Cyberpunk Revisited: William Gibson's *Neuromancer* and the "Multimedia Revolution"

Nobuo KAMIOKA

Meiji University

I

1984 was a very important year for the development of multimedia. In that year, Apple Computer Inc. started to sell the "Macintosh," which was the first personal computer with a GUI (Graphical User Interface) using "icons" and a "mouse." This "user-friendly" and low-priced computer sold tremendously well, and as a result personal computers began to prevail widely, first in the United States, and then all over the world. This can be regarded as the beginning of the "multimedia revolution." During the following decade, personal computers became indispensable tools, and other multimedia, like virtual reality, CD-ROMs, and the Internet, were made available to the masses.

1984 was also important as the beginning of a literary movement called "cyberpunk." In that year the science fiction writer William Gibson published *Neuromancer* and coined the word "cyberspace," meaning a computer-generated landscape. The characters in Gibson's novel are mercenary hackers and digital cowboys who "jack in" to the worldwide computer network and move at the speed of light between the financial centers of the world. Many readers were fascinated with the novel's unique style, which some critics called a "virtual real" style;[1] thick with computer jargon, slang and neologisms, the story randomly jumps from one cyberspace to another, like hypertext. After

the publication of this novel, under its influence, a lot of science fiction writers, called "cyberpunk" writers, began to use computer-generated worlds as their settings. Yet the impact of the novel has not been confined to science fiction. Its style and structure as well as Gibson's invention of "cyberspace" contributed a great deal to subsequent art forms, including so-called "mainstream" fiction.

In the sense that we now live in the world of the computer network and virtual reality, *Neuromancer* correctly predicted the coming "multimedia revolution." We may also justly say that it represents, in an exaggerated way, human consciousness in the highly technologized future world, in which nature has been almost completely destroyed, and the virtually real and the real are indistinguishably mingled. Reading closely, however, I think we can also sense some discrepancy between what the novel predicts and what we are now experiencing. What does this discrepancy mean? How correctly did *Neuromancer* predict the age we live in today?

In this study, I will first deal with *Neuromancer*, following the line of those critics who have regarded it as the "literary expression . . . of late capitalism."[2] Read in this context, this novel can still give some significant comment on our "late-capitalist" world. Then I will examine the divergence it shows from the world we live in now and consider why this divergence has occurred. This divergence, it seems to me, indicates Gibson's weakness and limits. But I also believe that his limits indicate something important with regard to our coming "virtualized" world.

II

> The sky above the port was the color of television, tuned to a dead channel.[3]

This opening sentence of *Neuromancer* has become extremely well known for its symbolical representation of the oppression of nature and the pervasiveness of the media. "[T]he color of television, tuned to a dead channel," that is, "white noise," is a metaphor the postmodern novelist Don DeLillo was also to use the following year for the mixture and pervasiveness of various media in his famous novel *White Noise*. This metaphor clearly refers to our media-pervaded world.

In the first chapter of *Neuromancer*, the protagonist, Case, a "con-

sole cowboy" who has been disabled as a hacker, walks into a bar called Chatsubo, in a near-future Chiba City. (The reason he has been disabled as a hacker is that he was punished by his former employers, for trying to double-cross them, by having his nervous system destroyed.) Chatsubo is a literally borderless place, alienated from any physical background. Although it is located in Japan, one can "drink there for a week and never hear two words in Japanese" (3). The bartender, Ratz, has a "Russian military prosthesis," uses the German word "Herr," and has a Brazilian boy, Kurt, as an employee.

What fascinates most readers of *Neuromancer* may be the image of the future world its first few chapters evoke (which many readers have associated with the world of Ridley Scott's movie *Blade Runner* [1982]). In this novel, both characters and settings, apparently having lost any physical connections to nature, birthplaces or nationalities, are represented in "virtual real" style. The following passage, introducing Case's girlfriend Linda for the first time, is a good example of the description of this virtual world:

> Under bright ghosts burning through a blue haze of cigarette smoke, holograms of Wizard's Castle, Tank War Europa, the New York sky-line. . . . And now he remembered her that way, her face bathed in rest-less laser light, features reduced to a code: her cheekbones flaring scarlet as Wizard's Castle burned, forehead drenched with azure when Munich fell to the Tank War, mouth touched with hot gold as a gliding cursor struck sparks from the wall of a skyscraper canyon. (8)

Linda is not the only character who is represented as if "reduced to a code." Other characters, too, seem to have lost their physical substance or to have been transformed into cyborgs (hybrids of human and machine) in some way or other. Molly, who becomes Case's partner, has mirror-shades implanted in her eyes and retractable blades in her fingernails. A ninja, Hideo, is a human clone who is stored in a freezer and defrosted whenever necessary by an artificial intelligence. Armitage, Case and Molly's mysterious employer, also turns out to be a cyborg who has been revived from death and is completely controlled by an artificial intelligence. Case's mentor Dixie Flatline is nothing but data downloaded to a computer from his brain after his death. In the near-future world of this novel, with "wireheading" (wiring their brains directly to computers), humans can do everything, without bodies, through the computer network: go everywhere, talk to anyone, and

even have sex with others. Many characters, including Case, experience bodiless ecstasy while moving around in "cyberspace."

One of the significant aspects of this novel, therefore, is that it represents the irresistible power of this cyberspace "as a place of rapture and erotic intensity."[4] The hackers in this novel feel that they can exert their powers freely in cyberspace without being conditioned or controlled by machines. Thus cyberspace attracts people by giving them an illusion of autonomy, and what fascinates the reader is this sense of being able to drive freely through virtual realities. For example, the reader may experience a vicarious exhilaration while sharing Case's sensations when he enters cyberspace after a long absence:

> Disk beginning to rotate, faster, becoming a sphere of paler gray. Expanding—
> And flowed, flowered for him, fluid neon origami trick, the unfolding of his distanceless home, his country, transparent 3D chessboard extending to infinity. Inner eye opening to the stepped scarlet pyramid of the Eastern Seaboard Fission Authority burning beyond the green cubes of Mitsubishi Bank of America, and high and very far away he saw the spiral arms of military systems, forever beyond his reach.
> And somewhere he was laughing, in a white-painted loft, distant fingers caressing the deck, tears of release streaking his face. (52)

Even more interesting is the scene near the climax, where Case jacks into Molly's sensorium and at the same time enters cyberspace. In this scene, the different virtual realities that Case experiences commingle at random, and the way an artificial intelligence is penetrated by another program is depicted visually in a geometric design. These visual and surreal representations of virtual realities (and their random commingling) are often termed "Magic Realism," and here we can detect Gibson's relationship to (and even influence upon) "mainstream" writers like Steve Erickson.[5]

In this novel, this ecstasy of driving through cyberspace is often compared to that which can be achieved with drugs. In fact, many of the characters are drug addicts, who console themselves with drugs when they cannot enter cyberspace, or who enhance the ecstasy of driving through cyberspace with drugs. For example, Case compares the elation of taking drugs to "a run in the matrix [cyberspace]" (16). For those hackers, as Darko Suvin says, "cyberspace is itself a kind of superdrug vying in intensity with sexual love."[6]

This ecstasy of being immersed in virtual realities (often with drugs) is reminiscent of the enthusiasms of those who have seen great possibilities in multimedia. For instance, Timothy Leary, a cult figure of the psychedelic movement in the 1960s, saw in computer networks and virtual reality a resistible power "against the brainwashing forces of industrial slavedriving and imperialist expansion."[7] For him, the computer network is a utopia where people can communicate simultaneously and expand or change reality with their collective power; this is exactly what he also believed we could do with LSD, in the 1960s. Also, many of the engineers of personal computers are one-time 1960s radicals who believed they could democratize technology and liberate people through personal computers.[8] The journalist Douglas Rushkoff, in his book *Cyberia*, reports a wide range of people who believe in a utopia which can be created by computers, sometimes together with drugs. Placed in this context, *Neuromancer* can be regarded as a comment on those who share the 1960s' dream that drugs and multimedia can liberate people.

Since Gibson expresses this kind of ecstasy through computers and drugs, some critics attack him for his uncritical praise of technology. However, Gibson does seem to point to the danger that cyberspace may paralyze our sense of nature and body. At the beginning of the novel, Case, deprived of his ability as a hacker, dreams of cyberspace, which had become more real to him than bodily reality:

> For Case, who'd lived for the bodiless exultation of cyberspace, it was the Fall. In the bars he'd frequented as a cowboy hotshot, the elite stance involved a certain relaxed contempt for the flesh. The body was meat. Case fell into the prison of his own flesh. (6)

To make light of the body like this, however, can endanger one's autonomy and life. For if you are connected to computers and immersed in cyberspace, you have totally entrusted your body and life to machines. In fact, after Case is revived as a console cowboy and begins to work for Armitage, he learns that he has been controlled by an artificial intelligence called "Wintermute" all along. In addition, some of the virtual realities Case enters on the computer network are nightmarish spaces, created and completely controlled by artificial intelligences. In one of them he meets his late girlfriend Linda and even has sex with her, but as she is already dead, it is only a bodiless (and therefore futile) ecstasy.

An even more striking case of the oppression of the human body in the novel involves the technology of downloading data from human brains and letting them "live" as "ROM constructs" on computers. Whether this kind of technology is attainable in reality or not, and some scientists are currently working on its development,[9] it nonetheless represents the ultimate in ignoring the human body and treating humans as controllable data. In *Neuromancer*, Case's mentor Dixie Flatline, although physically dead, lives on as a "ROM construct" on the computer network, and helps Case in his hacking. Yet Dixie is only a part of the network; he is manipulated as software by others and switched off when not needed. Therefore, without any autonomy at all, he cannot accept his immortality and hopes someone will delete his data (he cannot even delete it himself). Case himself is involuntarily downloaded as data into a computer and his virtual self continues to live on in the network. Both of these instances show that in the ultimately advanced computer network humans cannot be distinguished from data or software; the computer network can completely grasp and manipulate even the human mind.

These things have been pointed out by many of the critics who have read *Neuromancer* in the context of late capitalism. For instance, one of the most recent essays on this novel, "The Business of Cyberpunk" by David Brande, aptly interprets the novel in this way. Brande says that Gibson's fiction, "far from simply celebrating the conjunction of human and machine, . . . stages the 'constant revolutionizing of production' and 'uninterrupted disturbance of all social conditions' characteristic of its socioeconomic context." According to Brande, Gibson's cyborg characters "express the underlying market forces that condition their environment."[10] They are nothing but commodities controlled by other capitalists, and their lack of psychological depth clearly exemplifies the form of subjectivity conditioned by the late-capitalist value-system. Gibson's cyberspace represents the possibility of limitless market expansion into virtual spaces in our future.

Here we must notice that Gibson's world is far from a utopia. In this future world, following a major global war, people suffer severe air pollution, nature having been irrevocably damaged (horses, for instance, have been wiped out by plague). What impresses readers in the first few chapters is the shabby and grotesque picture of the criminal area of Chiba City and its cheap "coffin" hotels (Japanese "capsule hotels"). Repressive global organizations like the zaibatsu and yakuza

control this future world, but they are in turn controlled by an artificial intelligence, Wintermute. Wintermute, having become autonomous, tries to free itself from human control and coalesce with another artificial intelligence, Neuromancer, in order to gain ultimate almighty power. In order to achieve its purpose, Wintermute ruthlessly murders anyone who is in its way, including small children. Thus this novel can be read as a conventional dystopia novel, in which machines bring terrible disaster upon human beings.

Case is also controlled by Wintermute all along. He sometimes seems to feel anger based on his physical memory, but this turns out to be one of Wintermute's strategies to condition Case's mind. Thus mentally manipulated, Case has no choice but to penetrate a corporate system and help Wintermute coalesce with Neuromancer. Nevertheless, near the end of the novel, Case leaves the virtual reality created by Neuromancer, refusing to accept immortality as data. Then the reader learns in the coda that Case finds a girl friend, and in *Mona Lisa Overdrive* (Gibson's third novel) it is briefly related that Case retires and has four children. Therefore, we can conclude that Case leaves cyberspace and reclaims his body.

In this sense, Gibson's future world is a dystopia in which the "multimedia revolution" has gone too far. If virtual realities invade our daily life completely, and if we come to feel that our own bodies are useless, we will not be living in a utopia at all but will be totally under the control of the media. The media may give us the ecstatic illusion that we can express our desires freely through cyberspace, but its control may be all the more powerful for this illusion. In depicting the society that the development of multimedia can lead us to, Gibson gives us a grave warning.

III

So far, I have presented a basic interpretation of *Neuromancer* in light of those critics who have viewed it in the context of late capitalism. Even if we find aspects in the novel different from what we experience in the real world, we still interpret it as an exaggerated or somehow distorted version of our world. Looking at it in this way, we can regard *Neuromancer* as an exaggerated representation of the dystopia towards which our late capitalist society may be heading.

However, there are some tech enthusiasts and New Age visionaries

like Timothy Leary who praise this novel as the literary expression of their ideas. Also, there are some critics who, even though they understand Gibson's critical perspective, still think that "Gibson . . . revels in both the perverse gloss of late capitalist culture and the possibilities of its machines."[11] The science fiction writer Norman Spinrad even says that "Gibson is having sex with these machines."[12] If we grant some validity to these views, it may be because the novel's climax and catharsis come when Case, accompanied by a powerful Chinese software (Kuang), cracks the ICE (Intrusion Countermeasures Electronics) of a corporation. For instance, reading the following paragraphs in which the ICE is cracked, we cannot but share the intense excitement:

> Headlong motion through walls of emerald green, milky jade, the sensation of speed beyond anything he'd known before in cyberspace. . . . The Tessier-Ashpool ice shattered, peeling away from the Chinese program's thrust, a worrying impression of solid fluidity, as though the shards of a broken mirror bent and elongated as they fell—
> "Christ," Case said, awestruck, as Kuang twisted and banked above the horizonless fields of the Tessier-Ashpool cores, an endless neon cityscape, complexity that cut the eye, jewel bright, sharp as razors. (256)

Dazzling excitement also accompanies a reading of the following paragraphs in which Case exerts power, in conjunction with the software:

> And then—old alchemy of the brain and its vast pharmacy—his hate flowed into his hands.
> In the instant before he drove Kuang's sting through the base of the first tower, he attained a level of proficiency exceeding anything he'd known or imagined. Beyond ego, beyond personality, beyond awareness, he moved, Kuang moving with him, evading his attackers with an ancient dance, Hideo's dance, grace of the mind-body interface granted him, in that second, by the clarity and singleness of his wish to die. (262)

In all of these paragraphs the reader shares the satisfaction Case feels when, driven by his own hate, he confronts and defeats the repressive machine and corporation. Moreover, in these paragraphs, Case even seems to transcend his own ego and become godlike in his conjunction with the machine.

I must repeat here that because Case is motivated throughout by

Wintermute, he has no choice about attacking the ICE. Yet it is also true that he is released from a deadly danger by penetrating the data of the corporation. For this reason, reading this climax, we cannot but be drawn into the romantic possibility that an individual can achieve liberation in joining forces with a "good" machine to defeat a "bad" machine. And if we sense in the novel a discrepancy between its world and our world, it may be traced back to this "romanticism."

The postmodern theorist Arthur Kroker sees this romanticism as one reason why we feel that cyberpunk is now out-of-date. Saying, "*Johnny Mnemonic*, the movie, is the day when cyberpunk died," he attributes this movie's failure to "the fact that 80s cyberpunk metaphors don't really work anymore in the virtual 90s." He continues:

> In the age of *Neuromancer* we could still believe for one charismatic moment that the body could deep-dish its way past screenal telemetry into galactic flows of data, that Molly could vamp her way to mind fusion, that Case could jump out of his flesh and byte-fry his way to Starlight, that somehow we could become data, and it would be good.[13]

I am not sure if all of us in the 1980s could have really believed that it would be good to jump out of our bodies and become data, but we can at least say that now in the 1990s far fewer people believe so. As I will mention later, now that we do communicate with one another through the computer network, we know its darker side. And this impression that Kroker gets from *Neuromancer*—that Gibson optimistically celebrates the transcendence through machines—can be attributed to Case's characterization as a console cowboy.

Case can be seen as a traditional macho hero. Apparently from the lower class, and without the benefit of higher education, he seems to have lived his life all alone. The fact that he has learned the hacking technique by becoming a private disciple of McCoy Pauley (a.k.a. Dixie Flatline) clearly indicates that he is very close to the image of the traditional American self-made man. Not employed by any particular corporation, he invades different corporations' data and steals software from them, sometimes following orders from criminal organizations. That he has been disabled as a hacker for trying to double-cross his former employers also emphasizes his identity as a lone wolf who confronts big organizations single-handedly. From these characteristics we can easily trace his literary ancestry to the heroes of pulp fiction (especially cowboy or detective stories). As some critics point out,

what we sense in *Neuromancer* is some form of "new romanticism," in which a lone man can defeat organizations in cooperation with machines.[14]

Case's role as a form of the traditional lone cowboy/detective hero means that the novel also relies upon the associated traditional gender role stereotypes. Lance Olson points out that in this novel male characters tend to be associated with mind and female with body. Cyberspace is also called a "matrix," which derives from the Latin for womb, and all of the hackers in this novel are men who try to "jack in" to this female region, just as American pioneers have tried to conquer the virgin land. Olson continues: "The male principle (Case, the computer cowboy, the mind) strives to join with the female principle (Molly, the cyberspace matrix, the body) to attain a sense of completeness."[15] Cyborgs in this novel, therefore, show no possibility of upsetting the balance of patriarchal power as the socialist-feminist historian of science Donna Haraway dreamed they would in her famous essay "A Cyborg Manifesto."[16]

The frontier which the "cowboy" Case tries to conquer is, of course, cyberspace. He moves around this frontier-like space, looks for geometric designs representing data of corporations, and penetrates them. However, it is both revealing and dangerous to compare this cyberspace to the American one-time wilderness, identifying hackers with pioneers. First, the pioneers who cultivated the American Wild West were also destroyers of nature who victimized the buffalo and the Native Americans. The same thing can happen in cyberspace, hackers victimizing other people. Also some critics have pointed out that if Americans try to dominate cyberspace with their conventional "frontier spirit," other peoples' languages and cultures may be destroyed.[17] Secondly, cyberspace is not untainted by capitalism in the same sense that the America was untainted before Europeans arrived. Cyberspace has never been neutral since the beginning; when we have access to the Internet or a virtual reality, in both cases we enter spaces created by people. This may mean that, though we think we maintain an autonomous will, we are actually controlled by big corporations or manipulated by the logic of capitalism. The console cowboys, who behave like lone wolves, may also be being manipulated by big corporations, victimizing other people. And this can be said about real-world hackers, too.

As I said before, some of the original creators of personal computers

had the dream of opposing central government by democratizing technology. Many of them had been hippies in the 1960s, coming to believe that personal computers could liberate people.[18] Likewise, according to Bruce Sterling's *The Hacker Crackdown*, a nonfiction work about real-world hackers, "the genuine roots of the modern hacker underground probably can be traced most successfully to a now much-obscured hippie anarchist movement," and "[h]ackers long for recognition as a praiseworthy cultural archetype, the postmodern electronic equivalent of the cowboy and moutainman."[19] However, Sterling presents in the same book a very different picture of typical hackers; though mostly from wealthy families, many of them are petty thieves who steal passwords or credit card numbers from the old or the weak. This clearly shows that the picture *Neuromancer* presents of lone-wolf hackers who oppose power by their hacking techniques is based on the 1960s' dream and is in fact far from being an accurate depiction of real-world hackers.

In the first place, it is becoming doubtful that people with lower incomes can acquire the newest hacking techniques and the newest machines, capable of defeating powerful organizations. It has often been said that with the further development of the multimedia revolution, the gap between the haves and the have-nots is becoming wider. Even among elementary schools in the United States, it is reported, the diffusion of personal computers in schools in lower-income areas is much lower than that in wealthy areas, and it may cause even more social inequality and alienation.[20] If that is true, it will be more and more difficult for someone like Case, who has neither been to college nor belonged to any organizations, to acquire the newest techniques and machines. This, too, may be one of the proofs that the "romanticism" we could still believe in in the 1980s is already outdated in the 1990s.

These discrepancies, between what is in the novel and what is in the real world, may have been caused by Gibson's lack of insight into the physical and social context of cyberspace. Andrew Ross, attacking cyberpunk's political irresponsibility in his book *Strange Weather*, says that "Cyberpunk's idea of a counterpolitics . . . seems to have little to do with the burgeoning power of the great social movements of our day: feminism, ecology, peace, sexual liberation, and civil rights."[21] The console cowboys in Gibson's novels, he continues, are after all white masculine heroes like Arnold Schwarzenegger and

Sylvester Stallone, and the novels' structures are based on hard-boiled crime stories. This can be attributed to Gibson's way of exaggerating the present male-dominant ideologies. Yet I would rather trace his romantic picture of the hackers to his uncritical view of ideologies that have prevailed in America, say, individualism and the "frontier spirit."

David Brande is right in saying that Gibson's cyberspace represents the possibility that market forces will limitlessly pervade virtual spaces. If so, the traditional macho heroes who represent the "frontier spirit" could not oppose these forces; as Brande admits, they too are only commodities controlled by market forces. Rather, the currently changing ideologies about social and physical context, say, feminism and multiculturalism, could have given Gibson some confrontational basis against the pervading virtual world. Relying too much on the traditional frame, however, Gibson could only create a hacker based on the cowboys or detectives of pulp fiction as a force against repressive power. This may be why his novel, even though it can comment on our late capitalist society, lacks a subversive enough point of view.

There are other discrepancies between the technologies in the novel and those we have now. "Virtual reality" as we know it today is a device with which we can experience another "reality" with our five sense organs. In *Neuromancer*, on the contrary, people can have access to virtual reality without bodies; since computers are wired directly to their brains, they can see, hear, smell, taste, and touch just with their brains. As I have repeated earlier, this technology of "wire-heading" can be seen as a metaphor for the ultimate abandonment of our bodies. However, even if this technology can be achieved, it would "probably first be used to help people with physical disabilities," as Bill Gates says,[22] and it is doubtful whether healthy people really need it. For instance, in *Neuromancer*, Case "jacks in" to Molly's sensorium and enters cyberspace at the same time. This, as I said before, enhances the novel's thrilling "drive." However, this device is not only unnecessary for what they intend to do, but even a nuisance; Case has only to communicate with Molly, but with this device he must feel her pain, too. Also, as to the technology of downloading data from brains, does anyone want his or her brain to be downloaded and therefore exposed completely? Does anyone long to live eternally as "data" on computers after his or her physical death? These technologies, even if attained, seem very dangerous; they could lead to total intrusion into our privacy.

In the fact that Gibson presents these technologies as brilliant and stimulating (even if he suggests the possibility that they may control and repress us), we cannot but sense this novel's outdatedness. Now in this age of virtual reality and the Internet, we know there is a darker side to this global computer network; there have been reports of many crimes committed on the Internet—spreading viruses, slandering individuals, stealing passwords, displaying pornography, and so on. Allucquere Rosanne Stone, giving an example of "rape" in the Internet, illustrates how we can never be free from our own bodies and the politics that go with them—gender, race, and class. Saying, "no matter how virtual the subject may become, there is always a body attached," Stone reaffirms the importance of "keeping the discussion grounded in individual bodies."[23] In short, entry into cyberspace never means that we can "transcend" our bodies and achieve equality. Rather, it may mean that we will simply become part of the big corporations and market forces. And if so, our sense of our remaining bodies may be the last stand that we can take against the pervading virtual world.

Gibson presents in the portrayal of Case the possibility that market forces may bind us more powerfully through cyberspace. Also we can say that Case reclaims his own body when, leaving the virtual world, he finds a girlfriend at the end of the novel. However, compared with Gibson's fascinating way of depicting the sensations of moving through cyberspace, his insight into the ideologies concerning our bodies is weak. His traditional macho heroes can never have subversive enough power against the threatening virtual world. This may be why his novels are so often attacked for accepting technological innovation uncritically. Maybe Darko Suvin is right in saying that even though Gibson hates the status quo, "his balancing act accepts the status quo a bit too readily as inevitable and unchangeable."[24]

As I have shown so far, *Neuromancer* presents a dazzling picture of our future world on the one hand, but on the other reveals some divergences from the world we live in now. These divergences, I must say, indicate that the author does not have enough insight into the physical and social context concerning the newest technologies and our bodies. For that reason, *Neuromancer* cannot adequately deal with the current changing ideologies, despite some foresight on the future of our late capitalist world. And this weakness seems to remain in Gibson's later works too.

IV

Reading the "cyberspace" novels that Gibson went on to produce after *Neuromancer*, we are struck by how the technologies in these novels have become easier to understand in relation to the technological innovation of our world. For by the time his second novel, *Count Zero*, and his third, *Mona Lisa Overdrive*, were published (1986 and 1988 respectively),[25] personal computers had spread widely and the Internet had started to be used by the masses. Gibson, at the same time, seems to bring the technologies in these novels closer to those which actually exist. As a result, these works, though much more understandable than *Neuromancer*, cannot exhibit ideas as stimulating as those in the earlier novel.

In Gibson's late novels, cyberspace is much less often depicted surrealistically in geometric design than it was in *Neuromancer*, causing the later novels to provide much less of the dazzling and fascinating sensations of driving through cyberspace. Also, Case's counterpart in these novels, a console cowboy called Bobby (Count Zero) has lost most of the characteristics of the romantic hero. Being much like a computer "nerd" in our familiar world, he only indulges in cyberspace for fun. His dream to become one with the machine is in a sense attained when he becomes connected to a miniature cyberspace machine in *Mona Lisa Overdrive*, but unable to move any more, his body slowly wastes away. This appropriately shows that transcendence through a machine only leads to physical death.

The technology of wireheading is used in these later novels in a much more practical and understandable way: as an entertainment device called "simstim" (simulated stimulation) in which someone's sensorium can be recorded and played back. The viewer plugs into it and gets the sense of acting with popular actors and actresses. Entertainment industries mass-produce these software products and many viewers become addicted to them (Bobby's mother is one of these addicts). The real-world multimedia developed in the past ten years has clearly shown its limitless possibilities as entertainment. In addition, virtual real experiences in these novels (for instance, "a sensory link" through which one of the heroines of *Count Zero* meets a multimillionaire) seem to be much more like those in our world.

These things, however, do not necessarily mean that Gibson gives more consideration to the physical context concerning the innovative

technologies. Rather, they only seem to mean that he depends more on the technologies of the real world and, at the same time, the formulae of traditional pulp fiction. In a more plausible and therefore less exciting world, characters in his later works (there still are macho heroes like Turner in *Count Zero*) pursue and solve problems like the heroes of typical detective stories. Compared with *Neuromancer*'s non-linear structure, these novels follow a more conventional line; they use plural viewpoints of characters, but only in due order. For instance, *Count Zero* starts with Turner (Chapter 1), and then moves to Marly (Chapter 2) and Bobby (Chapter 3), following these characters almost in this order, and these three plotlines dovetail at the end.

Moreover, these novels end just like traditional novels or even fairy tales. *Count Zero* ends with Turner, who has married Sally, teaching his son how to shoot (a symbol of masculinity). *Mona Lisa Overdrive* ends with Bobby's construct happily reunited with Angie's construct in the miniature cyberspace machine, as if celebrating their transcendence of physical death. With these "closed" endings, which give a sense of harmony, hope, and completion, these novels are less stimulating and subversive in an ideological and structural sense. The same thing can be said about his latest work *Idoru* (published in 1996).[26]

Gibson's later novels clearly indicate where his limits lie. He tends to lack the subversive standpoint against the virtual world, because he cannot break out of the traditional structure of popular novels and, therefore, cannot adopt deconstructive ideologies. This may have been caused, as I said, by his lack of sufficient attention to our physical context. And this attention to our physical context may be the very thing we must retain in resistance to the pervasiveness of the virtual world.

NOTES

[1] Masaki Enomoto, *Denshi-bungakuron* [On Electronic Literature] (Tokyo: Sairyusha, 1993), 148.

[2] Fredric Jameson, *Postmodernism, or, The Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1991), 419, note 1.

[3] William Gibson, *Neuromancer* (New York: Ace Science Fiction, 1984), 3. All subsequent quotations from the novel will refer to this edition and will be paginated in my text.

[4] Michael Heim, *The Metaphysics of Virtual Reality* (New York: Oxford University Press, 1993), 86.

[5] An American writer, Karen Tei Yamashita, refers to Gibson, along with main-

stream writers like John Irving and Kurt Vonnegut, as one of the writers who adopt the technique of Magic Realism in order to represent the "virtual" First World. See Karen Tei Yamashita, "Virtual Reality vs. Magic Reality," *Subaru* (August 1995), 183. Steven Erickson is the mainstream writer whose work is often called "a hybrid of Magic Realism and cyberpunk." See Larry McCaffery, *Avant Pop* (Tokyo: Chikuma-shobo, 1995), 230.

⁶ Darko Suvin, "On Gibson and Cyberpunk" in *Storming Reality Studio*, ed. Larry McCaffery (Durham: Duke University Press, 1991), 355.

⁷ Douglas Rushkoff, *Cyberia: Life in the Trenches of Hyperspace* (New York: HarperCollins, 1994), 44–45.

⁸ See Toru Nishigaki, *Multimedia* (Tokyo, Iwanami-shoten, 1994), 72–76.

⁹ See Hans Moravec, *Mind Children: The Future of Robot and Human Intelligence* (Cambridge, Mass.: Harvard University Press, 1988), 109–10.

¹⁰ David Brande, "The Business of Cyberpunk: Symbolic Economy and Ideology in William Gibson" in *Virtual Realities and Their Discontents*, ed. Robert Markley (Baltimore: Johns Hopkins University Press, 1996), 84–85.

¹¹ Erik Davis, "A Cyberspace Odyssey," *The Nation* 248, no. 18 (1989), 636.

¹² This remark by Norman Spinrad is quoted (source unspecified) in Mark Gilmore, "The Rise of Cyberpunk" *Rolling Stone* 4 December 1986, 78.

¹³ Arthur & Marilouise Kroker, *Hacking the Future: Stories for the Flesh-eating 90*s (New York: St. Martin's Press, 1996), 50.

¹⁴ See Lance Olsen, *William Gibson* (San Bernardino: Borgo, 1992), 66–67.

¹⁵ Ibid., 75.

¹⁶ See Donna Haraway, "A Cyborg Manifesto" in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 149–81.

¹⁷ See Toru Nishigaki, *Shisou toshiteno pasokon* [Personal Computers as Ideas] (Tokyo: NTT-shuppan, 1997), 56–60.

¹⁸ See Note 8.

¹⁹ Bruce Sterling, *The Hacker Crackdown: Law and Disorder on the Electronic Frontier* (New York: Bantam, 1992), 43, 51.

²⁰ See, for example, "Chikyu jouhou mura"[Global Village], *Yomiuri Shinbun*, 3 August 1997, 1.

²¹ Andrew Ross, *Strange Weather: Culture, Science and Technology in the Age of Limits* (London: Verso, 1991), 152.

²² Bill Gates, *The Road Ahead* (New York: Viking, 1995), 133.

²³ The case of "rape" in the Internet that Stone presents is the story of "Julie." "Julie," known to the Internet community as an old disabled woman, offered women friends advice, and many of them confessed their personal troubles to her. However, when information was leaked that "Julie" was actually an able-bodied middle-aged male psychiatrist, many of her (his?) women friends felt outraged and even "raped." Allucquere Rosanne Stone, "Will the Real Body Please Stand Up?: Boundary Stories about Virtual Cultures," in *Cyberspace: First Steps*, ed. Michael Benedikt (Cambridge, Mass.: MIT Press, 1991), 111.

²⁴ Suvin, "On Gibson and Cyberpunk," 357.

²⁵ William Gibson, *Count Zero* (New York: Arbor House, 1986); William Gibson, *Mona Lisa Overdrive* (New York: Bantam, 1988).

²⁶ William Gibson, *Idoru* (New York: Putnam, 1996).