

CYBORG MANIFESTO

Part - 1

DEFINING THE CYBORG

Author defines the anchoring metaphor of her essay, this image of cyborg, in four different ways:

Cybernetic Organism

A Hybrid of Machine and Organism

A Creature of Lived Social Reality (of the present)

Creature of Fiction (of the future)

"Cybernetics" is the study of communication and control processes in biological, mechanical, and electronic systems. Accordingly, a "cybernetic organism" is one that functions according to a communication and control network.

A "hybrid" in genetics refers to the offspring of genetically dissimilar parents or stock. Something that is a "hybrid of machine and organism" would of necessity contain both organic and inorganic materials.

A cyborg would have elements that would qualify it as classically "alive" and then again, not.

These four descriptions of the cyborg (cybernetic, hybrid, of the present, of the future) are not discrete, but rather co-determinate.

For instance, Haraway argues that in philosophical terms, there is no real space between "lived social reality" and "fiction", because one category is constantly defining and refining the other.

Haraway points out how feminists have deployed the notion of "women's experience" using it both as "fiction and a fact of the most crucial, political kind." In a similar way, Haraway argues, the cyborg will "change what counts as experience" for women in the late twentieth century.

The struggle to define and control the cyborg amounts to a border war, Haraway argues.

Ironically enough, she adds, this war is fought on a terrain that is largely an "optical illusion": the space between science fiction and today's fact.

Anyone who believes cyborgs are things of the future is mistaken. Modern medicine is full of cyborgs already, Haraway points out, as is modern reproduction, manufacturing and modern

warfare. In short, writes Haraway, "we are cyborgs", whether we know it or not, if only because it is the cyborg which "is our ontology, it gives us our politics."

Author argues that cyborg politics have been linked to oppressive mythologies: scientific progress; racist, male-dominated capitalism; the exploitation of nature to serve the needs of culture. This doesn't have to remain the case, however.

Indeed, Haraway writes that her Manifesto is an argument for "pleasure in the confusion of boundaries and for responsibility in their construction."

As part of the reasoning to the metaphor of cyborg, author highlights the ability, where cyborg does not depend on human reproduction, for the existence, it is "outside gender".

Indeed, the cyborg is no Frankenstein, Haraway argues, waiting to be saved by its master/father. Neither does it seek completeness by searching for a heterosexual soul mate, or desire community by way of a nuclear family.

However, the cyborg certainly has a history, tied to military. The cyborg serves as the end-point in the West's story of escalating domination of its environment: the notion of a solitary man launched into space. Like the military-funded space man sent to explore new worlds, Haraway argues that the cyborg is "oppositional, utopian and completely without innocence." Cyborgs are not reverent, Haraway writes, "for they do not remember the cosmos."

Because they are the "illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism," writes Haraway, cyborgs are never entirely trustworthy creatures.

BORDER CROSSINGS

Haraway cites three crucial "border crossings" which she argues make the call to "return to nature" an impossibility for feminists.

The first is the boundary breakdown between humans and animals, which has occurred as a result of things like pollution, tourism and medical experimentation.

Baboon hearts transplants, she points out "evoke national ethical perplexity-- for animal rights activists at least as much as for the guardians of human purity."

The second boundary transgression Haraway describes is between humans and machines. In the past, machines were not self-moving, self-designing, and autonomous. Today, however, machines are making "ambiguous the difference between the natural and the artificial," writes Haraway.

Without ever citing the Internet or virtual reality technologies, she alludes to as much when she writes, "Our machines are disturbingly lively, and we ourselves frighteningly inert."

The third boundary crossing Haraway calls a subset of the second: the eroding space between "the physical and the non-physical."

Haraway cites the cruise missile (which can be transported undetected on the back of a pickup truck) as well as the microchip (which is the size of a thumbnail) as sources of two different sorts of dis-ease that plague the modern world. The first is related to the actual health hazard of producing microprocessors. The second is pervasive stress (the "invisible illness") of consuming them everyday through computer and media culture.

Haraway details these three border crossings (there are others) in order to get American socialist feminists used to the idea of politically negotiating through a technological world.

The political struggle is neither the wholesale adoption nor rejection of technoculture, but rather the capacity to understand both perspectives at once. As author puts it, "each reveals both dominations and possibilities unimaginable from the other vantage point."

Part - 2

POLITICS OF CYBORG

"I do not know of any other time in history," Haraway writes, "when there was greater need for political unity to confront effectively the dominations of 'race', 'gender', 'sexuality', and 'class'."

Although she speaks of a "need for unity," Haraway takes issue with the standard modus operandi of feminist groups: political organizing based around what are called "identity politics."

Cyborgs are hybrid and provisional, Haraway points out, and for this reason, they can have no truck with political categories requiring a stabile, essentialist identity.

Historically, essentialism has served as an excuse for (first world) women's domination over others, "for their own good."

Rather than using identity as a political category, Haraway advocates feminists to consider building coalitions based on the more cyborg-friendly notion of "affinity."

To ground her argument, Haraway analyzes the phrase "women of color," suggesting it as one possible category of affinity politics. Whereas a category like "Chicana" designates a sort of racial essence, the theorist Chela Sandoval has argued that there is nothing that a woman of color essentially is. Sandoval coins the term "oppositional consciousness" to describe the effect

that the phrase "women of color" has had on the feminist community. Haraway takes oppositional consciousness to be consistent with a cyborg politics, because rather than identity it stresses how affinity comes as a result of "otherness, difference, and specificity."

Haraway has mixed feelings on socialism's contribution to affinity politics. On one hand, she lauds Marxism's emphasis "on the daily responsibility of real women to build unities rather than to naturalize them." On the other hand, she admits that, "The inheritance of Marxian humanism, with its pre-eminently Western self, is the difficulty for me."

Haraway argues that "women", like "homosexual" and "youth", was invented as a social category without much regard given to the lives of actual women, and sees women as a socially constructed category, rather than an essential truth.

She strongly criticizes the radical feminism of Catherine MacKinnon, arguing that the search for the "essential woman" is not only elusive, it is dangerous.

Part - 3

CYBERNETIC STRUCTURE OF CYBORG

She begins by explaining what she sees as the "major rearrangements" in the "world-wide social relations tied to science and technology," since the advent of World War II. Haraway's instruction takes the form of a two column chart.

On the left hand, she describes what she calls the "comfortable old hierarchical dominations" we've all come to know. On the right hand, she details the "scary new networks", which she calls the "informatics of domination." Haraway lists thirty-three categories in all. Here is a sample:

Representation	Simulation	Eugenics	Population Control	Microbiology, tuberculosis	Immunology,
AIDS	Reproduction, Replication	Family/Market/Factory	Women in the Integrated		
Circuit	Public/Private	Cyborg citizenship	Sex	Genetic engineering	Second World War
					Star Wars

"First," she points out, "the objects on the right-hand side cannot be coded as 'natural', a realization that subverts naturalistic coding for the left-hand side as well."

Because nature and culture exist side by side, Haraway explains that scientists have ceased speaking about essential components of phenomena and instead discuss things in terms of interconnected networks.

This is a long way of saying communications and biotechnologies are now of a piece, suggests Haraway. For example, philosophizing in an era of managed pregnancies and cloning now has to

do with essentialist notions of human life than it does with the "design, boundary constraints, rates of flows, systems logics, and costs of lowering constraints" of population control.

The breakdown in natural sciences is mirrored in the social sciences

In the social sciences, Haraway argues, it has become increasingly "irrational" to invoke concepts like primitive and civilized to describe populations. Instead, discussions of development and under-development, as well as rates and constraints of modernization, dominate.

Haraway argues that where once biology was seen as a discipline in which "organisms were the object of knowledge", today biotechnology has rendered "the translation of the world into a problem of coding."

Haraway points out that new biotechnologies concern more than human reproduction, mentioning agriculture and energy as just two of these other categories.

In addition to biotechnology, communications technology has rendered the everyday world a problem of code, as well. "Communications technologies depend on electronics," Haraway points out, and these in turn rely on computer programming.

Haraway's list of elements in the modern communications simulacrum include: "modern states, multinational corporations, military power, welfare state apparatuses, satellite systems, political processes, fabrication of our imaginations, labour-control systems, medical constructions of our bodies, commercial pornography, the international division of labour, and religious evangelism."

Thus, "Informatics of Domination," a movement in which biotechnologies become indistinguishable from communications technologies, in part because both are structured like networks, and both rely on "the transmission of code" for their functioning. This refashioning of the biological world takes in the social science world as well; so much so that it is now impossible to speak of things like economics without resorting to the language of the network and the code.

Part - 4

ECONOMIC MATTERS

In addition to producing new sexualities and ethnicities, the 'New Industrial Revolution' is producing a new world-wide working class, one that is neither gender nor race neutral. While white men in advanced industrial societies are becoming more prone to "downsizing", it is women, Haraway argues, who are the preferred "home-workers" of the new economy.

Haraway borrows the term "homeworker" from Richard Gordon, who uses it to describe not only the act of electronics assembly (done mainly by women overseas) but also the "feminizing" of labor in general.

"To be feminized means," Haraway explains, "to be made extremely vulnerable."

Haraway elaborates on workplace feminization, noting that it can also be interpreted as an of the following: to be exploited as a reserve labour force; seen less as workers than as servers; subjected to arrangements on and off the paid job that make a mockery of a limited work day; leading an existence that always borders on being obscene, out of place, and reducible to sex.

Haraway argues that the feminization of labor is not new to certain segments of the population. Black women in the United States, for example, have long known had to deal with the structural underemployment ('feminization') of black men, as well as their own highly vulnerable position in the wage economy.

The difference is that now "many more women and men will contend with similar situations," Haraway maintains, "which will make cross-gender and race alliances on issues of basic life support (with or without jobs) necessary, not just nice."

Even though women are not disappearing from the job rolls at the same rates as men, argues Haraway "the feminization of poverty" has also become an urgent focus for women in the new economy. This is due in part to the homework economy (which renders stable jobs the exception rather than the rule), as well as expectation that women's wages will not be met with equal male child support. The dismantling of the welfare state, too, will have major developments on gender and race in the new economy.

One of these developments, Haraway points out, is that teenage women in industrializing areas of the Third World will simultaneously increasingly find themselves the sole or major source of a cash wage for their families, while being denied access to land ownership.

Haraway continues that in the new economy, poverty is feminized as well as labor. In addition, she argues that as privatization grows larger, public space grows smaller for workers in the new economy.

Part - 5

INTEGRATED CIRCUIT

Author considers the ways in which the new economy has served to break down earlier distinctions between public and private domains.

In the industrial era, Haraway argues, it was popular to speak about women's lives by making distinctions between (for example) the factory, the market, and the home. Today, homework economies and surveillance technologies make such distinctions impossible to maintain.

To describe the fact that women today live in a world "intimately restructured through the social relations of science and technology," Haraway borrows the metaphor of the "integrated circuit" from theorist Rachel Grossman.

Essentially, an integrated circuit consists of a semiconductor wafer on which thousands or millions of tiny resistors, capacitors, and transistors are fabricated. Today, integrated circuits are used for many different types of functions: as amplifiers, oscillators, timers, counters, computer memory, or microprocessors. Haraway wants to make an argument here that in a similar way, women in the integrated circuit can have multiple functionality.

As a metaphor for sociality, the integrated circuit works as a network, argues Haraway, one that suggests "the profusion of spaces and identities and the permeability of boundaries in the personal body and in the body politic." Haraway uses the integrated circuit metaphor to consider seven traditional private/public distinctions in industrial society: Home, Market, Paid Work Place, State, School, Clinic-Hospital, and Church.

when Haraway considers "home" as part of an integrated circuit she sees the following connections: Home as women-headed household; home as site of serial monogamy; home as flight of men; home as old women alone; home as technology of domestic work; home as paid homework; home as re-emergence of home sweat-shops, home-based businesses and telecommuting; home as electronic cottage; home as index of urban homelessness; home as site of migration; home as module architecture; home as reinforced (simulated) nuclear family; home as site of intense domestic violence.

While this may seem depressing to some, Haraway argues that this need not be the case, because feminist politics, like cyborg ontology, works as a series of "partialities" than as a totalizing whole.

"The feminist dream of a common language," she argues, "like all dreams for a perfectly true language, of perfectly faithful naming of experience, is a totalizing and imperialist one." Like cyborgs, feminism does not need a totality to work well.

THEORISTS OF CYBORG

Haraway mentions contemporary science fiction writers as "theorists for cyborgs."

The remainder of her essay details two strategies feminists are currently using to create cyborg mythologies: constructions of 'women of colour' in poetry and fiction, and the portrayal of 'monstrous selves' in feminist science fiction.

In Haraway's "new myth", Sister Outsider exists symbolically in both an "offshore" and an "onshore" variety. Offshore, she represents a woman "whom US workers, female and feminized, are supposed to regard as the enemy preventing their solidarity, threatening their security." Onshore, Haraway argues, Sister Outsider represents the fact that women can be manipulated on the basis of their ethnic identity for division, competition, and exploitation in the same industries.

Women of color have been able to exploit the language of their colonizers, as well as be exploited by it.

Haraway argues that women writers of color write stories that detail "the power to survive, not on the basis of original innocence, but on the basis of seizing the tools to mark the world that marked them as other."

Haraway calls writing by women of color to be the "pre-eminent technology of cyborgs."

She writes that "These cyborgs are the people who refuse to disappear on cue, no matter how many times a 'western' commentator remarks on the sad passing of another primitive, another organic group done in by 'Western' technology, by writing."

A pause for recapitulation.

"Certain dualisms have been persistent in Western traditions", she reminds her reader. These dualisms have been linked to a system of logic that must isolate "others" (women, people of colour, nature, workers, animals) whose task it is to mirror the self. As Haraway puts it, "The self is the One" (who is not dominated, who knows.) Yet, she argues, "to be One is to be an illusion, and so to be involved in a dialectic of apocalypse with the other."

Haraway argues that high-tech culture challenges these dualisms, in part because, "it is not clear who makes and who is made in the relation between human and machine." argues Haraway.

At last: "In so far as we know ourselves in both formal discourse (for example, biology) and in daily practice (for example, the homework economy in the integrated circuit)," she writes, "we

find ourselves to be cyborgs, hybrids, mosaics, chimeras." She names the replicant Rachel in the Ridley Scott film Blade Runner as "the image of a cyborg culture's fear, love, and confusion."

Haraway wonders aloud, "Why should our bodies end at the skin, or include at best other beings encapsulated by skin?"

Haraway notes that in feminist science fiction, cyborg monsters "define quite different political possibilities and limits from those proposed by the mundane fiction of Man and Woman."

She also points out that monsters have always "defined the limits of community in Western imaginations."

One of the ways the feminist cyborg science fiction has worked as a mode of progressive politics, Haraway argues, is that it has emphasized regeneration over rebirth (a common theme of traditional stories involving monstrous entities.) She points to the salamander, (a creature in nature that routinely regenerates) as a way of understanding what she means, here.

"For salamanders," Haraway notes, "regeneration after injury, such as the loss of a limb, involves regrowth of structure." She concedes that although the regrown limb can be monstrous it can also be profoundly potent.

In a similar way, Haraway argues, "We have all been injured, profoundly. We require regeneration, not rebirth, and the possibilities for our reconstitution include the utopian dream of the hope for a monstrous world without gender."

If nothing else, Haraway argues, feminist science fiction's reconceptualization of the cyborg shows readers that "The machine is not an 'it' to be animated, worshipped, and dominated." Rather, she maintains, "The machine is us, our processes, an aspect of our embodiment. We can be responsible for machines; they do not dominate or threaten us."

CRUCIAL ARGUMENTS

1. "The production of universal, totalizing theory is a major mistake that misses most of reality, probably always, but certainly now."

2. "Taking responsibility for the social relations of science and technology means refusing an anti-science metaphysics, a demonology of technology."

3. Cyborg imagery suggests "a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves."

She admits that though both creation and destruction are bound to be part of this "spiral dance" of a cyborg future, she would still "rather be a cyborg than a goddess."

Once again, Haraway emphasizes that hers is not a dream of a universal feminist language for all, but rather of a "powerful infidel heteroglossia."

For Haraway, a cyborg politics will be both pleasant and dangerous, and will require both a building and a destroying of "machines, identities, categories, relationships, space stories."