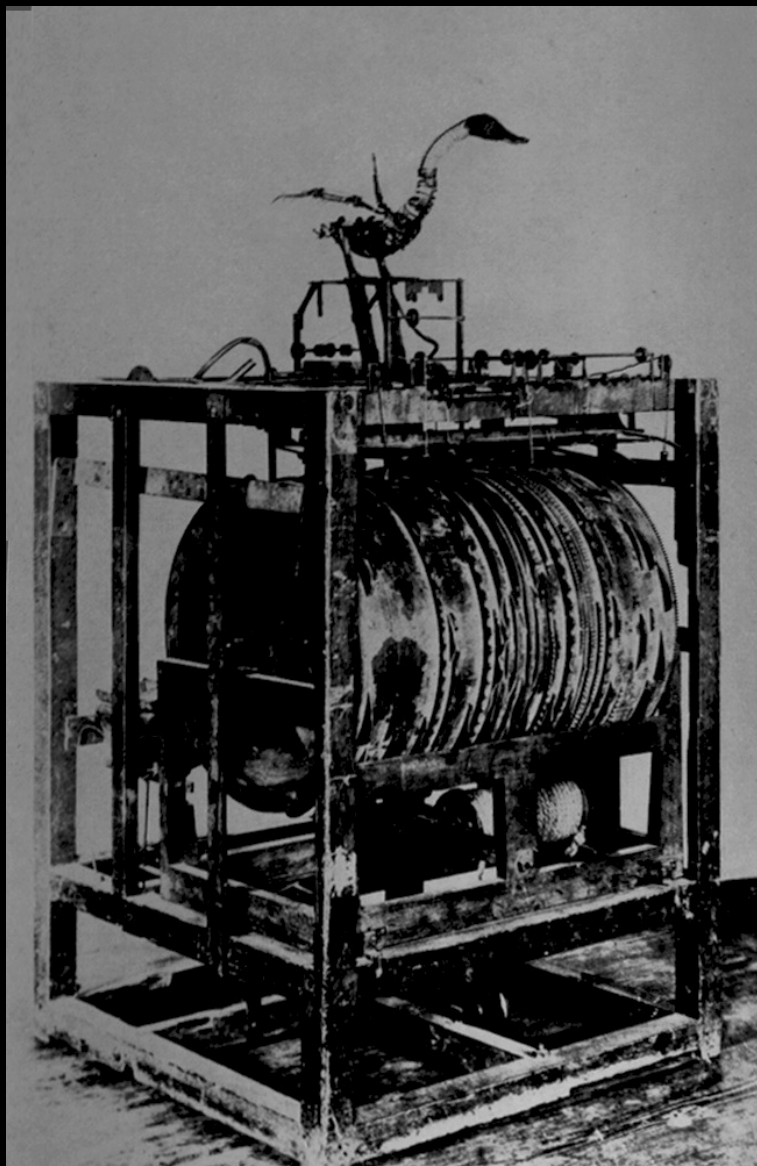
- Science Fiction
- Cyborg
- Futurist Writing
- Beyond Human
- Robotics



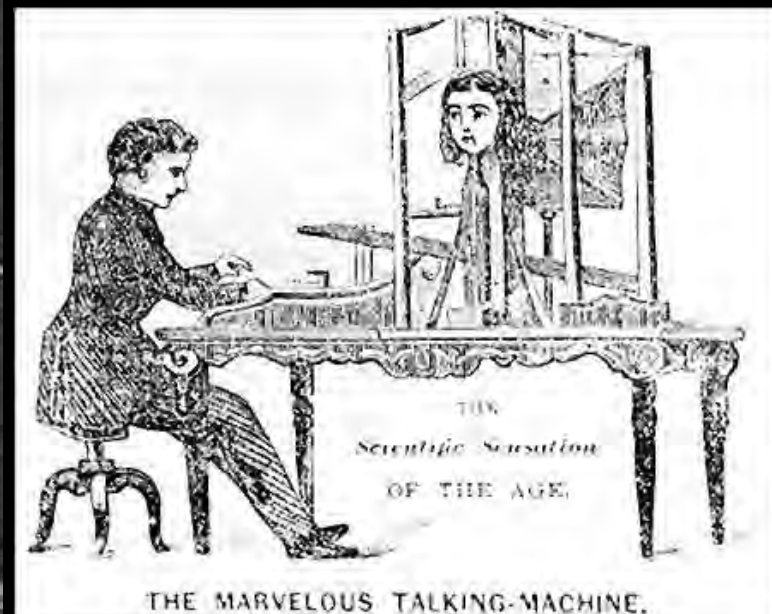
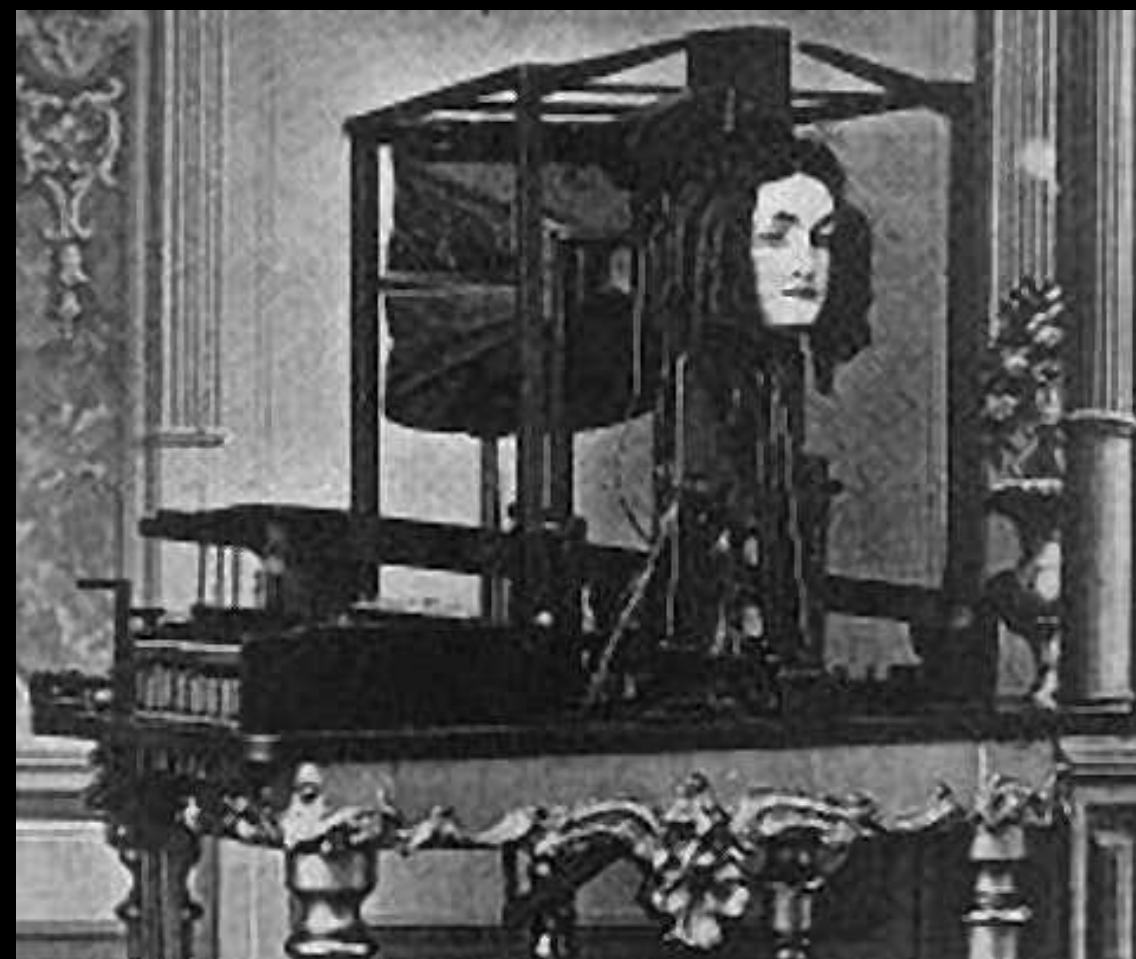
Jacques de Vaucanson, Flute Player, 1737; Digesting Duck, 1739







<http://www.youtube.com/watch?v=UoJ0OHwI3b8>



Joseph Faber, Euphonia/Talking Machine, 1830-40

The New York Times - 15th April 1893

A MECHANICAL MAN

Some New Features of an Invention Many Will Remember.

Many years ago, before the application of steam as a motive power had reached the stage of development of the present time, many devices were constructed to make the force subservient to man. One of the most ingenious of these many devices could have been seen within recent times in a down-town junkshop. It was the figure of a man, constructed of iron, and fitted with internal mechanism, which, when put in motion by steam, was intended to cause the figure to move much as a human being walks.

During the past two years Prof. George Moore, a native of Canada, has been at work upon a motive engine, built upon the same plans as the old discarded "iron man," and at last he has succeeded in constructing a model which will not only walk about with a firm steady gait, but also exerts considerable tractive power. The iron man, as shown in the accompanying illustration, seems in appearance like a mediaeval knight. In operation the action is quite natural, the hip, knee, and ankle movements being successfully imitated. It moves along at a brisk walk, and can cover about four or five miles an hour. The iron man is about 6 feet in height, and when in full operation, it is said, cannot be held back by two men.



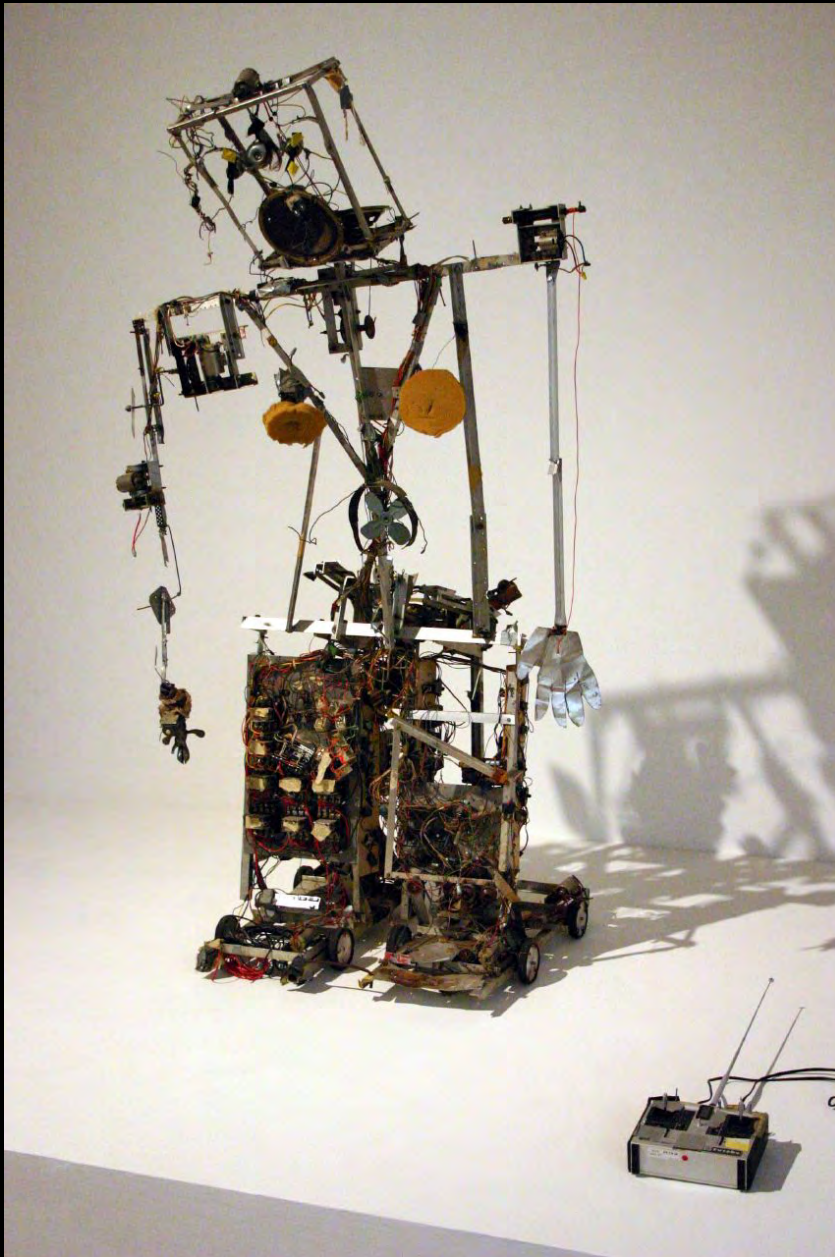


r 0 0 1
Hel (Evil Maria)



gausswerks.com

Fritz Lang, *Metropolis*, 1927



Nam June Paik and Shuya Abe, Robot K-456, 1964



<https://www.youtube.com/watch?v=5-QIm7EgNIM>



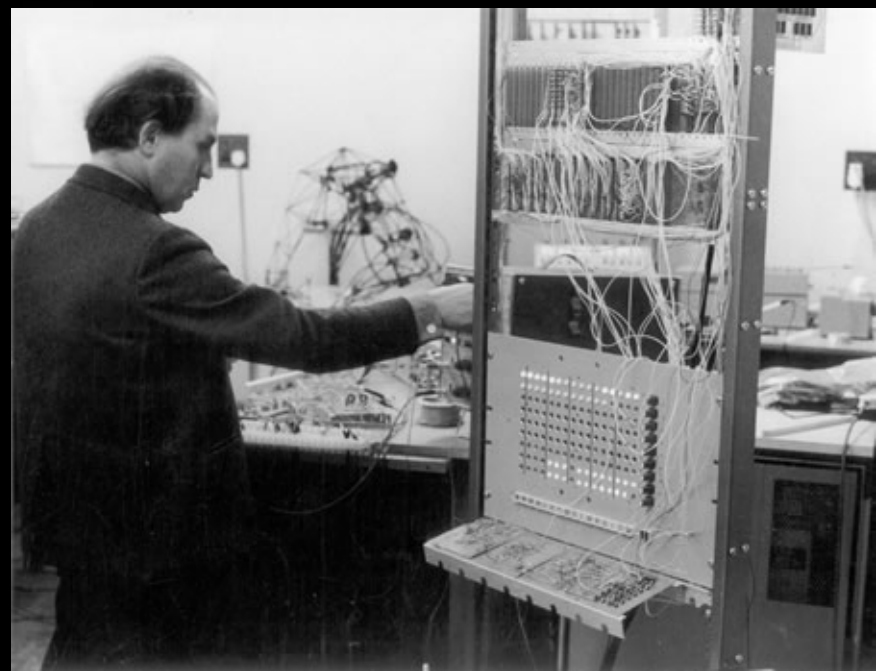
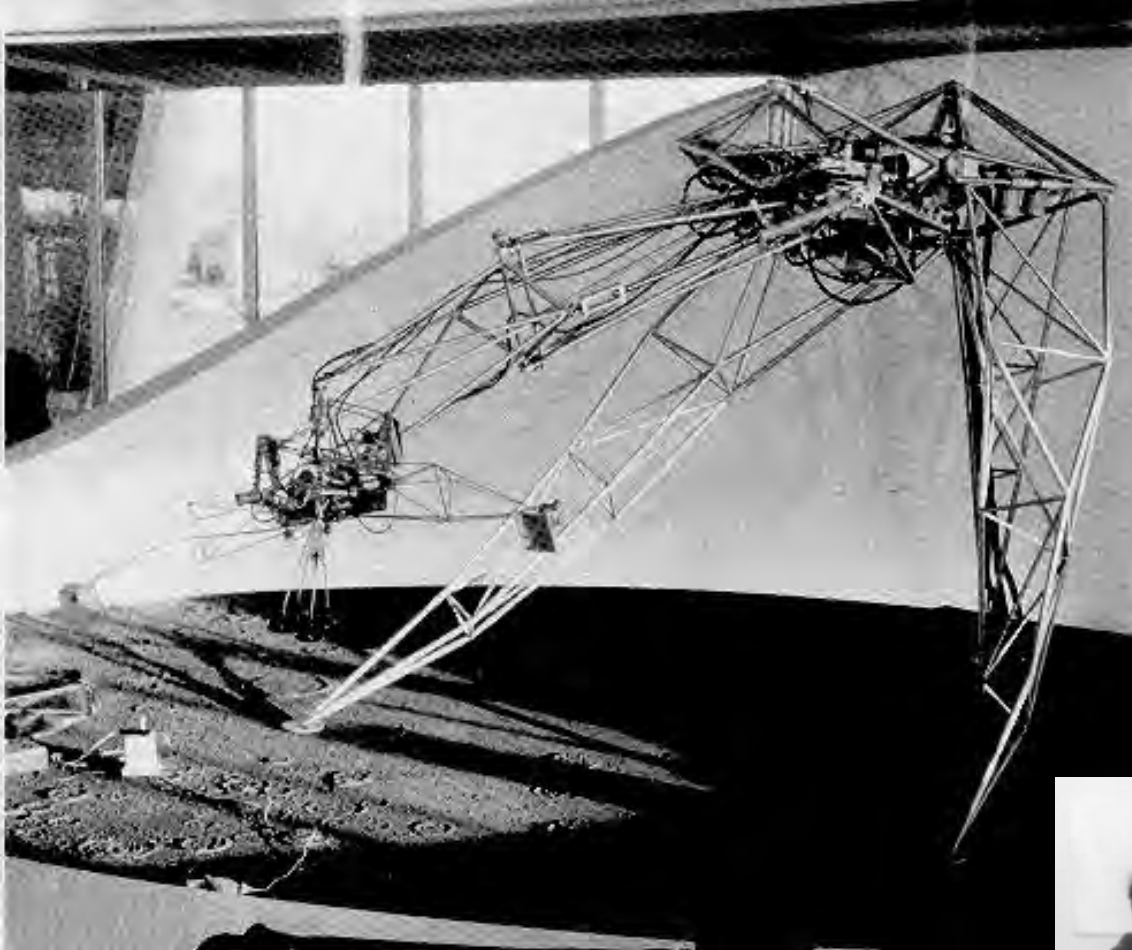
Robot and Cyborg Art

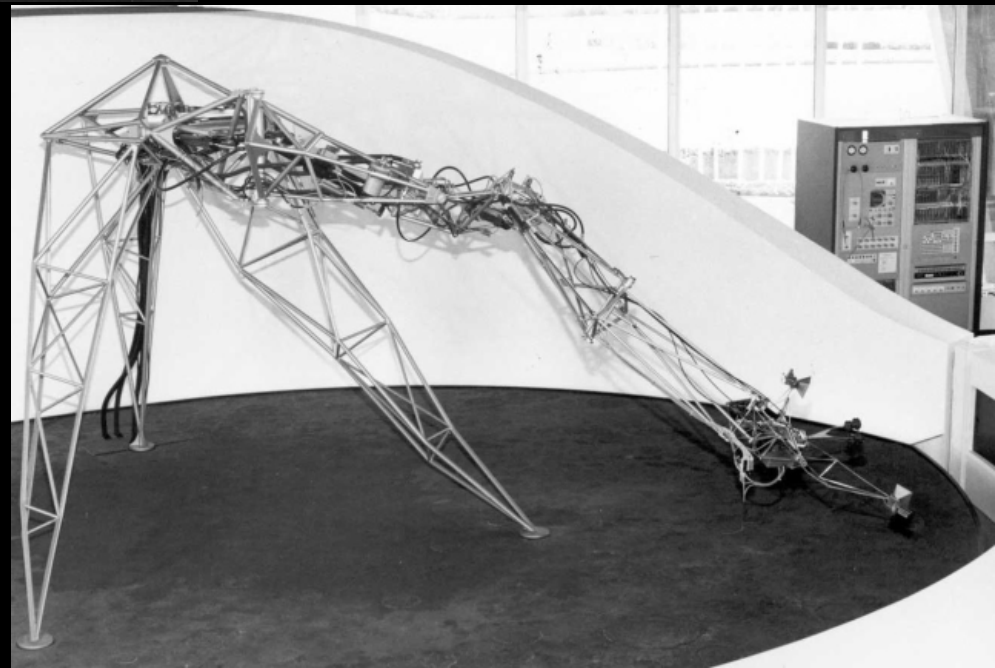
Jack Burnham (1968)

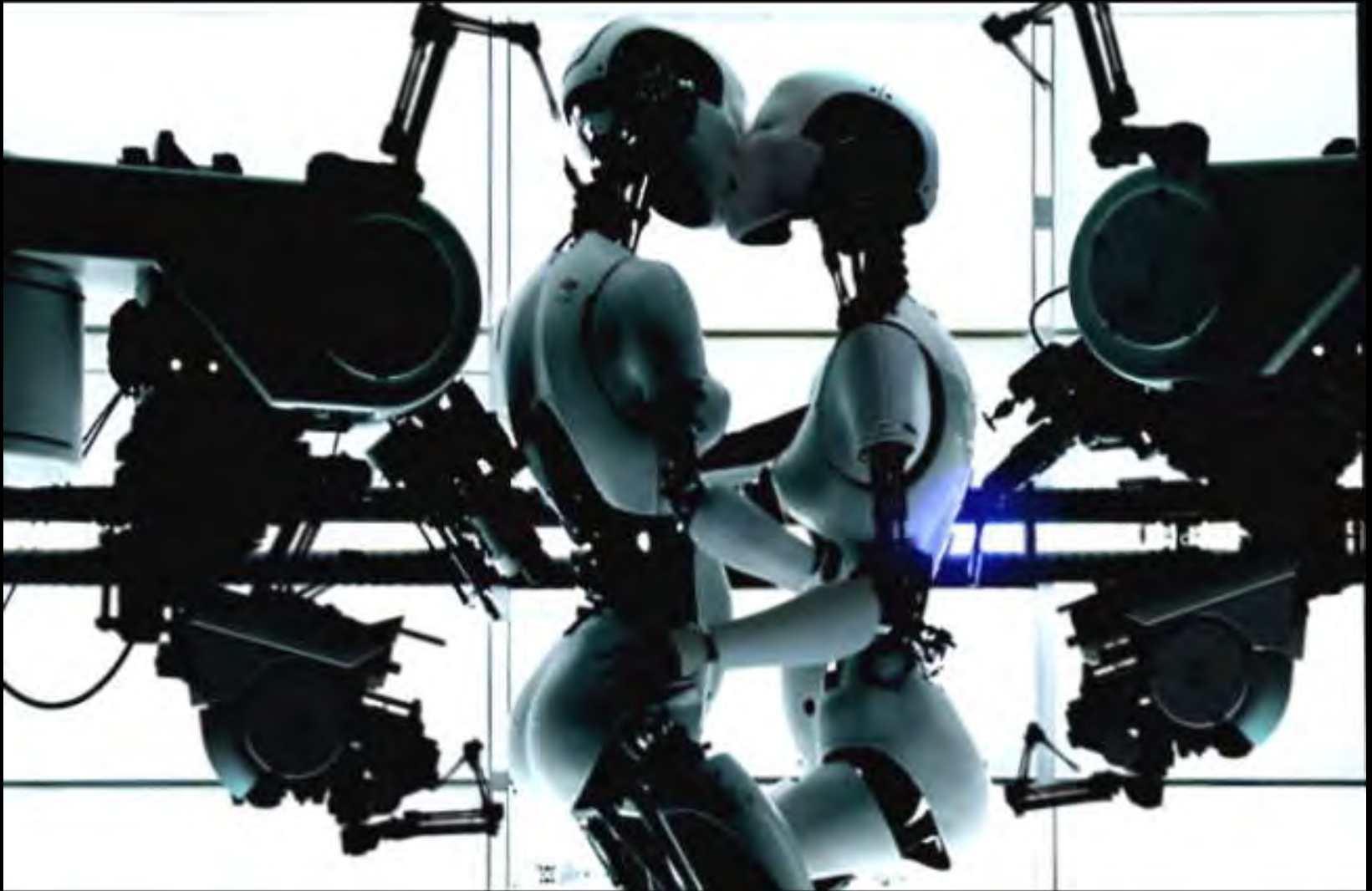
...the cultural obsession with the art object is slowly disappearing and being replaced by what might be called 'systems consciousness'. Actually, this shifts from the direct shaping of matter to a concern for organizing quantities of energy and information. Seen another way, it is a refocusing of aesthetics awareness – based on future scientific-technological evolution – on matter-energy information exchanges and away from the invention of solid artefacts. These new systems prompt us *not* to look at the 'skin' of objects, but at those meaningful relationships within and beyond their visible boundaries.



Edward Ihnatowicz, The Senster, 1969-70







Bjork/Chris Cunningham, *All Is Full of Love*, 1999

<https://www.youtube.com/watch?v=EApBXQdu6q4>

Robotic Art

Eduardo Kac and Marcel.li Antunezroca
(1997)

...Robotic art can occur in physical places, in telematic space, in virtual environments, or any combination of these that includes an actual location.

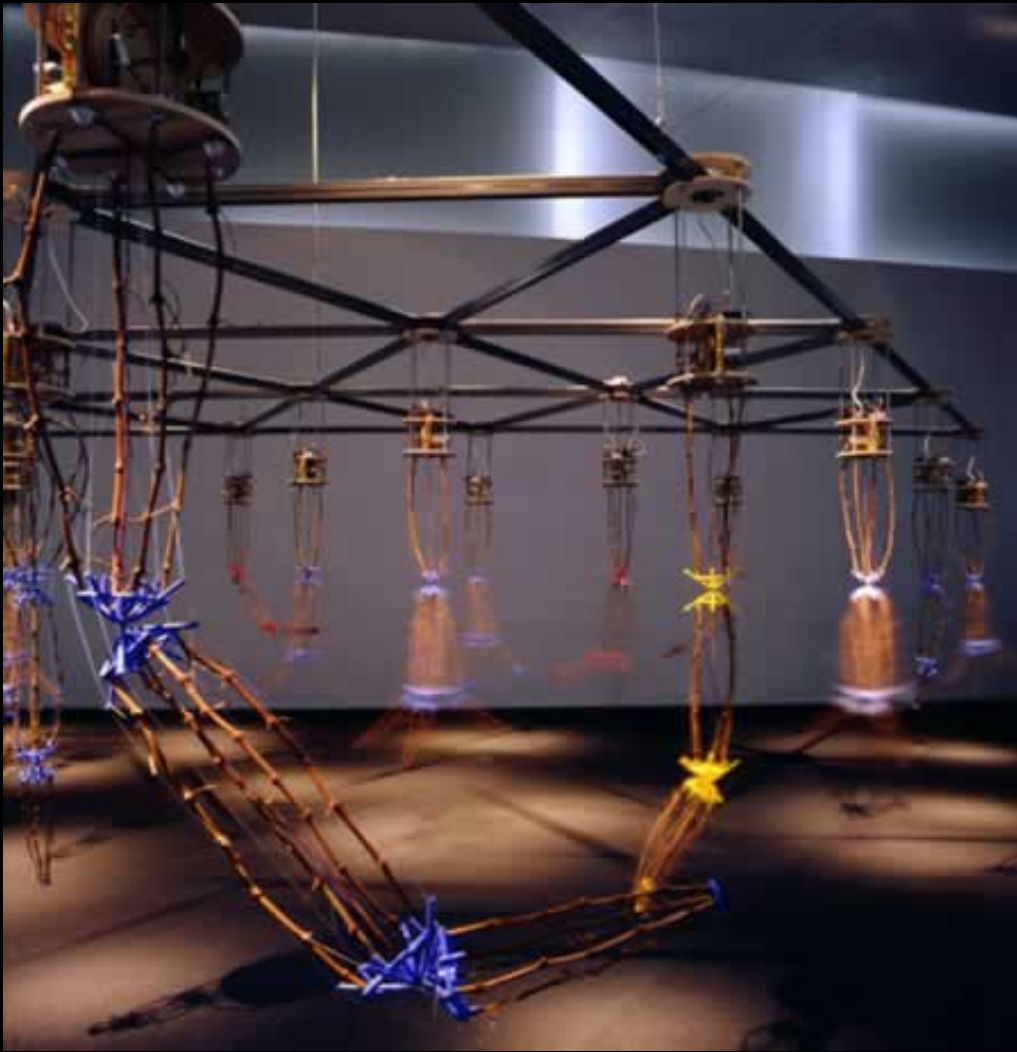
Robots belong to a new category of objects and situations disruptive to the traditional taxonomy of art. Where one once spoke of boundaries, borders, limits we find today new territories. These new artistic terrains are open to new possibilities and relate to one another in productive ways. In these new heterodox terrains, hybrid creatures within no preceding models are born. Coupled with telecommunications media...robotics gives origin to telepresence art, in which the robot is the host of a remote subject.



Hanson Robotics – Albert Einstein, 2011

<http://hansonrobotics.wordpress.com>

THE UNCANNY VALLEY



Kenneth Rinaldo, Autopoiesis, 2004

http://www.youtube.com/watch?v=qLYvF83Qrrc&playnext=1&list=PLB91A51EC459449E4&feature=results_main

EMBODIED CYBORG

Pippilotti Rist, "Open My Glade"

April 6 - May 20, 2000

One-minute video segments
every hour at 15 past the hour
from 9:15 am to 12:15 am

on the NBC Astrovision by Panasonic video
screen in Times Square



EMBODIED CYBORG

- Maurice Merleau-Ponty, *Phenomenology of Perception* (1945):
- Maurice Merleau-Ponty defines phenomenology as the study of essences, including the essence of perception and of consciousness. He also says, however, that phenomenology is a method of describing the nature of our perceptual contact with the world. Phenomenology is concerned with providing a direct description of human experience. Perception is the background of experience which guides every conscious action. The world is a field for perception, and human consciousness assigns meaning to the world. We cannot separate ourselves from our perceptions of the world.
- primacy of perception
- tactile eyes
- mobile body
- N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (1999)
- “...The body has disappeared [and] a certain kind of subjectivity has emerged. This subjectivity is constituted by the crossing of the materiality of informatics with the immateriality of information...The body’s dematerialization depends in complex and highly specific ways on the embodied circumstances that an ideology of dematerialization would obscure...Because incorporating practices are always performative and instantiated, they necessarily contain improvisational elements that are context specific.”

