The message implied by the promoters of the Wall fragment is clearly a thinly veiled ideology. Capitalist free market ideology asserts itself by offering itself to the consumer, thus negating in one fell swoop any hint that there might be any choice. What makes it a collector's item is not really that it is in limited supply; it is a collector's item only while it still con-

tains an aura of the cold war. In its commodity form it's sold as if it were a cultural treasure. In the examples on display at the major shopping malls you'll find it enclosed in a velvet draw-string bag.

As commodities the Berlin Wall fragments defy memory: as fragments they are dead history. As the Wall came down its historical meaning went with it. Wolf Biermann (an East German folksinger and Nina Hagen's stepfather) asked in an open letter to taz (11.11.89) what would happen to the rubble from the Wall? He was probably the first to raise any questions. He wondered whether it is better that the pieces become souvenirs for Americans or whether they could perhaps be used for a better purpose. Biermann's question is buried under an avalanche of commentaries on the Wall. As simple as his question might seem, it raises an interesting point: the instant the Wall came down it seemed that anything might have been possible. This is not the impression one gets from most West German or North American papers.

That the fragments became commodities/souvenirs is perfectly in line with the logic of the production of commodities; that is, this seems to be a natural outcome. In retrospect it shouldn't seem surprising that the fragments became commodities, but this is not a natural result. The Wall built by East German workers was never meant to be anything other than a wall. That the pieces now are seen as commodities/souvenirs signifies that the Wall as monument has receded into the irretrievable past. The presence of the fragment in the present is contingent and tenuous. The emphasis placed on the authenticity of the fragment obscures its commodity character.

By invoking its authenticity, by highlighting its aura ("let your fingers wander slowly across its battered surface") the promoters of the Wall fragments are encouraging western consumers (western workers) to partake in the triumphal procession - to buy something that once symbolized oppression. The East German workers were forced to build the wall which prevented free travel to the West. Now that the Wall is fallen, its fragments have come to mean something quite different: the adoption of capitalist market principles, class division, unemployment, homelessness, etc. They have exchanged one prison for another and Berlin is a whole city again.

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JOYCE NELSON

Culture and Agriculture

PART II: Monoculture

Life is plurality, death is uniformity. By suppressing differences and peculiarities, by eliminating different civilizations and cultures, progress weakens life and favors death. The ideal of a single civilization for everyone, implicit in the cult of progress and technique, impoverishes and mutilates us. Every view of the world that becomes extinct, every culture that disappears, diminishes a possibility of life.

Octavio Paz

hat I have previously termed "the Disneyfication of culture and agriculture" is much more than the robotic takeover through simulacra of species and nature at specific Disney-sites around the planet. It is more than the perverse preference for the "life-like" that permeates post-modernity. Disneyfication might best be understood by reference to that term dreamed up by Walt himself to name his overarching goal: "imagineering."

The word conflates three others image, imagination and engineering - and is thus a term entirely suited to this century: a century in which Descartes' metaphoric image of the cosmos, and all matter except the human body, as a lifeless clockworks or engine, became entirely concretized, i.e., literally lived out in every aspect of society. Through the triumph of Mechanism over Vitalism as the prevailing scientific and socio-economic paradigm, the machine became the highest value and most numinous symbol in

Disney was thus the fulfillment of three centuries of Cartesian thought and rampant industrialization, but he was also the harbinger of the future. Reaching the peak of his career at mid-century, Disney was both sign and stimulus of a culture so thoroughly "imagineered" that the ability to imagine alternatives different from the prevailing technological dictates had all but entirely atrophied.

In the immediate post-World War II period, Siegfried Giedion observed in Mechanization Takes Command:

The assembly line and scientific management are essentially rationalizing measures. Tendencies in this direction extend relatively far back. But it was in the twentieth century that they were elaborated and became a sweeping influence. In the second decade (with Frederick Taylor as the central figure), it was scientific management that aroused the greatest attention: the interest of industry, the opposition of workers, public discussion, and governmental enquiries. This is the period of its further refinement and of its joining with experimental psychology (Frank B. Gilbreth, central and most universal figure). In the third decade (Henry Ford, the central figure), the assembly line moves to the key position in all industry

Writing in 1948, Giedion recognized the unquestioned power accruing to the key figure in the Mechanistic paradigm: the engineer. "In the time of full mechanization," he writes, "the production engineer gained sway over manufactures of the most diverse types, seeking every possible opening in which an assembly line might be inserted." Replacing artist, priest, shaman, and even politician as the most numinous figure of our time, the engineer (as Disney recognized) is the techno-magician fulfilling Descartes' dream.

But even such an astute observer as Siegfried Giedion could not have known that those "manufactures of the most diverse types" over which the production engineer would gain sway included literally every realm of life. Genetic engineering, or biotechnology, is in this sense the logical development of the rise to supremacy of technology as our primary metaphor and the engineer as hallowed techno-magician. Jeremy Rifkin, the most outspoken opponent of biotechnology, writes: "Engineering is a process of continual improvement in the performance of

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a machine, and the idea of setting arbitrary limits to how much 'improvement' is acceptable is alien to the entire engineering conception."

The lack of limits in the engineering mind-set is reflective of boundary-problems in every area of the dominant, techno-imperialist culture. Indeed, the degree to which the boundary between human and machine has blurred is noted by Bill McKibben in *The End of Nature*. Discussing the effects of global warming through the overwhelming release of "greenhouse gases" like carbon dioxide, McKibben writes:

Over the last century a human life has become a machine for burning petroleum. At least in the West the system that produces carbon dioxide is not only huge and growing but also psychologically all-encompassing. It makes no sense to talk about cars and power plants and so on as if they were something apart from our lives — they are our lives.

Even more disturbing, we must recognize that the last three words of McKibbben's phrase, "cars and power plants and so on," actually encompass those two huge interlocking areas known as "the culture industries" and "agri-business." The bullet we must bite is that petroleum-based film, video-tape and audio-tape comprise the centrepiece of the former, just as petrochemicals are the basis for the latter. Our

dependency on fossil fuels is virtually total. Most problematic of all, we have exported that dependency as the model of "progress" everywhere, encouraging some five billion others to similarly become "machines for burning petroleum."

Having already achieved a petrochemicals revolution in North American farming praxis during the World War II years, the corporate non-farm sector controlling agriculture set its sights on the global market. During the 1950s and 1960s, scientists employed by multinational agribusiness developed new strains of hybrid seeds called high-yield varieties (HYVs) that were hyped as part of a so-called "Green Revolution" to end world hunger.

Susan George, author of *How the Other Half Dies*, has traced the Green Revolution back to 1943 when "Four American plant geneticists/pathologists financed by the Rockefeller Foundation were sent to Mexico" where they founded the forerunner of CIMMYT (Mexico's "non-profit" agricultural research centre) and developed corn and wheat HYVs from 1944 to the early 1960s. "With this success under its belt, the Rockefeller Foundation teamed up with Ford to repeat the performance in Asia – this time with rice – and founded the International Rice Research Institute (IRRI) in the Philippines in 1962."

The Green Revolution was heavily promoted throughout the Third World, especially between 1965 and 1973. Coun-

tries were encouraged to abandon traditional farming methods and adopt the new HYV monoculture farming methods to produce cash-crops with mass yield to be sold on the world market. Such crops were highly dependent on massive use of petrochemicals pesticides, herbicides, and fertilizers – sold by the same companies which developed the "miracle seeds." As Jack Dovle documents in Altered Harvest:

In many countries
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In 1967, the Indonesian government contracted with Ciba-Geigy to provide the technical apparatus for an experimental Green Revolution rice production project. Following this contract, companies such as Hoechst, AHT, Mitsubichi, Coopa, and Ciba-Geigy all worked with the Indonesian government in dispensing the ingredients of the Green Revolution – including fertilizer, pesticides, and management services, and the miracle seeds themselves.

As a result, more than twenty percent of Indonesia's wet-rice land – roughly 2.5 million acres – had become part of the Green Revolution by 1970.

This transformation to HYV monoculture happened throughout the underdeveloped world as companies like Imperial Chemicals Industries (ICI), Monsanto, Bayer, and Dow also jumped on the monoculture HYV bandwagon of promotion. As Susan George documents, the main beneficiaries of Green Revolution hype were Mexico, India, Pakistan, Turkey, Afghanistan, Nepal, North Africa, Taiwan, the Philippines, and Sri Lanka, which turned over millions of acres to the new wheat and rice strains. According to George, in many countries American interests pushed the Green Revolution "as an alternative to land reform and to the social change reform would require."

While increasing cash-crop yields, the new farming methods of HYV monoculture nevertheless had several serious repercussions. First, they almost completely replaced the subsistence crops by which a given region had previously supplied its own food base. This meant that peasant farmers and the local population were forced to rely on imported foodstuffs since the land had been turned over to cash-crops for export.

Second, the new farming methods of the Green Revolution threw millions out of work in the rural areas of underdeveloped countries. As Susan George notes, "In the beginning, the Green Revolution







In both agribusiness and "the culture industries" the same goals prevail: mass yield, cash-crops for export, uniformity of product

increased the need for labour; there were fertilizers and pesticides to be spread; moreover, there were two harvests a year. Hired labourers saw the increased yields and increased their wage demands accordingly. Tractors do not present this disadvantage, as wealthy farmers were quick to understand."

Similarly, rice HYVs introduced in Indonesia "changed harvesting practices" because the big landowners bought First World tractors for tilling, thereby replacing traditional jobs for women in the rice fields. As well, they invested in new rice milling technology, through which some two million women rice pounders lost their work. Made redundant by the new technologies which the wealthy landowners quickly adopted, millions of rural peasants across the Third World were forced to migrate to the cities to look for work.

Such disruption by agribusiness interests occurred throughout the underdeveloped world during the 1960s, mainly

benefitting the multinationals of the First World and the tiny percentage of landowners in Third World countries. The Green Revolution was more than an increase in crop volumes through HYV monoculture; it was a fully technological revolution and intended as such by the corporate interests involved. Even more specifically, it meant that Third World agriculture would become just as addicted to petrochemicals as the First World.

But besides this vulnerability in HYV monoculture, there is another, initially unforeseen by the engineering mind-set enthralled by mass-yield. Acres and acres of a single genetic strain of one crop may adequately meet the agribusiness criteria of uniform plants all ripening at the same time, all same-sized for packaging, and all ideal for machine-harvesting, but such uniformity makes the entire crop fully susceptible to any new strain of pest or any other unforeseen factor. Ironically, the desire for total control of the crop through monoculture has often constellated its opposite: loss of the entire yield because of this uniform vulnerability. It is this feature of monoculture, as well as its dependency on petrochemicals, that is motivating many farmers to return to traditional practices involving mixed crops, crop rotation, and organic methods.

It should not surprise us to learn that the U.S.-exported Green Revolution in agriculture historically coincided with that country's effort to establish television networks throughout the Third World. During the late 1950s and throughout the 1960s, U.S. corporate and network advisors convinced most of the underdeveloped world to invest in TV hardware, thereby becoming dependent on the glut of American programming available for export.²

In both agribusiness and "the culture industries" the same goals prevail: mass yield, cash-crops for export, uniformity of product, but the comparison is even more specific. Just as the Green Revolution "miracle seeds" brought with them an entire socio-economic transformation of the recipient countries - including a reliance on imported petrochemicals, foodstuffs, new technologies and a complete disruption of traditional culture- so, too, the simultaneous adoption of TV hardware (that "miracle seed" of U.S. enterprise) brought with it another layer of socioeconomic transformation that included reliance on imported TV programming, consumer products, and a more decisive disruption of traditional culture.

In both instances, the underdeveloped world was enfolded into U.S. monoculture, as thoroughly as Canada had already been subsumed by the same processes. As U.S. anthropologist Edmund Carter once noted: "We use media to destroy cultures, but we first use media to create a false record of what we are about to destroy."

It is not surprising then that at the same time both the exported Green Revolution and TV revolution were utterly transforming the underdeveloped world, the Disney enterprises offered North American TV viewers a series depicting

peoples and places around the world. Carpenter writes:

Twenty cultures were chosen, scattered among tundra, desert, and jungle, but even though the people dressed in different clothes and ate different foods, they were all alike, members of a single culture. That culture was our culture—more accurately, our cliched image of ourselves that might be called the Hallmark greeting card view... The audience enjoys a painless, undernanding, mirrored image of itself, under the illusion that it is experiencing an alien culture.

All real differences were collapsed into those sentimental "universals" that reassured us, in Carpenter's words, that "though people differ in colour and creed, they all love, quarrel, protect their children, etc., exactly as we do." Disney had long done the same to animals through his TV series about nature that depicted wild animals as cute suburbanites in disguise. In terms of his people and places series, Carpenter writes, "The message is clear: we should love them because they are like us. But that statement has its questioning brother: what if they aren't like us?"

But Carpenter was writing in the late 1960s. The question has since become meaningless through the rampant spread of monoculture world-wide. It now can be said, with Bill McKibben, that human life is defined as a "machine for burning petroleum." Disney, with his obsession about death and his hatred of the land, must be smiling in his cryogenic vat.

Joyce Nelson's latest book is Sultans of Sleaze: Public Relations and the Media, published by Toronto's Between the Lines. She wishes to acknowledge financial assistance from the Ontario Arts Council for the writing of this "Culture and Agriculture" series.

NOTES

- Asian Action, Nov.-Dec., 1983.
 See "The Global Pillage" in Joyce Nelson,
- 2. See "The Global Pillage" in Joyce Nelsor The Perfect Machine: TV In The Nuclear Age. Toronto: Between The Lines, 1987.

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