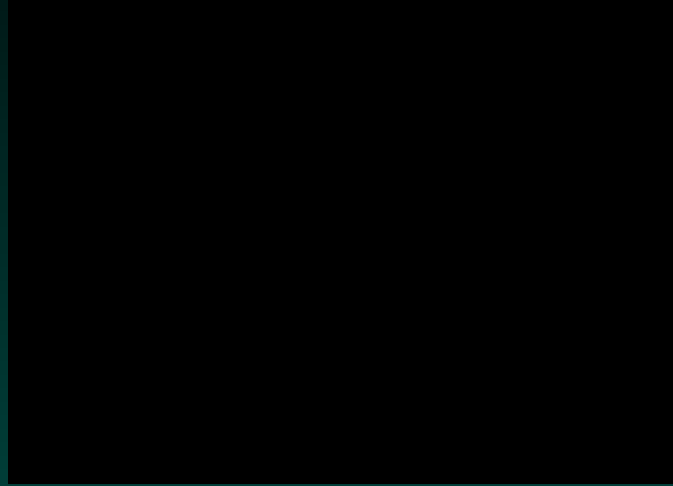


Hacking Humanism



Life as we have
known it is over.

Resistance is futile.

Cyborg



Cyborgs and Space

12

Altering man's bodily functions to meet the requirements of extraterrestrial environments would be more logical than providing an earthlike environment for him in space. Artificial organism systems which would extend man's capabilities, self-regulatory controls are one possibility.

By Manfred C. Clynes and Nathan S. Kline



Manfred C. Clynes is a research scientist in the Department of Psychiatry at the University of Pennsylvania. He is a graduate of the University of Pennsylvania and the University of California, Berkeley. He has published numerous papers on the subject of artificial organisms and systems, and is the author of the book, "Cyborgs and Space."

Nathan S. Kline has been a pioneer in the field of psychiatric genetics. He is a graduate of the University of Pennsylvania and the University of California, Berkeley. He has published numerous papers on the subject of artificial organisms and systems, and is the author of the book, "Cyborgs and Space."

This article is based on a paper presented at the 1962 meeting of the American Psychological Association, San Francisco, California. It is reprinted by permission of the publisher, Basic Books, Inc., New York, N.Y.

SPACE travel challenges mankind to develop techniques for man's survival in that if you are not to take the return part in the new biological revolution, you will be left behind. The challenge is to find a way to alter man's organismic capabilities which after evaluation have been proved to be necessary for his survival.

The task of adapting man's body to an environment he may choose will be made more by artificial knowledge of biological functioning, the artificial aspects of which are fast beginning to be understood and investigated. In the past, evolution brought about the changes of body functions in different environments. Having no of them, it will be possible to alter man's body functions in a controlled manner to meet the demands of, for example, artificial environments of space.

Historically, man's organismic functions in various environments are designed to permit a wide spectrum of the particular environment of his organism. Examples of these successful alternate systems provided by nature are the human body's ability to function in both land and water, and the ability of the human body to function in both air and water. The human body's ability to function in both air and water is a result of the human body's ability to function in both air and water.

Science has shown that man's body is not designed for artificial environments. However, the human body and plants can be altered to function with altered abilities in the environment to create a "new" kind of organism. It is not a question of time to give a child the body, an apparently "unnatural" organism.

However, if the organismic knowledge about the human body is used, it could be made to function in a "new" kind of environment. It is not a question of time to give a child the body, an apparently "unnatural" organism.

“Altering man’s bodily functions to meet the requirements of extraterrestrial environments would be more logical than providing an earthly environment for him in space.”

Cyborgs and Spa

Altering man's bodily functions to meet the requirements of extraterrestrial environments would be more logical than providing an earthly environment for him in space. Artificially regulated, self-regulatory control.

By Michael J. Thompson, Editor of Science



Michael J. Thompson, Editor of Science, is a member of the American Association of Anatomists and the American Association of Physicists. He is also a member of the American Association of Physicists and the American Association of Anatomists. He is also a member of the American Association of Physicists and the American Association of Anatomists.

Science is a field of knowledge that is constantly expanding. It is a field of knowledge that is constantly expanding. It is a field of knowledge that is constantly expanding. It is a field of knowledge that is constantly expanding.

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Scientific knowledge of immediate knowledge, the scientific aspects of which are not beginning to be understood and investigated. In the past, scientific knowledge about the nature of life in various environments (living or not) will be possible to obtain. It is now possible to obtain knowledge of the nature of life in various environments (living or not) will be possible to obtain.

Historically, man's body has been designed to perform in a specific environment. The particular environment of the organism. Examples of these wonderful alternate environments provided by nature are the body's ability to perform in a specific environment. The particular environment of the organism. Examples of these wonderful alternate environments provided by nature are the body's ability to perform in a specific environment.

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“Altering man’s bodily functions to meet the requirements of extraterrestrial environments would be more logical than providing an earthly environment for him in space.”

“For the exogenously extended organizational complex functioning as an integrated homeostatic system... we propose the term cyborg.”

“There are many actual cyborgs among us in society. Anyone with an artificial organ, limb or supplement (like a pacemaker), anyone programmed to resist disease (immunized) or drugged to think/ behave/ feel better (psychopharmacology) is technically a cyborg.”



Gray et al, *Cyborg Handbook*
(New York: Routledge, 1995)

“A much higher percentage participate in occupations that make them into metaphoric cyborgs, including the computer keyboarder joined in a cybernetic circuit with the screen, the neurosurgeon guided by fiber optic microscopy during an operation, and the teen gameplayer in the local video game arcade.”



N. Katherine Hayles, “The Life Cycle of Cyborgs” (1995)

Donna Haraway
“A Cyborg Manifesto”

Donna J. Haraway



Simians, Cyborgs, and Women
The Retention of Nature.

Donna J. Haraway



Companion Species, and Women
of Nature.

Two Boundary Breakdowns

- That between animals (or other organisms) and humans
- That between self-controlled, self-governing machines and organisms especially humans

“By the late twentieth century in United States, scientific culture, the boundaries between human and animal is thoroughly breached. The last beachheads of uniqueness have been polluted if not turned into amusement parks-- language, tool use, social behavior, mental events. Nothing really convincingly settles the separation of human and animal”

Donna J. Haraway



Simians, Cyborgs, and Women
The Retention of Nature.

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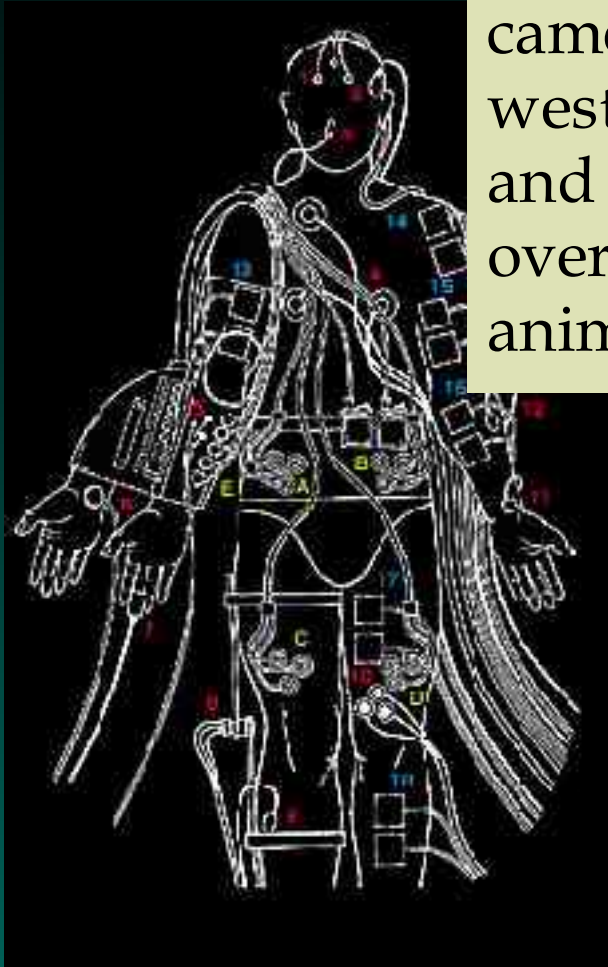
“Late twentieth century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert”

Donna J. Haraway



Primate Visions, Cyborgs, and Women
The Reinvention of Nature.

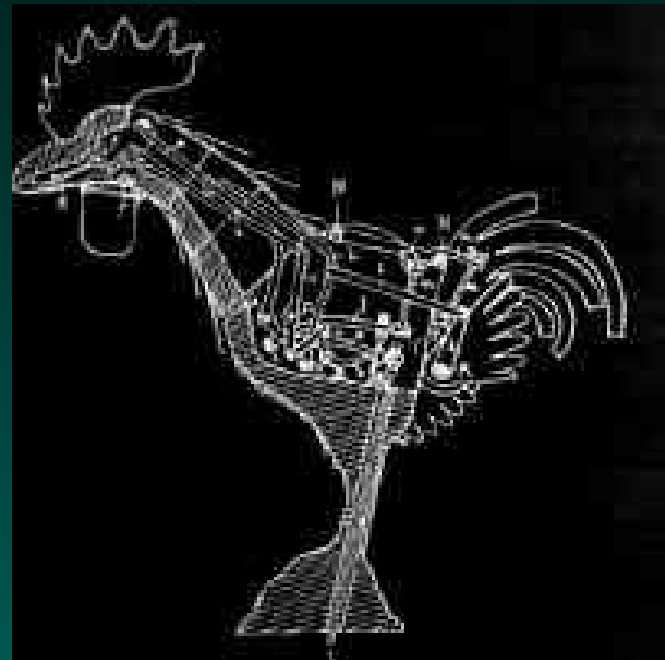
“The concern about man’s animal and mechanical nature came forcefully together in the west in the seventeenth century and did so in terms of a debate over what was called the animal-machine.”

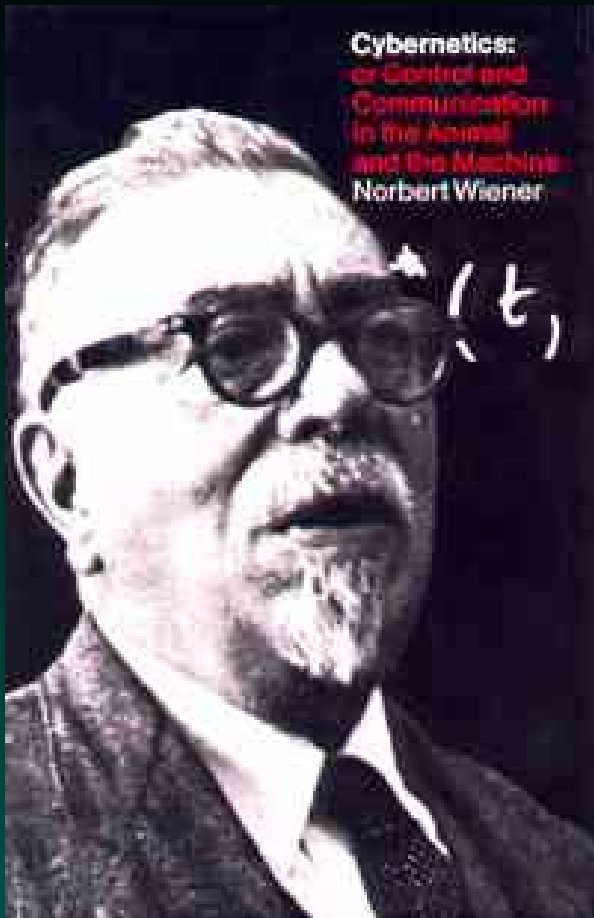


Bruce Mazlish, *The Fourth Discontinuity*
(New Haven, Yale University Press, 1993)

Rene Descartes
Discourse On Method

La Mettrie
L'Homme-Machine





“We have decided to call the entire field of control and communication theory, whether in the machine or in the animal, by the name *Cybernetics*, which we form from the Greek *Kybernetes* or steersman.”

$$\left. \begin{aligned} k(\omega) &= \frac{1}{2\pi} \int_{-\infty}^{\infty} K(t)e^{-i\omega t} dt \\ q(\omega) &= \frac{1}{2\pi} \int_{-\infty}^{\infty} \overline{Q(t)}e^{-i\omega t} dt \\ r(\omega) &= \frac{1}{2\pi} \int_{-\infty}^{\infty} R(t)e^{-i\omega t} dt \end{aligned} \right\} \quad (3.907)$$

$$\Phi_{11}(\omega) + \Phi_{22}(\omega) + \overline{\Phi_{12}(\omega)} + \overline{\Phi_{21}(\omega)} = |k(\omega)|^2 \quad (3.908)$$

$$q(\omega)\overline{k(\omega)} = \Phi_{11}(\omega) + \Phi_{21}(\omega) \quad (3.909)$$

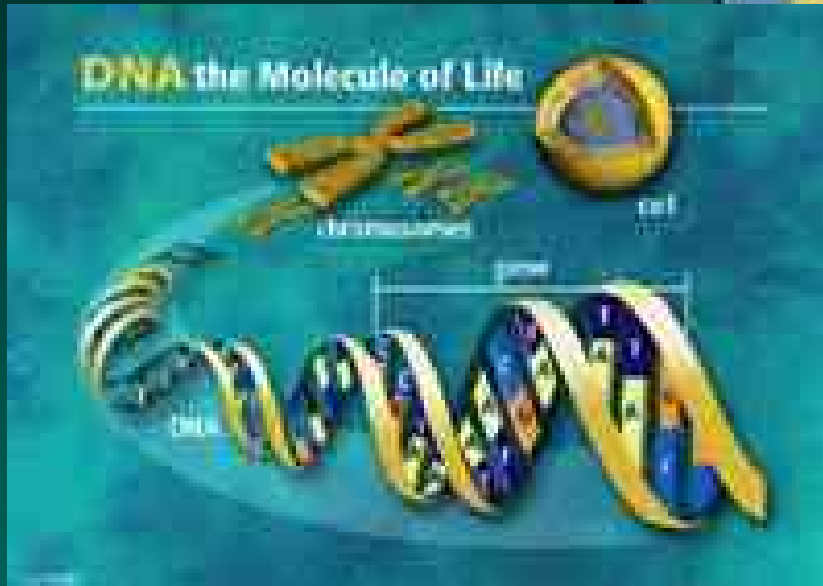
For symmetry we write $\Phi_{21}(\omega) = \overline{\Phi_{12}(\omega)}$. We can now determine $k(\omega)$ from Eq. 3.908, as we have defined $k(\omega)$ before on the basis of Eq. 3.74. Here we put $\Phi(t)$ for $\Phi_{11}(t) + \Phi_{21}(t) + 2\Re\{\Phi_{12}(t)\}$. This will give us

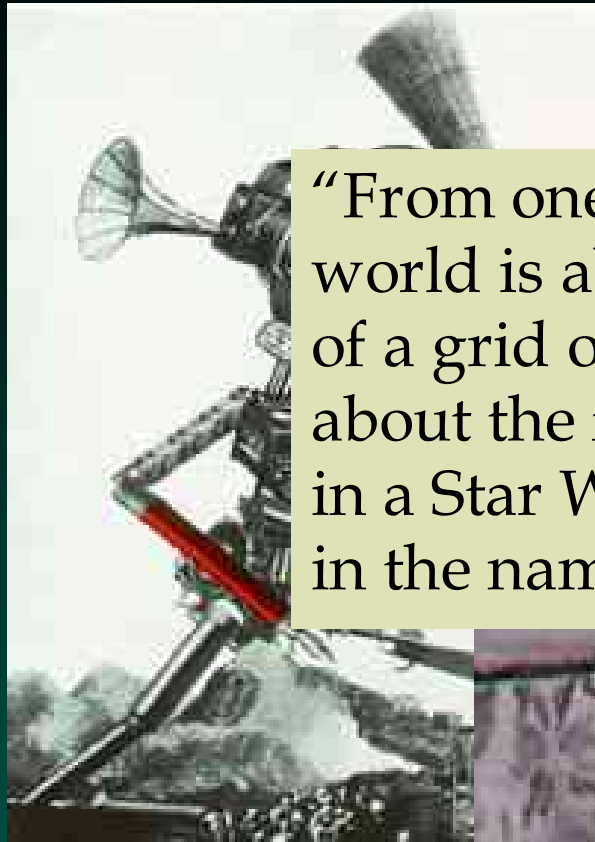
$$q(\omega) = \frac{\Phi_{11}(\omega) + \Phi_{21}(\omega)}{k(\omega)} \quad (3.910)$$

Hence

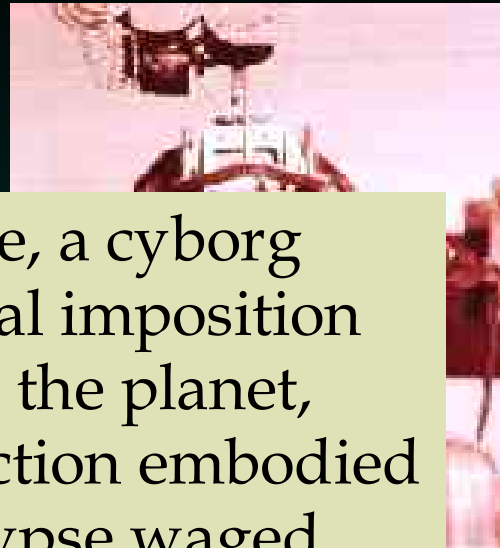
$$Q(t) = \int_{-\infty}^{\infty} \frac{\Phi_{11}(\omega) + \Phi_{21}(\omega)}{k(\omega)} e^{i\omega t} d\omega \quad (3.911)$$

Human Genome Project





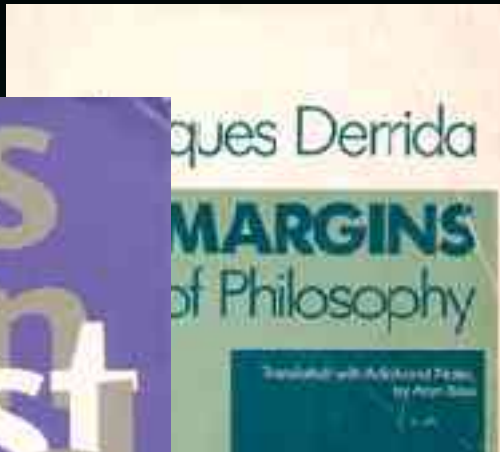
"From one perspective, a cyborg world is about the final imposition of a grid of control on the planet, about the final abstraction embodied in a Star Wars apocalypse waged in the name of defense."





ess
ays
most
modern
culture

edited by eyal zohar & jahnke wertz



VOLA
BOD

TOWARD A CORPO



ELIZABETH GROSZ

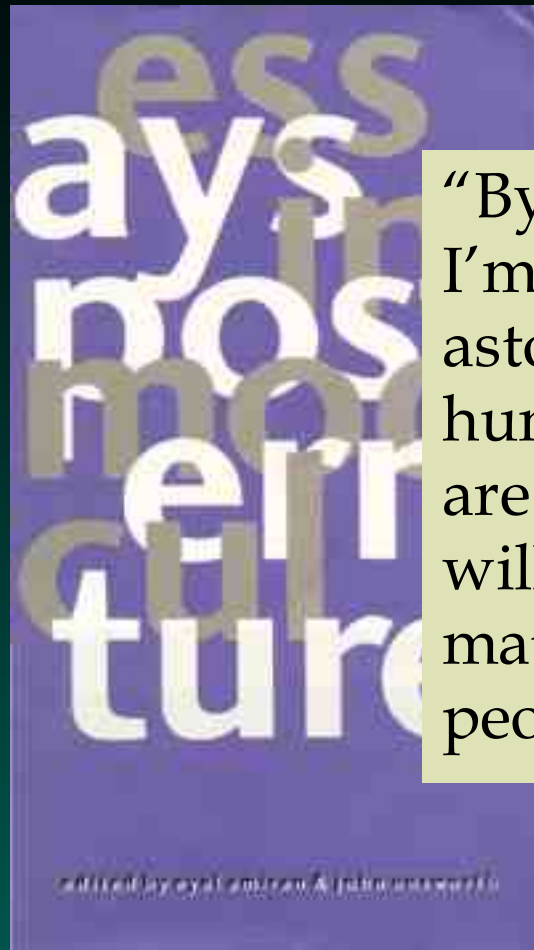
A square portrait of a woman with dark hair, looking directly at the camera, set against a warm, reddish-orange background.

*Woman
Native
Other*

A square portrait of a woman's face, looking slightly to the side, set against a warm, yellowish-orange background.

Trinh T. Minh-ha

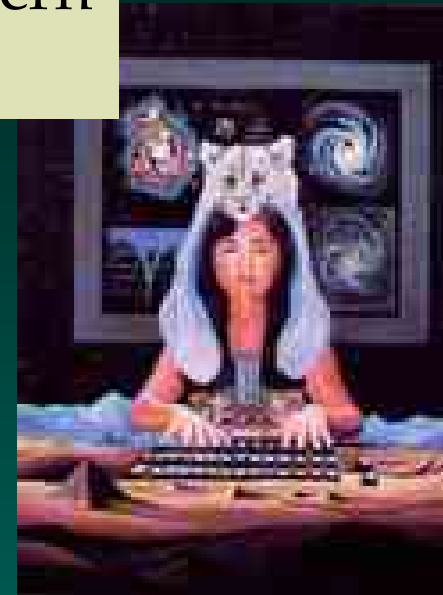




“By using the cyborg as a starting point, I’m saying--and this is by no means an astounding observation--rhetorics of humanism and organicism have produced, are currently producing, and, I dare say will probably always produce radical material inequities for the vast majority of people.”

Allison Fraiberg, “Of AIDS, Cyborgs, and Other Indiscretions” (1993)

“Perhaps we can learn from our fusion with animals and machines how not to be Man, the embodiment of Western Logos.”



Donna Haraway, *Simians, Cyborgs, and Women*
(New York: Routledge, 1991)



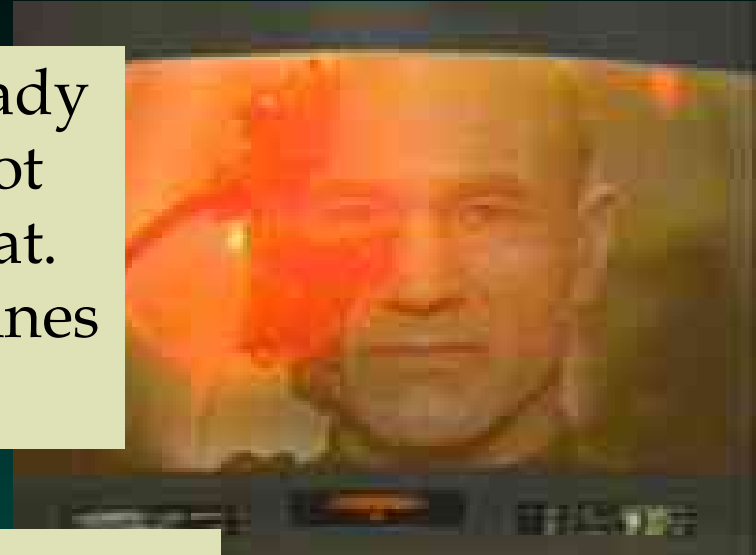
Mark Dery, *Escape Velocity*
(New York: Grove Press, 1996)

“The trespass across the once-forbidden zone between the natural and the artificial, the organic and the inorganic render much of what we know--or thought we knew--provisional.”

Conclusions

1. We are Borg. We are already assimilated. The cyborg is not some future promise or threat. It already describes and defines who and what we are.

2. Resistance is futile. Because we are already cyborg, the cyborg is not something that could be resisted with any amount of strength or resolve.



Conclusions

3. From one perspective, a perspective that still values the human and humanist thinking, this can only appear to be a bad thing—dehumanizing operation.

4. From another perspective, a perspective that is open to alternative arrangements and values, this post-human entity challenges the humanist assumptions that have all too often created problems for us and for the *others* who inhabit this planet with us.

