

## **The Apocalyptic Vision of Philip K. Dick**

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The past several decades have exhibited vertiginous change, surprising novelties, and upheaval in an era marked by technological revolution and the global restructuring of capitalism.<sup>1</sup> This "great transformation," comparable in scope to the shifts produced by the Industrial Revolution, is moving the world into a postindustrial, infotainment, and biotech mode of global capitalism, organized around new information, communications, and genetic technologies. The scientific-technological-economic revolutions of the era and spread of the global economy are providing new financial opportunities, openings for political amelioration, and a wealth of ingenious products and technologies that might improve the human condition. Yet these developments are accompanied by explosive conflict, crisis, and even catastrophe. The post-September 11 world reveals the contradictory dialectic of globalization in which the wide-reaching circulation of people, technology, media, and ideologies can have destructive as well as beneficial consequences. Hence, the turbulent transmutations of the contemporary situation are highly contradictory and ambiguous, with both hopeful and threatening features being played out on political, economic, social, and cultural fronts.

Consequently, critical social theory that seeks a "dialectics of the present" must deploy a multiplicity of optics to attempt to capture the complexity and conflicts of the contemporary era. A critical theory of the new millennium would combine social theory, science and technology studies, and cultural studies in a multiperspectivist and transdisciplinary framework that illuminates the dynamics of the emerging social and cultural system. Confronting the turmoil and unpredictability of the day immerses us in what we are calling "the postmodern adventure."

The concept of the postmodern adventure is deployed in our studies to describe engagement with the striking metamorphoses and the contentious controversies over how to characterize the vicissitudes of the present era. Whereas Alfred North Whitehead (1967) charts the trajectories of Western culture through various "adventures of ideas," we argue that fundamental changes stem first and foremost from material transformations in the domains of science, technology, and economics. The postmodern adventure involves leaving behind the assumptions and procedures of modern theory and embracing a dynamic and ongoing encounter with emergent modes of economy, society, and polity that help generate new theories, sciences, technologies, cultural forms, communications media, experiences, politics, and identities. It requires the traversal and exploration of novel social and cultural spaces, alive with fresh possibilities for thought, action, and personal and social change. The adventure is also fraught with distractions and mushrooming peril, as we move toward an increasingly unstable world of deadly military conflicts, terrorist attacks, social unrest, and environmental breakdown.

Postmodern adventures call for altering definitions of natural, social, and human reality, and

developing innovative modes of representation, mapping, and practice. Capturing the dynamics, novelties, and conflicts of the postmodern adventure requires diverse types of representations, including theory and science, art and media culture, quantitative and qualitative, descriptive and normative, ethical and political, and utopian and dystopian modes. We argue that multiple chartings are relevant, indeed necessary, for distinct domains of social reality and specific social contexts, and that it is thus a pragmatic question concerning which modes of representation should be used in particular constellations. Contemporary maps of the new technoculture and configurations of global capitalism would do well to deploy the resources of both "theory" and "fiction," since each provides key illuminations of social experience from different vantage-points that supplement and complement each other. Because of their unique ability to dramatize present and future conditions of social life, science fiction maps are indispensable to critical theory and cultural studies.

While critical social theory provides maps of constellations of class, race, and gender within analysis of dominant social relations and the major constituents of social systems, science fiction (SF) portrays radical otherness and discontinuity, modes of representation appropriate to the postmodern adventure that unfolds in the space between modernity and a new era. Indeed, with increasingly surreal scientific and technological developments — ranging from frozen embryos and transgenic species to cloned animals and space travel -- the distance between science fiction and science fact is collapsing. Few writers have captured this amalgamation as vividly as Philip K. Dick, whose farsighted writings embody powerful visions of a hi-tech world collapsing boundaries between technology and the human. He portrays tendencies in the present that will lead to future affliction, forecasts entropic decay of nature and society, and dissolves society and reality into grotesque configurations, in which ordinary categories of space, time, and reality are ruptured. Dick drafts fantastic technological worlds with strange forms of media culture and art, simulacra, and a collapse of the boundaries of modernity that anticipate conceptions of hyperreality, implosion, simulation, and the virtual found in later French postmodern theory, such as Baudrillard and Virilio.

### **From the Cold War to the Space Race**

Our present social continuum is disintegrating rapidly; if war doesn't burst it apart, it obviously will corrode away ... to avoid the topic of war and cultural regression is unrealistic and downright irresponsible.

Philip K. Dick

Since science fiction concerns the future of human society, the worldwide loss of faith in science and in scientific progress is bound to cause convulsions in the SF field. This loss of faith in the idea of progress, in a 'brighter tomorrow,' extends over our whole cultural milieu; the dour tone of recent science fiction is an effect, not a cause.

Philip K. Dick

An apocalyptic imagination emerged after World War Two which accompanied the genesis

of postwar SF, politics, and culture. After Hiroshima, people were haunted by fears of nuclear annihilation, as visible in popular literature and media culture of the day. In particular, science fiction writers like Philip K. Dick, Bernard Wolfe, J.G. Ballard, and others attempted to imagine and represent the aftermath of nuclear holocaust, the greatest conceivable catastrophic event ever unleashed by and upon the human species.

Ironically, while science and technology are key driving forces of the postmodern adventure, skepticism toward them has decisively shaped contemporary culture and consciousness. The decline in grand narratives of progress that Lyotard (1984) popularized and promoted is grounded in sustained questioning of the forces of science, technology, and Enlightenment as instruments of social advancement and enrichment. Throughout the modern era, science and technology have been taken as the primary vehicles of progress, as the major promoters of human well-being, and as prime social goods. The loss of faith in them ensues in part from the perceived dangers to the human species resulting from uncontrolled industrial-technological overdevelopment. In particular, highly destructive military technology and the creation of societies of bureaucratic domination and manipulation raise questions as to whether science and technology are really instruments of progress and emancipation or domination and destruction.<sup>2</sup>

The explosion of the atom bomb and subsequent development of a deadly nuclear arsenal which could destroy the world was the great catalyst in questioning the value of science and technology and the modern civilization they produced. The possibility of the destruction of the human species and life on earth promoted an apocalyptic imagination that portrayed the human species coming to an end. Cautionary warnings concerning potential misuse of science and technology have become a defining feature of the best imaginative fiction of our time.

Indeed, it is novelists like Thomas Pynchon, SF classics like H.G. Wells and Philip K. Dick, and cyberpunks like William Gibson that best come to terms with the consequences of science and technology and the earth-shattering transformations that we are undergoing.<sup>3</sup> Thus, to supplement and illustrate the ideas of a critical theory of science and technology, one should go not only to sociological theory, and science/technology studies, but also to visionary writers, especially the masters of science fiction. Arguably, literature can powerfully and concretely embody representations of the products and effects of technoscience, what it does to human beings, how humans and technology are merging, and what novel environments and modes of life science and technology are creating. Since so-called hi-tech is itself the embodiment of a futuristic imagination that is in many ways quite fantastic, the best SF writers capture the drama, the texture, the look and feel, and the impact of technology on human beings. SF is thus an avant-garde form of the postmodern adventure, a mode highly suited to representation of original forms of science, technology, and technocapitalism.

While H.G. Wells carried through a crucial science-fiction breakthrough, Philip K. Dick emerges in our reading as the poet laureate of the postmodern adventure in his bleak and brilliant portrayals of the future of global capitalism, interplanetary space travel and colonization, and the merging of humans and technology.<sup>4</sup> Dick's stories and novels pursue the SF logic of "what if?" --

taking a premise about current social development and following through to its possible conclusions. Eschewing the hard science approach of Asimov, Clarke, and Heinlen, Dick was more interested than other SF writers of his time in the philosophical interrogation of reality, the decline of human and social values, and providing warnings against future catastrophes of the human species and natural world.

Astonishingly prolific, amazingly inventive, and always visionary, Dick, in his best works, attempts to measure the fallout of a proliferating technological society and to project foreboding visions of possible futures, as he extrapolates from contemporary economic, technological, political, and cultural developments. Like cyberpunk, which he anticipates and influenced, Dick sets his fantasies within a world drawn from current configurations of global capitalism and the Cold War. His writings reveal deep fears of war, social breakdown, nuclear Armageddon, and military technology and political tensions escalating out of control. He portrays a future in which demagogues use media culture to manipulate and dominate underlying masses of people, and where the development of cybernetic systems results in a society where humans are mastered by machines, technology, and in some cases superior species. Hence, the collapse of humans and technology and a posthuman threat to individuals in technocapitalism are core themes of Dick's work.

Typically, Dick's narratives do not have happy endings. Deeply disturbed by German fascism, he often sketches out totalitarian societies ruled by demagogues and authoritarians. More prescient than other writers of his day in regard to the dynamics of global capitalism, Dick portrays corporate forces using technology to exploit and control the underlying population. Further, he was one of the first SF writers to explore a new virtual technoculture, in which the distinction between reality and illusion, the real and the virtual, implodes.

The strong undercurrents of pessimism in Dick's work respond to Cold War conformity and stabilization in his 1950s and early 1960s writings, and then to the defeat of the counterculture, of which he was a precursor and participant, by the 1970s. While characters in his writings often manage to see through the socially-manufactured illusions that stabilize the oppressive societies depicted, they are usually unable to do anything, and their revolt appears futile. Nuclear apocalypse haunts his work, and Cold War geopolitics are in the background of his novels that display ordinary people threatened by political and technological forces beyond their understanding and control.

Whereas in the Star Trek sagas, and for scientists and visionaries like Carl Sagan, space travel is an object of poetic rapture, portrayed as the next stage in the drama of human evolution, for Dick it is inherently ambiguous and potentially catastrophic. Although these contrasting perspectives on the future see space travel as an inevitable outgrowth of science, technology, industry, and capitalism, Dick has grave worries about space technologies in the historical context of nuclear weapons, Cold War rivalries, global power politics, and predatory capitalism. Dick's epics of space colonialism, like Martian Time-Slip (1964), depict class hierarchies and forms of political and technological domination developed on Earth replicated in the space colonies. His novel The Three Stigmata of Palmer Eldridge (1965) shows colonizers becoming addicted to drugs to overcome the

bleak conditions of life on other planets.

Moreover, the aliens who populate his voluminous short stories and novels are rarely benign. Sagan, of course, imagines alien intelligence in positive ways in the manner of Steven Spielberg, while the Star Trek saga projects narratives which imply that worldly class, gender, race, and power issues can be transcended at escape velocity. Dick, by contrast, portrays alien species who threaten to dominate and destroy humans, as well as depicting humans producing new forms of life and technology that might also overpower and devastate them in societies that combine gender, race, and class hierarchies and oppression.

Whereas the technocratic imaginary of our time sees science and technology as forces of inevitable human progress, Dick is deeply skeptical of their impact, especially when in the hands of dark and destructive social groups, like, in his perception, the police, the military, or corrupt politicians. To give an example of fears of military technology going out of control from the treasure-house Dick's early short stories, his 1952 fable "The Gun" deals with a space ship encountering a strange planet giving off intense nuclear radiation (Dick 1987a). As the ship draws close to the planet, the crew sees what appears to be a destroyed city and are shot at and forced to land. The crew is horrified at the evidence of interspecies war and looks around and finds a gun programmed to shoot at any intruder. The desolate planet seems devoid of life and appalled at the indiscriminate violence generated by this weapon, they disable the gun and discover a cache of literature, films, and cultural artifacts below the surface. As they philosophize over how terrible the destruction of this planet was, we too are led to imagine the possible demise of our own earth with its rich cultures and biodiversity. The crew is then startled to observe the emergence of robotic carts loaded with repair material and an atomic warhead moving toward the destroyed gun. This figure evokes an image of a cybernetic military apparatus ready to repair the gun, so that it can again wreak its devastation in a self-perpetuating technological system dedicated to interminable war and destruction.

Dick's 1952 story "Second Variety," which was made into the movie Screamers in 1996, presents a barren post-nuclear war landscape, in which the two surviving superpowers continue in futile warfare on earth and its colonies (Dick 1987b). The U.S. forces have created a type of robotic weapon, much like the insectoid smart machines used to explore Mars and developed by MIT scientist Rodney Brooks. These intelligent weapons kill those who do not have electronic deterrence devices. As the story progresses, it surfaces that these smart machines have created humanoid-appearing killing devices, and after presumably eliminating two known varieties, the remaining humans learn that another "second variety" has been devised, and the plot turns around which of the "human" characters is really a murderous android, anticipating the themes of Dick's later works.

The same year that these stories appeared, a number of cautionary warnings concerning the future were published in the field of SF. Bertrand Wolfe's Limbo (1952) delineated a frightening post-holocaust hi-tech world.<sup>5</sup> Taking Wells' biosurgical projection The Island of Dr. Moreau to a higher level, Limbo (1952) goes further in depicting the reconstitution of the human, showing individuals weary of war in a cybernetic society agreeing to amputation of their arms and legs -- and sometimes sexual organs. In Wolfe's bizarre tale and cult classic, after a devastating nuclear Third

World War, individuals join a pacifist "Immob" movement that rewards individuals for amputating limbs. Using slogans like "No Demobilization without Immobilization," or, "No Pacifism without Passivity," the Immob movement compensates the voluntary amputees (volamps) with social prestige and special benefits, an ironic parody of the Welfare State. Cyberneticists in turn invent prostheses which happen to empower the volamps, making them physically superior to humans, and thus an ironic figure of the posthuman. Satirizing the cybernetic project of reconstituting humans and society, Wolfe portrays a society where science and technology redefine and reconstitute the very structure and boundaries of human beings, creating new fusions of humans and technology, and thus a new type of technohumans, as well as technological control systems.

Both Dick and Wolfe linked cybernetics to war and fear of military technology spiraling out of control, creating a nuclear apocalypse, or simply coming to dominate human beings and their society. Obviously, both were aware, through Norbert Wiener and others, of the military origins of cybernetics, of how during World War Two a new science of information theory, and new communications and military technologies, emerged -- including the computer and cybernetics theory and practices (see Edwards 1996 and Hayles 1999).

Dick was also obsessed with the rise of new forms of totalitarian police states and in his 1954 story "The Minority Report" (produced and reconfigured in a 2002 film by Steven Spielberg), Dick sketched out a future society in which the police employ "precogs" who can see the future and arrest suspects before a crime is committed (Dick 1987b). This system is challenged by the possibility that one of the precogs will issue a "minority report," that concedes the suspect may not be guilty. The story provides an interesting anticipation of the Bush administration's "Total Information Awareness" computer data base program that would supposedly enable the police to arrest "terrorists" before they had committed any crimes, based on their data profiles and computer analysis.

Dick's SF and fantasy stories also interrogate and break down boundaries between humans, animals, and inanimate objects. Stories like "Roof" take the point of view of a dog and other tales anthropomorphize both animals and objects, some showing humans becoming animals or objects, as the boundaries between species and things become more porous and permeable. Dick's writings frequently present events from multiple points of view, making Dick a precursor of postmodern multiperspectival vision. In his now classic SF novels, Dick deals with the invention of androids which put in question the borders between reality and simulation, technology and the human, as in Do Androids Dream of Electric Sheep? (1968), the basis of the cult film Blade Runner (1982).

To properly grasp the many dimensions of Dick's amazing oeuvre, one must read him in the context of the pulp science fiction genre in which his work was initially conceived and written, the socio-historical environment in which he wrote, and the philosophical and aesthetic dimensions of his work. On one level, Dick is one of the most comical, outrageous and engaging SF writers of his generation who published his short stories in the major SF journals and almost all of his major novels with SF paperback publishers. While our focus will be largely philosophical and theoretical, Dick's works are often extremely humorous and wildly inventive, full of whacky characters, intriguing

situations, and original and illuminating images and ideas.<sup>6</sup> Our reading of Androids, however, will spotlight Dick's views on commodification, technology, and the fate of the human being, other species, and the natural environment under the conditions of a global and militarist capitalism.

### **Androids, Humans, and Entropy**

My grand theme -- who is human and who only appears (masquerades) as human? Unless we can individually and collectively be certain of the answer to this question, we face what is, in my view, the most serious problem possible. Without answering it adequately, we cannot even be certain of our own selves. I cannot even know myself, let alone you. So I keep working on this theme; to me nothing is as important a question. And the answer comes very hard.  
Philip K. Dick

The greatest change growing across our world these days is probably the momentum of the living towards reification, and at the same time a reciprocal entry into animation by the mechanical.  
Philip K. Dick

It is perhaps Dick's Do Androids Dream of Electric Sheep? that provides his most compelling apocalyptic vision, which also exemplifies the prototypically Dickian themes of the implosion between the real and the artificial, humans and technology, and natural reality and simulation in a hi-tech world. In the plot of the novel, which is significantly different from the film Blade Runner that is loosely based on it, Rick Deckard, an android bounty hunter, craves above all else to own real animals, instead of his electric artificial ones. The novel's narrative suggests a future in which one animal species after another has disappeared after a nuclear war and animals are highly prized as a cherished and vanishing form of life. Deckard is ordered to exterminate a group of highly advanced android Nexis-6 models who have escaped from the "off-colonies," where they were slaves, in order to prolong their short preprogrammed lives. The bounty hunter increasingly sympathizes and emphasizes with the androids, one of whom, Rachel, he becomes sexually involved with. Consequently, Deckard is ever more troubled by the killing or "retiring" required by his job, as he comes to recognize the android others as akin to human subjects and forms of life, just as he recognizes humans are becoming more mechanical and reified.

Dick frames his story within the political economy of an interplanetary global capitalism, set in a bombscape of human ruination and massive species extinction in 2021, after World War Terminus. The androids were originally produced to help colonize Mars, when capitalist corporations, having devastated their home base, began inhabiting other planets. In a competitive race between two global giants, the Rosen Association and the Grozzi Corporation vie to market the most advanced androids. This war of technology has produced increasingly complex creatures who are seemingly identical with humans, sharing capacities such as memory, love, empathy, desire, and fear of death. In the form of the Nexus-6 model produced by the Rosen Corporation, androids also have acquired a high level of self-reflexivity, which leads them to repudiate their slave status. Hence,

as Marx saw in an earlier industrial context, capitalists created their own gravediggers by manufacturing increasingly complex workers who eventually acquire the class consciousness and will to rebel. Thus, Dick provides a futuristic embodiment of Marx's vision of a rebellious proletariat, while underscoring the contradictory logic of capital.

Dick presents a universe of total commodification, such that nothing escapes the nihilistic reduction of market logic and the profit imperative. Colonists who agree to leave earth are given an android as a reward, a bonus which reveals intensification of the commodification of human beings and other forms of life. After the destruction of nature and animals by nuclear holocaust, animals also are commodified, revered as a token of prestige whose market value is closely documented and watched by investors who crave purchase and ownership of animals. Dick thus presents penetrating portraits of a society ruled by obsessive consumption and the fetishism of commodities.

As in many of Dick's novels and stories, the text interrogates what is real and poses the question "What is human"? Rejecting the classic equation of the human being with language and rationality, Dick instead chooses empathy to characterize the human. In the novel, humans are able to enter into empathetic fusion with Mercer, a religious figure who appears when individuals interact with an "empathy box," which creates a quasi-hallucinatory oneness with Mercer and others participating in the experience. A major theme of the story concerns the difficulty in trying to distinguish between what is real and what is a simulation, what is organic and natural, and what is constructed and artificial. The collapse of clear distinctions between the fake and the authentic applies to both animals and human beings in Androids: is it a real animal or an electric model, is it a human being or an android? Even the androids do not really know, since they have simulated lives through implanted memories, and at one point Deckard and his partner Phil Resch, another bounty hunter, begin to doubt whether they too are human or not, as the readers are also left to wonder.

The android bounty hunters administer a test to detect whether an entity is a human or an android, thereby updating the old Turing test to detect artificial from human intelligence. The examination is based, interestingly, on empathy; apparently, human beings are capable of sympathy and compassion for animals and other human beings, while androids lack this capacity. Yet Dick's Androids portrays humans drained of all natural feeling, becoming more controlled by media and society, thus questioning what is left of humanity in a hi-tech world and whether the distinctive features of the human will survive. Likewise, Deckard is attracted to the android Rachel and has sex with her, an episode that can be read allegorically as one way of negotiating new relations with technology in a posthuman world. Indeed, the androids are superior in some ways to humans, they are hyperreal humans, realer-than real, better-than-real, thus providing, Dick implies, superior warriors, lovers, workers, intellects, and the like.

In a subplot, John Isidore, a "special," a "chickenhead," retarded by the nuclear fallout, lives alone in an abandoned apartment; most inhabitants of earth have left for the colonies and only the poorest and most desperate remain on earth. Isidore hears another inhabitant play a television in the apartment, shyly goes down to meet her, bringing her a pat of margarine as a present. It is Pris, one of the escaped androids whose leaders, Roy and Irmina Batty, join her the next day, setting up the

eventual showdown with Deckard. The plot structure is typical of Dick's novels that introduce one protagonist, usually an ordinary person thrown into an extraordinary situation, followed by introduction of other, often subhuman, or underclass characters. Then characters in the Dick narrative machine typically encounter extraordinary humans or aliens, like the androids, who often threaten the human race. The characters finally come together in a crisis situation and the resolution of the plot unfolds -- a literary structure taken over by William Gibson and other cyberpunk writers, who, rightly, see Dick as their Godfather.

Yet there is a conservative dimension to the narrative resolution in Androids in which Dick affirms the superiority of humans over other forms of life in their capacity for empathy, and Deckard's white, male, and professional subjectivity is valorized over other participants in the story. Moreover, Deckard returns to his wife and accepts the conventions of heterosexual marriage, consumerism, and bourgeois normality, as Deckard comes to accept his former life and returns to his normal routine. Thus, the boundaries that the novel so powerfully deconstructed are resurrected and conservative values and identities are ultimately affirmed.

The film Blade Runner by contrast, directed by Ridley Scott, more radically contests the boundaries between the natural, the artificial, and the human. The film presents Deckard as the film noir individualist detective (whereas he is married and returns to his wife in the novel), and pairs him romantically in an ambiguous relationship with the android Rachel. The bounty hunter is called a "blade runner" in the movie (a term derived from William Burroughs), and Harrison Ford plays the character with world-weary aplomb. In the film, the androids are called "replicants," or "skin jobs", and are described as "more human than human." Whereas Dicks presents his androids as models of inhuman and mechanical beings opposed to the human, in the film the replicants seem to have more fully developed sensibilities and passion for life, as well as strength, cunning, and loyalty to each other, than the human characters.

The stunning visual environment of Blade Runner provides startling images of the postmodern metropolis, drenched in radiation-saturated rain, the debris and refuse of the modern industrial city, and the detritus of a global and multicultural society. The mis-en-scene is populated with several layers of dense imagery. The sky is filled with high-rise apartments, flaming industrial smokestacks, and hovercraft vehicles, surrounded with neon billboards for global corporations and ads for a new life in the out-colonies. Scott's film deploys the postmodern strategy of pastiche, combining the signs of Dick's SF genre with the voice-over narrative of Deckard, played by Harrison Ford, presented in the style of a film noir detective and variations of the stock characters of the urban crime film appear in the film.<sup>7</sup> The replicant Rachel is portrayed as a noir femme fatale who, however, helps Deckard destroy the androids and even leaves with him in a highly ambiguous romance -- a sharp departure from the novel where Deckard returns home to his wife and an uneasy reconciliation.

The representations of technology in Blade Runner are extremely interesting. Unlike conservative technophobic films, there is no privileging of nature and the human over technology,<sup>8</sup> and Deckard states at one point: "Replicants are like any other machine. They can be a benefit or a

hazard." In the film, Deckard comes to sympathize with the replicants and even falls in love with Rachel, while Roy Batty is presented as the most articulate and philosophical figure in the film, expressing a profound love of life, loyalty toward his fellow replicants, and ultimately saves Deckard with whom he comes to respect and emphasize, even though the bounty hunter is sent to "retire" him.

Blade Runner points to the oppressive core of capitalism which creates technology to exploit human beings and presents figures of rebellion in the form of the replicants who reject their status as pure instruments of commodified labor with limited life spans. The Tyrell Corporation explicitly produces replicants as a pliable work force, including women who are constructed alternately as love-slaves and castrators, pointing to the socially constructed role of women in capitalist patriarchy. Tyrell lives in a high-rise apartment whose neo-Mayan architecture suggests human sacrifice for the entrepreneurial deity and Tyrell is portrayed as a sinister and warped capitalist patriarch.

Most significantly, the film presents humans, machines, institutions, and "reality" itself as socially constructed and thus amenable to reconstruction. Unlike conservative narratives which contrast fixed and unchanging humans with reified technology, Scott's film foregrounds the constructedness of humans and technology, blurs the distinctions, and shows both capable of reconstruction for more socially benevolent purposes. The major protagonists -- Deckard and Roy - - ultimately renounce violence and come to empathize with their supposed opposites and enemies.

Proliferating entropy is a major theme of Dick's key works like Androids, which portray the incessant movement from birth to death, adolescence to senescence, order to disorder, and heterogeneity to homogeneity. As the second law of thermodynamics, "entropy" is a natural process; the cosmos, in Dick's terms, inexorably winds down to a state of "kipple." "No one can win against kipple ... except temporarily and maybe in one spot... It's a universal principle operating throughout the universe; the entire universe is moving toward a final state of total, absolute kippleization" (1987: 58).

Entropy is indeed the prototypical condition for Dick's futuristic world: cities are decaying; the natural environment is disappearing; the androids' short life spans are winding down; and the unfortunates stranded on earth are deteriorating in mind and body. Entropy is also evident in the "waning of affect," a symptom of postmodern subjectivity for theorists like J.G. Ballard and Fredric Jameson. In advanced stages of "civilization," individuals are so affectless that they have to rely on mechanical supplementation -- via technologies such as a "mood organ" or Dick's "empathy box" -- in order to feel. Dick portrays an exhausted human species drained of all feeling and connections with others, and shows androids gaining empathy. He thereby signals a fusion between humans and machines, questions what is left of humanity in a hi-tech world, and calls into doubt the long-term survivability of a human species whose members are losing positive emotional bonds with one another.

Dick's texts suggest that just as individuals can hasten the entropy of their own bodies,

social systems can quicken their own decay and that of the natural world. As an energy-devouring, resource-depleting, waste-producing, nonstop-guzzling megamachine of growth and accumulation, advanced capitalism rapidly accelerates entropic breakdown. While Blade Runner changed much in Dick's novel and omitted the themes of the manipulative effects of media culture and religion, it brilliantly captured the look and feel of a hyperintensive global system of production drowning in its own waste. The incessant downpour of toxic rain, the fire-belching smokestacks, the filthy refuse of the ultramodern metropolis, the densely overpopulated city streets and high-rise apartments, the glowing neon-billboards and crisscrossing traffic of hovercraft vehicles, and the detritus of a multicultural society where even language breaks down into kippled fragments underscore the presence of a dying, nihilistic, technocapitalism.

Blade Runner also adds the ironic touch of metallic blimps moving ponderously across the nuclear-red skies, broadcasting advertisements for the good life in the out-colonies. The underclass denizens -- mostly Asian and hybridized -- live in crowded ghettolike conditions on the ground level, while the remaining upper class dwells in luxurious high-rise apartments, reproducing the class-structure portrayed in Fritz Lang's Metropolis (1927). This futuristic city -- which became the prototype for the universe of cyberpunk -- was recognizably Los Angeles, where the film was shot, but it could stand for any global and multicultural city of a postholocaust future, or the aftermath of a collapse of the global economy.

### **Challenges for a New Millennium: Toward a Transformative Vision**

“How does one fashion a book of resistance, a book of truth in an empire of falsehood, or a book of rectitude in an empire of vicious lies? How does one do this right in front of the enemy?”

Philip K. Dick

In retrospect, Dick can be read as a dystopic visionary of the postmodern adventure in which science and technology are presented as creating new forms of life and eroding boundaries between the human and the technological, the natural and the artificial, bringing about a highly ambiguous posthuman condition. He provides a dialectical foil to the optimistic visions of Star Trek, many of the films of Steven Spielberg, scientists like Carl Sagan, and progress-besotted technocrats. As new media and cybercultures relentlessly alter everyday life, as technologies of progress become weapons of destruction, as amazing virtual technologies, genetic engineering cloning, and undreamed of technological utopias and nightmares become our fate, Philip K. Dick becomes an essential guide to the more disturbing elements of the postmodern adventure.

Yet dialectical vision requires hope for a better life and the nurturing of emancipatory social transformation. Dick occasionally provides allegorical visions of struggle, resistance, and hope, such as the revolt of the replicants in Androids, but his relentless social criticism should be supplemented by emancipatory visions that articulate both the negative and positive aspects of the contemporary era. There are indeed conflicting potentials in the present social situation. On one hand, postmodern fragmentation and pluralization has taken the differentiating features of modernity into a spiral of

otherness and difference, expanding social dissolution and conflict. This form of postmodern fragmentation involves a breaking up of unities (communities, traditions, even national cultures) that once provided resources for identity, were empowering, and enabled individuals to create better lives for themselves. Their disintegration is a loss, yet precisely these unities also contained oppressive features in the form of cultural hierarchies, relations of subordination and domination, and backwardness and chauvinisms of various sorts (as al Qaeda and Jihadic Islamism demonstrates). Postmodern fragmentation thus creates openings for destructive conflicts, as well as cosmopolitan identities and a more pluralized social condition that gives groups and individuals excluded from political and cultural participation expanded opportunities for cultural creation and political involvement.

Thus, crises contain opportunities for progressive change and fragmentation, while creating exciting openings and empowering possibilities, as well as dispiriting and destructive tendencies. What does the near future hold for humankind? Will the human species continue to overpopulate the planet, move toward technocracy, develop violent cultures, produce ever more deadly weapons of mass destruction and terrorism and fall into an Orwellian condition of perennial war? Will contemporary societies exacerbate the already obscene disparities between the rich and poor, advance trends toward global warming, destroy ever-more species, deplete the earth's natural resources, and utterly self-destruct? Will life end apocalyptically through epidemic disease or a nuclear bang or will there be enough fragments of humanity left to survive for a short time, as in contrasting conditions of drought and flood depicted by Mad Max and Waterworld, before it ends in a pathetic whimper? Will we mutate into cyborgs or bionic beings and live out our lives in spaceships and space stations? Will we make "contact" and be saved by the superior wisdom and technologies of space aliens, or will they devour us as resources for their megamachines? Or will we learn to harmonize our advanced technological society with the natural world and take on responsible roles as stewards of the earth?

The greatest adventure ever faced by the human species is staring us right in the face: can we use our advanced intelligence and technologies toward constructive rather than destructive ends? Can we learn to live together on this planet? Can we diversify and unify? Can we regain respect and reverence for life? And can we create global solutions to problems like environmental crisis, species depletion, terrorism, and destructive technologies, or will the human species self-destruct in violence and war, while destroying the earth in the process?

The survival of the human species requires imagination, insight, and political will, and thus needs to draw on the resources of our most critical and illuminating cultural and theoretical heritage. We have argued in this article that the dystopic science fiction of Philip K. Dick can help nourish vision and imagination, but maintain that we need to combine literary vision with critical social theory and radical democratic politics to adequately engage the problems of the present and to meet the challenges of the future (Best and Kellner 2001).

The next few generations hold the fate of the evolution of all life on earth in their hands. The window of opportunity is closing, and the postmodern adventure holds more promise, more danger,

and more surreality than any previous adventure known to humanity. We must seek possibilities in the present to move toward a better future. The postmodern adventure is just beginning and alternative futures unfold all around us. Western societies inhabit a historically unique terrain between the modern and the postmodern and we need a variety of theoretical and political perspectives to make sense of the momentous changes that are now occurring. In the Third Millennium, the choices agents make will determine whether the adventure of evolution itself will continue in creative ways on this planet, producing ever more biodiversity or collapsing into the sixth and perhaps final extinction crisis in the history of the earth (see Leakey and Lewin 1996).

As science, technology, and capitalism continue to coevolve into an ever denser global network, the ultimate question is whether the human species can reshape the driving forces of change to harmonize social with natural evolution, such that diversity and complexity grow in both spheres. Or will current developments produce intensified war and destruction, the death of the human, the despoliation of the earth, and even the demise of all complex life? Neither option is preordained, both are possible futures, and this tension and ambiguity itself is a core feature of the postmodern adventure.

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## Notes

<sup>1</sup> This text is an expansion of our study of Philip K. Dick in The Postmodern Adventure: Science Technology, and Cultural Studies at the Third Millennium (2001).

2. Horkheimer and Adorno in Dialectic of Enlightenment (1972 [1947]) argue that science, technology, culture, and rationality are turning into their opposites in contemporary totalitarian societies, that supposed instruments of emancipation and progress are becoming forces of domination and regression. In regard to the new information and biotechnologies, we argue that positive and negative features are intertwined and that thus the phenomena are highly ambivalent (see Best and Kellner 2001).

<sup>3</sup> On cyberpunk, see McCaffery 1991 and Kellner 1995, Chapter Nine.

4. Dick published 80 stories and thirteen novels from 1951-1958 (Sutin 1989: 85), an intensity

and productivity that continued through the 1960s, in which he published as many as eleven novels in one year. There are five volumes of his collected short stories in print and he published over 40 novels. Dick has indeed become a cult figure with a loyal following, a major SF prize named after him, and movies and TV-shows of his work regularly appearing. He was generally ignored during his life, often living in extreme poverty and turmoil. On Dick, see Sutin 1989, Hayles 1999, and the web site [www.philipkdick.com](http://www.philipkdick.com) which contains a wealth of material.

5. Wolfe had been Trotsky's body-guard, author of a book on blues, a pornography writer, and literature professor. See the introduction to his work in Ellison 1972: 308f. and the study in Hayles 1999.

<sup>6</sup> We are not dealing, however, with the question of the late Dick, revered by his followers as a religious and philosophical prophet after mind-binding mystical experiences around 1974. On this dimension of Dick's work, see Sutin 1989 and the documentary The Prophetic Vision of Philip K. Dick.

<sup>7</sup> Interestingly, the voice-over was not utilized in the Director's Cut of Blade Runner, thus creating a more ambiguous and modernist SF text and decentering the joining of noir detective fiction with SF. The voice-over also tends to create sympathy and identification with the noir detective Deckard whereas the Director's Cut makes Batty more central and perhaps attractive. On the differences between the versions, see the studies in Kerman 1991.

8. For an elaboration of this argument, see Kellner and Ryan 1988: 251ff.; on representations of the city in Blade Runner that uses Jameson's postmodern theory to interpret the film, see Bruno 1990; and for a wide range of essays on the film, see Kerman 1997.