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「她只是個軟體！」：  
後人文主義視角下的虛擬偶像

“She Is Only a Software!” :  
A Posthumanist View on the Virtual Idol



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## 摘要

本論文藉由後人文主義對於人類與智能機器結合等科技文化現象的視角，以期能形塑一套有別於傳統人文主義中「人類」與「非人」之間涇渭分明的價值觀。本文探討電腦龐克（Cyberpunk）中的塞爆空間（Cyberspace）並以「虛擬偶像」為研究對象，其中又以威廉·吉布森的《阿伊朵》（Idoru）和安德魯·尼可執導的科幻電影《虛擬偶像》（Simone）為主要文本。

本文將從人機合體的簡史開始論述，並簡介電腦龐克和賽伯格的世界。在電腦龐克中，「身體」僅被視為「肉身」說明了人類的有限，進而歌頌主體離身於塞爆空間的自由。「虛擬偶像」變成了一種尋找出打破現實／虛擬界線之方法的離身性主體。第二章以後人文主義觀點闡釋科技／文化產業對虛擬偶像的想像。後人文主義彌平了人文主義和反人文主義間的對立，更進一步發展可能的替代方案。本章援引了凱瑟琳·海爾思（Katherine Hayles）、凱利·沃爾夫（Cary Wolfe）和唐娜·哈樂薇（Donna Haraway）等學者的理論。筆者認為，凡以人類觀點解釋宇宙萬物的論述，仍無可避免地視其他物種為階級中的「他者」，人文主義的傲慢使得人類持續掌控了評價的權力。哈樂薇則單視人類為相互依存的世間萬物中（包含賽伯格及其他非人物種等芸芸眾生）的一小群。第三章試圖分析威廉·吉布森《阿伊朵》中的塞爆空間和各個要角。小說中，角色透過化身在塞爆空間中互動，甚至生活其中。虛擬空間模糊了人類與非人物種間的分界。非人物種因不再僅作為客體或邊界，他們以與人類同等的身分存在。簡而言之，通過吉布森所想像的未來，提供了我們對於人類與非人的關係另一面向的思考。他以人類與所有非人物種互為主客作為舞臺，發想了人與非人無休止的互動情境之模式。

關鍵詞：虛擬偶像、威廉·吉布森、電腦龐克、塞爆空間、賽伯格、《阿伊朵》、後人文主義、凱瑟琳·海爾思、唐娜·哈樂薇

## Abstract

Through a posthumanist view of the articulation of humans with intelligent machines, my thesis aims to explore the possibilities of crafting a value that rejects the classic humanist divisions of the human and the non-human. This thesis discusses cyberspace and the virtual idol in cyberpunk, and the sample texts include William Gibson's *Idoru* as well as Andrew Niccol's film *S1m0ne*.

This study begins with a brief history of the hybrid of human bodies and machines, followed with an introduction on cyberpunk and the cyborg. In cyberpunk, the reduction of the physical body as merely meat questions the limits of humanity and leads to the celebration of the freedoms of disembodied subjectivity in cyberspace. Blurring the border between actual and virtual reality, the virtual idol becomes a further challenge to the disembodied body. In Chapter Two, I turn to posthumanism to investigate the virtual idol within techno-cultural production and imagination. Posthumanism marks the end of the opposition between humanism and anti-humanism and goes further in exploring alternatives. Theorists discussed in this thesis include N. Katherine Hayles, Cary Wolfe and Donna Haraway. My argument is that because "human" as a first-order observer still unavoidably regards other beings as political "others" in a hierarchical system, the humanistic arrogance continues to control the measure of values. Haraway recognizes the human as just another knot among the organic or technological nonhuman beings, including cyborg and all other kinds labeled as "posthuman," in the worldwide web of interspecies dependencies. Chapter Three intends to analyze cyberspace and characters in William Gibson's *Idoru*. In Gibson's novels, characters employ avatars to interact and even dwell in cyberspace. The virtual environment blurs the boundaries between humans and multiple nonhuman beings. Thus, nonhuman beings are not merely objects or

boundary points anymore; rather, they exist in the same sense as humans. To be brief, Gibson's vision of the future offers a different way for us to think about the relationship between humans and nonhumans. He sets the stage where humans and all significant others interact as both subjects and objects in ongoing intra-action.

Keyword: virtual idol, William Gibson, cyberpunk, cyberspace, cyborg, *Idoru*, posthumanism, N. Katherine Hayles, Donna Haraway



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## Introduction

In 2010, Hatsune Miku (初音ミク), meaning “first sound of the future,” held her first overseas live concert in Los Angeles, with more than 5,000 tickets sold out at once. The event was simulcasted to nine theaters across U.S. cities as well as others in Taiwan, Shanghai and Hong Kong. It also streamed over the Internet to nearly 100,000 viewers around the world. In fact, this school girl with long teal-colored twin-ponytails is a humanoid persona voiced by a vocal synthesizer software called “Vocaloid” which is sponsored by the engine of Yamaha Corporation. Developed by Crypton Future Media Inc., a Japanese company that specializes in sound-generation software, Vocaloid software features the humanoid robot model, Hatsune Miku, as an image for the marketing promotion and was initially released in August of 2007. As an animated 3-D hologram, she becomes the first virtual idol performed onstage. “Six years into her career, she has already selling out shows and performing with a live backup band for crowds as large as 27,000 people” (Fairbairn).

Hatsune Miku’s voice is created through vocal samples from a Japanese vocal actress, Saki Fujita. Each vocal sample contains a single English or Japanese phonic. By stringing different samples together, users can create a song with Vocaloid software. At first, Vocaloid was intended for professional musicians or computer music users, but more and more amateurs, whose only limits were their own singing skills, used it to replace actual singers. With this “singer” in the computer, those amateurs released their own songs on video-sharing websites. A lot of original Vocaloid compositions which were posted on Youtube became popular in the musical software market in Japan. Those hit songs were even recorded and released as albums by major CD companies. Derivative products as diverse as anime-style dolls and musical games have been on sale as well. Due to Hatsune Miku’s popularity, the mass

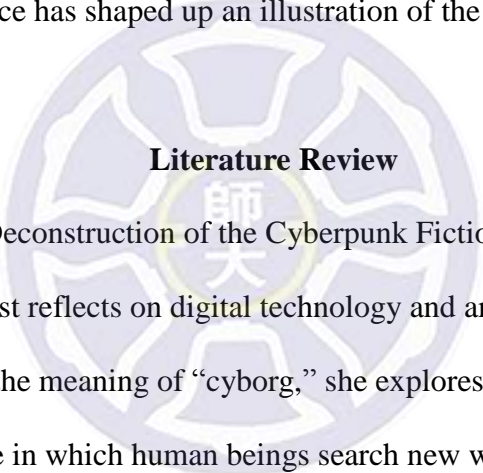


marketing also expanded to commercials. She was featured in advertisements for Domino's Pizza in Japanese market and performed sold-out 3D concerts all over the world. From a vocal synthesizer product to a worldwide beloved cyber celebrity, Hatsune Miku did achieve great commercial success.

Another example of the virtual idol is a science fiction film called *SimOne* (2002). In this film, the protagonist, Viktor Taransky, happens to get the software from a programmer and uses it to create a virtual actress, Simone. With a high-tech computer and his careful manipulation of the mass media, Viktor successfully makes Simone, being really good at acting and singing, a wonderful idol. He cheats the crowd into buying Simone's album, various types of derivative products and even Simone's live performance ticket. In the end of the movie, Viktor faces the dilemma of achieving both fame and wealth as the manager of a big star or revealing the truth that Simone is not a human being but only a computer program. As this brief summary suggests, while Viktor disguises Simone as an artificial image performing a media career in ways according to the demands of the managers, the existence of this virtual idol blurs the boundaries between the biological body and the artificial body.

From Hatsune Miku to Simone, these virtual idols mentioned above not only look like humans, sound like humans but also have been humanized. The virtual idol represents an interplay between the human bodies and digital technologies. In this thesis, I would take William Gibson's science-fiction novel *Idoru*, the second novel in the Bridge trilogy, as an example of the computer-generated media figure. This novel deals with the techno-cultural production and imagination of virtual idols. It imagines a near-future Tokyo in which human and posthuman beings can interact through network relations between physical space and "cyberspace," a term Gibson has invented in his masterpiece *Neuromancer*. The story begins with rumors that the

internationally famous rock singer Rez is going to marry Rei Toei, or so-called Idoru, a Japanese best-known virtual idol singer created by information software agents existing only in the virtual world. As a computer analyst, the main character, Colin Laney, is hired to investigate rumors surrounding Rez. At the same time, fourteen-year-old Chia Pet McKenzie is sent by the fan club for Rez's band to uncover what is going on with Rez. But the virtual celebrity, Idoru, is not at the center of the text. Rather, it serves as a combination of both human body and information technologies to explore a variety of political, social, and psychological issues in the virtual community, Kowloon Walled City. Long before the invention of the Internet, this concept of cyberspace has shaped up an illustration of the Information Age.



### Literature Review

#### Bodies and Machines: Deconstruction of the Cyberpunk Fiction

Donna Haraway first reflects on digital technology and artificial intelligence in early 1990s. Extending the meaning of “cyborg,” she explores a combination of both organic and artificial life in which human beings search new ways to break the boundaries between nature and culture. Haraway's cyborg theory calls for a world of fusions between humans and machine. As she expresses in “A Cyborg Manifesto,” “[m]onsters have always defined the limits of community in Western imaginations.... Cyborg monsters in feminist science fiction define quite different political possibilities and limits from those proposed by the mundane fiction of Man and Woman” (Haraway 315). Proposing a revision of the concept of gender, Haraway uses the metaphor of the cyborg to encourage feminists to move beyond naturalism and essentialism. Although Haraway's argument has been labelled as a post-gender statement, her concept of the cyborg is an attempt to break away from rigid

boundaries, especially those separating “human” from “animal” and “human” from “machine.” My thesis will apply her cyborg theory to analyze the breakdown of boundaries between humans and artificial machines in cyberpunk. Hence, this thesis would show specific problematic dualisms of self/other, natural/artificial, right/wrong, human/machine, mind/body and so on. In my opinion, the cyberpunk literature provides a possibility to break down these contradictory dualisms.

Cyberpunk actively shapes what the scientific theories signify and what the technological artifacts mean in cultural contexts. Several Gibson’s novels written in the 1990s including *Virtual Light*, *Idoru* and *All Tomorrow’s Parties* provide narratives through which the multiple implications of the posthuman can be explored, especially the virtual idol in *Idoru* that features the difference between a mediated persona and a living media celebrity. Blurring the border between actual and virtual reality, cyberpunk “[becomes] a general cultural term for an outlaw or critical attitude to the effects of information technology on society” (Jordan 20). As Han-yu Huang states in *Working through the Unbearable Ambivalence*,

[C]yberpunk always stands exactly at the blurred border between SF and the empirical world. While cyberpunk fiction is ascending to its publicity in the early and mid-eighties, a new global cyberculture is also coming into being, though the transformative effects brought about by high technology upon our perceptions of time, memory, body, identity, space, and reality still remain to be fantasized, narrated, and grasped. (14)

Huang’s thesis adopts the strategy of symptomatic reading to examine and interpret narrative, text, and discourse of cyberpunk fiction in connection with the techno-cultural realities. The symptomatic reading of cyberpunk fiction and cyberculture can be further specified as the following points. Firstly, symptomatic

reading exposes and interprets the hidden language of narrative and text in relation to the techno-cultural realities. Secondly, symptomatic reading regards cyberpunk as representation of the near future world that can be interpreted as the metaphors for imagining the postmodern conditions. Thirdly, while the Other is lacking and fail to offer the subject a stable identity, the subject itself is unable to identify with the Other. Therefore, technological fantasies come into existence to connect the lacks among the Other, the subject itself and the symbolic realities. Since no technological fantasy can deal with all the constitutive lacks without any contradiction, the symptomatic reading is significant to readjust the contradictory relationship with the Other. Accordingly, a rethinking and reconsideration of the subjectivity, space and time interacting with the Other is my main concern in this essay. I would interpret the context and narrative in cyberpunk, mainly Gibson's works, to deal with the interrelationships between the Other and the subject itself.

#### Cyberpunk as Social and Culture Theory

Cyberspace refers to virtual environments where humans can interact. According to Mike Featherstone and Roger Burrows, some of the main variants include Barlovian cyberspace, virtual reality (VR), and Gibsonian cyberspace (Featherstone and Burrows 5). For Barlovian cyberspace, interactions use both telephones and computer network systems, while VR is a computer-generated system providing a realistic sense of being immersed in a simulated environment. On the other hand, Gibsonian cyberspace is “a global computer network of information which Gibson calls ‘the matrix,’ which operators can access (‘jack-in’) through headsets (‘trodes’) via a computer terminal (‘cyberspace deck’)” (6). Gibsonian cyberspace, which will be further specified in the following chapters in this thesis, represents a combination

of the Internet and VR systems. In Gibson's novels, characters use avatars to interact with other people in cyberspace. However, it is not until *Idoru* that Gibson applies the concept of avatars as ways that people not only employ avatars to interact but also to "dwell" in virtual spaces (Henthorne 70).

Baudrillard's socio-cultural observations of the effects of cybertechnology upon the subject, body and reality most closely approach the main concerns of this thesis. Baudrillard focuses on the impacts of technological medium and mass media upon society with concepts such as "hyperreality," "simulation" and "implosion." As he claims in his *The Ecstasy of Communication*, cyberspace presents a form of hyperreality: "That which was previously mentally projected, which was lived as a metaphor in the terrestrial habitat is from now on projected entirely without metaphor, into the absolute space of simulation" (Baudrillard, *Ecstasy* 16). For Baudrillard, this transference from the real to the hyperreal brings about the collapse of the distinctions between subject/object and reality/representation by means of technological simulation. Within this virtual space, the concept of alienation disappears. The subject no longer differs from itself and is, therefore, indifferent to itself. From a Baudrillardian perspective, this "indifference to oneself" is a mirror-image of all these kinds of indifference: "The indifference of space," "political indifference," "sexual indifference" and the individual's indifference to oneself (Baudrillard, *Illusion* 108). That is, the subject has left behind all of the embodied bounds of material worlds, and then enters a virtual world where "the subject is neither the one nor the other; it is merely the Same" (Baudrillard, *Transparency* 22). To be more specific, Baudrillard deals with the escape from embodiment of the lived-body and its limitations in cyberculture.

Not only Baudrillard reads cyberpunk as social theory, Doug Kellner also regards

cyberpunk as an analytic resource for the postmodern social theory. As Kellner indicates in *Media Culture*,

cyberpunk science fiction can be read as a sort of social theory, while Baudrillard's futuristic postmodern social theory can be read in turn as science fiction. This optic also suggests a deconstruction of sharp oppositions between literature and social theory, showing that much social theory contains a narrative and vision of the present and future, and that certain types of literature provide cogent mappings of the contemporary environment and, in the case of cyberpunk, of future trends. (Kellner 299)

He suggests that cyberpunk involves the postmodern literary expression and cultural milieu from which it derives inspiration. By operating outside the law, cyberpunk takes on a politically subversive connotation of the uses of technology and science. Because of the various numbers of significations at play, postmodern culture and cyberpunk study should be considered together when dealing with the cyberpunk text.

As I have pointed out, various strands of contemporary social and cultural theory bring up many of the themes inherent to cyberpunk. Other writers like De Landa systematically examines the consequences for the human sciences. Through a materialist non-metaphorical reading of Deleuze and Guattari, De Landa has outlined a theory of "stratification" that the complementary functions of "sorting out" and "consolidation" are shown to be behind structural forms. Based on computer simulations of cultural, social and economic processes in cyberspace, the future of social theory will be in the construction of new "epistemological reservoirs" (Featherstone and Burrows 14). De Landa suggests that the social sciences have to begin the process of "purging" some of their domain assumptions. The closed and static notion of stability has been replaced by the new science of systems in which our

understanding of the world is fundamentally altered.

### The Virtual Body in Cyberspace

Among various scholarships concerned with the relationship between the biological organism and the artificial, the notions of the body's lack of clear boundaries play a prominent part. Bioengineering and bionics (biological electronics) especially relate to this context. According to Dani Cavallaro, the former term focuses on the application of engineering methodologies to the body through studying the system of the biological organism in terms of the mechanical properties of substances, such as prosthetics and hospital equipment to include engineering at the cellular level. The later concentrates on the possibility of applying biological processes to technology and works on the premise that certain design principles characteristic of the human body might be used as models for producing new mechanical devices (Cavallaro 74). Cyberpunk echoes contemporary developments of technologies to show the ever-changing boundaries between the body and technology in an imaginative articulation. In Gibson's cyberspace, Walled City, character's body flows in a world of temporal and spatial dislocation. According to Cavallaro, though technologies seem to take the materiality of the body away, "[i]mmersion in the virtual environments produced by technoscience does not automatically amount to an experience of disembodiment for it is grounded in ritual/ceremonial experiences of an eminently material nature" (78-79). Cavallaro makes it quite clear that the relationship between the organic and the artificial is an ever-changing boundary. She concentrates on the application of technological processes to the body by promoting specific mentally needs and desires. In *Cyberpunk and Cyberculture*, Cavallaro focuses on the media malaise in the virtual singer. She regards Idoru as a "desiring machine" that

“servers to channel the media-generated yearnings of fans and consumers into an intricate structure of mutating images” (81). *Idoru* organizes the bodies of its fans by regimenting their desires. It carries traces of personal life stories, submerged memories, and fleeting scenes, sounds and images. Proceeding from a similar assumption of Gibson’s construct of *Idoru* and Deleuze and Guattari’s concept of corporeality, Cavallaro argues that the virtual idol is not only deployed to evoke Rez’s fans’ desire, but also presented as a perfect figure to attract their consumption. According to Cavallaro, *Idoru* “exemplifies the idea that bodies are technological products and that technology, in turn, embodies specific cultural forms of production and consumption” (79). Designed as a corporate commodity by the male software designers, the virtual idol is a digital representation of male fancies in popular culture.

Gibson draws upon issues such as public space and urban condition throughout his work, especially in *Virtual Light*. Since Gibsonian concept of cyberspace about cultural, economic and social phenomena provides a sociologically coherent dystopic vision of a near future, cyberpunk and cyberculture thus become analytic resources for cultural critics like Jean Baudrillard, Doug Kellner and De Landa. As De Landa calls for a radical shift in the methodological implications of cyberculture, this essay intends to offer a reconstruction of the body/mind dichotomy and a reconstitution of cyberspatial virtual environments. In order to provide an imagination of the posthuman future, I would like to carry out a concise survey on Gibson’s cyberpunk fiction, *Idoru*, in this thesis. At the end of *All Tomorrow’s Parties*, Gibson leaves undeveloped and unanswered the implications of Rei Toei’s multiple emergence. In many ways, while Gibson has set the stage for a posthuman interrogation of the patterning of presence, he still remains those implications ambiguous. Although Gibson cannot offer closure to the Bridge sequence, he leaves the emergence of Rei



Toei, as an emergent system based on randomness, for readers to think about the next evolutionary step of information.

### Research Questions

In this thesis, I would reconsider the advent of the virtual idol by questioning the understanding of the virtual idol as a representation of a biological body: What makes the virtual idol different from other representations of living celebrities? How this interaction of body and machine becomes so well-established in common conceptions of technology? The human beings create virtual idols and animated computer creations which appear as singers or catwalk models, to have their appearance youthful or attractive in order to match consumer tastes of nowadays. Moreover, virtual idols are designed by computer programmers as female characters with slender figures and tender personalities. In Gibson's *Idoru*, the figure of the virtual idol, though artificial, represents an underlying narrative of conservative view points of sexuality and gender. Can this phenomenon be interpreted as an objectification of the female? Does it mean that people tend to project their ideal figures on to those virtual idols? What transformations govern the connections between users and virtual idols?

The development of technology makes more possibilities and breaks limits of human's capabilities such as the creation of cyborgs and virtual idols. But will we humans create "something" opposite to our plan? Could it be possible for a revenge on humans from another Frankenstein's creature? Just like what the protagonist said in Margaret Atwood's science fiction *Oryx and Crake*: "Why is it he feels some line has been crossed, some boundary transgressed? How much is too much? How far is too far?" (206) Identifying the virtual idol within techno-cultural production and imagination, this thesis aims to embrace the possibilities of crafting a value that

rejects the classic humanist divisions of the human and the non-human in the face of such technologies.

### **Methodology**

The above questions pertain to the virtual idol and its phenomenon with a posthumanist rethinking of the articulation of humans with intelligent machines. To investigate the virtual idol within techno-cultural production and imagination, I turn to N. Katherine Hayles. According to Hayles, “The posthuman subject is an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction” (Hayles, *How* 3). In *How We Became Posthuman*, Hayles challenges the human-posthuman dichotomy. She supposes, “If human essence is freedom from the wills of others,” the posthuman is “post” not because it is necessarily unfree but because there is no a priori way to identify a self-will that can be clearly distinguished from an other-will (4). Hayles’s critique of the cybernetic view of the posthuman is motivated by Hans Moravec’s dream of transplanting one’s consciousness into the cyberspace. In *Mind Children*, he imagines a future that a person’s mind can be liberated from his body because the identity of a person is the pattern and the consciousness in one’s head. Through understanding human being as a set of informational processes, this construction implied that embodiment is not essential to human being. Accordingly, Hayles attempts to discuss the following three issues. First of all, how does information lose its body? In other words, how does information come to be regarded as a separable stuff from the material substrates. Secondly, how was the cyborg created as a technological artifact and cultural icon? Lastly, how is a historically specific construction called the human giving away to a different construction called the

posthuman (2)? That is, we leave the old cosmos characterized by presence and absence, entering a world where the binary of pattern and randomness computes. Part of her questions of the conception of the posthuman share similar points with my research questions about the possibility of new ways of thinking about the humanist subjectivity and what being human means. Hence, the methodology that I intend to perform upon cyberculture and cyberpunk will be further elaborated in the light of the following Halles's theoretical statements.

Halles makes reference in relation to the history of cybernetics: the three main movements or "waves" of cybernetics are homeostasis (1945-1960), reflexivity (1960-1985) and virtuality (1985 to the present). She does not just provide a historical examination of the history of cybernetic but explores the complex interplay between embodied forms of subjectivity and arguments for disembodiment throughout the cybernetic tradition. Halles offers the following four assumptions of the posthuman: Firstly, the posthuman is a new kind of subjectivity that privileges informational pattern over material instantiation. Therefore, embodiment in a biological substrate is not seen as an inevitability of life but an accident of history. Both "humanist" and "cybernetic posthuman" perspectives engage in the erasure of embodiment from subjectivity. While the former views cognition taking precedence over the body as an object to possess and master, the later imagines the body as a receptacle for data and information. The erasure of embodiment, including sex, race and ethnicity, in the cybernetic construction of the posthuman takes place in ways that have not occurred in other critiques of the liberal humanist subject, especially in feminist and postcolonial theories (4). With Halles's posthumanist views and cybernetic theories about the binary opposition between embodiment and disembodiment, this thesis would explain what embodied forms of subjectivity means in the cybernetic tradition

and illustrate the complex interrelationships between subjects, their bodies and the cybernetics.

Secondly, the posthumanist view regards consciousness as an epiphenomenon. The implication is that consciousness is not the main show in the evolutionary process but merely a minor subsystem “running its program of self-construction and self-assurance while remaining ignorant of the actual dynamics of complex systems” (286). Conscious mastery is not the essence of human self-identity, but “merely the story consciousness tells itself to explain results that actually come about through chaotic dynamics and emergent structures” (288). In the field of Artificial Intelligence, consciousness can be created inside a machine as an intelligence comparable to that of a human. By contrast, in Artificial Life, human consciousness is regarded as an epiphenomenon of nervous systems for intelligent machines to understand human beings. This refashioning of the human into the posthuman deconstructs the liberal humanist subject, an emphasis on anthropocentric views, because “the essential function for both intelligent machines and humans is processing information” (239). Hayles’s insight into the essence of human and her posthumanist thinking would help me dive into discussion of anthropocentric views and the blurred boundary between the human and the non-human issues.

Thirdly, the posthumanist view thinks of the body as the original prosthesis we all learn to operate, so that expanding or replacing the body with other prostheses becomes a continuation of a process that began before we were born (3). Fourthly, the the posthumanist view configures human being so that it can be seamlessly articulated with intelligent machines. Accordingly, the posthuman has no essential differences or absolute distinctions between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals (3). Hayles’s

views of the posthuman offer me resources for thinking about extending embodied awareness in ways that would be impossible without electronic prosthesis (291).

Hayles questions the materiality/information separation by complicating the leap from embodied reality to abstract information. In her another essay, “Embodied Virtuality: Or How to Put Bodies Back into the Picture,” she discusses “virtual reality” to oppose the conception that regards cyberspace as a disembodied medium. She questions the reason why we want to leave the body behind by erasing it from cyberspace discourse. In fact, the bodies are actively involved in the construction of virtuality from determining the precise configurations of a virtual reality interface to influencing the speed with which we can read a CRT screen (Hayles, “Embodied” 1). Then, why do so many conceptions regard cyberspace as a disembodied medium if we, being embodied, can interact with virtual worlds? Hayles finds a clue from the ways to form constructions of virtuality: a boundary between the body and the screen image is marked to create the illusion of disembodiment. And then, the image is reified as an alternative universe where our subjectivities can inhabit. After erasing awareness of the perceptual processes which brought this “world” into being, “the illusion compelling is now close to the surface: we want this alternate world to exist so that the body can be left behind, and we know the body can be left behind because this world exists” (2). In the age of virtuality, the body is regarded as a flawed and superfluous container while the mind equates subjectivity. The dream of transcending the body to achieve immortality comes true with the mind continuing in its incarnation as electronically coded information.

To challenge the assumption that cyberspace is a disembodied medium, Hayles conceptualizes the concept of virtuality from two perspectives of subjectivity: one links the subject to the mind, the other links the subject to the body. Hayles suggests

that the binary construction of masculine/feminine still exists in the domain of cyberspace, as Nancy Stepan has shown taking race and gender as example, the characteristics of one duality can transfer onto another when the two are consistently associated (Hayles, “Embodied” 3). Yet this duality becomes mind/body: mind is superior to body while silicon technology is superior to protein organism. Thus, in the discursive practices among these terms, the “stigmatized terms” (body, organism, female) are erased or left behind.

Hayles uses the “semiotic square” to transcend the persistent binary thinking by explicating the concealed terms which help to generate meaning and stabilize significance (Hayles, *How* 247). Both sets of dualities, “presence/absence” and “randomness/pattern,” are used to investigate the implication of virtuality as a crossing between “materiality” and “information.” (see fig. 1)



Fig. 1. Virtuality and the Semiotic Square (Hayles, “Embodied” 9)

The pattern/randomness and presence/absence dialectics interact dynamically with their partners. Through these interactions, new synthetic terms arise. The semiotic square shows “the possible relationships that can emerge when materiality and information mutually imply each other, thus providing a theoretical framework in which such apparently diverse ideas as hyperreality and mutation can be understood

as different manifestations of the same underlying phenomenon” (Hayles, “Embodied” 10). The body is no longer regarded as simply material object or informational pattern. This interplay between pattern and presence can explain how the virtual body is constituted. In posititng a shift from presence/absence to randomness/pattern, Hayles shows how these categories can be transformed from the inside to arrive at new kinds of cultural configurations. That is, it signals the end of a certain conceptions that have applied to the fraction of humanity having the wealth and power to conceptualize themselves as autonomous beings.

Hayles’s semiotic square has much in common with Gibson’s narrative in cyberpunk. It can be used to investigate the implications of virtuality as a crossing between information and materiality. For example, the contrast between the limitation of Rez-the-flesh and the power of Rez-the-icon that consists of patterns without randomness highlights the advantages of pattern over presence. As an extension of the body, Rez has attained a kind of immortality. Here I would like to discuss the subject in the flow of relations with multiple others in contemporary posthuman address. When body and mind interact, any reconfiguration of the body must necessarily affect how subjectivity is constituted.

### **Outline of Chapters**

This thesis deals with cyberspace and virtual idols in cyberpunk fiction, and the sample texts include William Gibson’s *Idoru* (1996) as well as the film *SimOne*. The whole thesis is divided into three chapters. Chapter One provides a brief history of cyberpunk in relation to postmodernity and cyberculture. As a representation of the near future world, cyberpunk can be interpreted as a metaphor for imagining postmodern conditions. Meanwhile, cyberpunk also represents the social, cultural, and

technological realities. Thus, the focus is placed on topical issues of cyberpunk such as the impact of technology on everyday lives and on all sorts of spatio-temporal experiences. The discussion proceeds to different kinds of technological production like cyborg and AI fictionalized by cyberpunk. This chapter also highlights the controversial issues concerning the border between actual and virtual reality. To investigate how critical thinking has reacted to placing cyberpunk in postmodern context, the theorists to which this chapter refers include N. Katherine Hayles, Rosi Braidotti, and Cary Wolfe. Here I especially rely on Hayles's posthumanist studies to investigate the cyberbodies within techno-cultural production and imagination. This chapter would also discuss Hayles's semiotic square. This theoretical framework crosses the persistent binary thinking by explicating the concealed terms which help to generate meaning and stabilize significance.

Chapter Two presents the implications of becoming posthuman. I will draw on Hayles's posthumanist theory to explore cyberpunk by reading cyberculture and the virtuality. This chapter attempts to confirm the following theses. First of all, the posthuman is a new kind of subjectivity that privileges informational pattern over material instantiation. And information came to be regarded as a separable stuff from the material substrates. Secondly, conscious mastery is not the essence of human self-identity. This conception proves the deconstruction of the liberal humanist subject in cybernetics. Thirdly, since the body is regarded as the original prosthesis we all learn to operate, expanding or replacing the body with other prosthesis becomes a continuation of a process that began before we were born. Fourthly, the posthuman configures human being so that it can be seamlessly articulated with intelligent machines. To elaborate a more solid understanding of the posthuman, the second section of Chapter Two provides a survey on works of Cary Wolfe and Donna

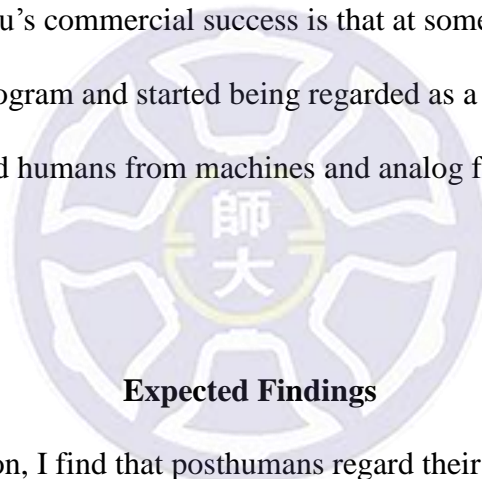


Haraway. I attempt to recontextualizes our taken-for-granted normal human experience and rethink the “human” as a spectrum instead of two sets of opposing ideals (human or nonhuman). With a detailed analysis of posthumanist views, I argue that posthumanism does not make an absolute fracture from the legacy of humanism since the human, as a first-order observer, still unavoidably recognizes nonhumans/animals as significant others in a hierarchical system.

Finally, in the last chapter, I would interpret the context and narrative in cyberpunk by adopting André Nusselder’s methodology, a Lacanian analysis of cyberspace, to deal with the interrelationships between the Other and the subject itself. One of the key themes of cyberpunk involves a combination of both organic and artificial life in which “human beings” search new ways to break the boundaries between self and other, natural and artificial, and those problematic dualisms. Cyberpunk thus provides possibilities to break these contradictory dualisms. Gibson’s works address fundamental questions about disembodiment. It comes into existence to connect the lacks among the Other, the subject itself and the symbolic realities. My main concern is the fluid boundary between the biological body and the artificial one in cyberpunk. Besides, I would focus on the virtual idol within techno-cultural production and imagination. To find out the origin of computer-generated media figure, I would take Gibson’s *Idoru* and the film *Simone* as sample texts for clarifying problems of the interplay between human bodies and digital technologies. This chapter argues that the virtual idol in Gibson’s cyberpunk fiction provides the possibility of transcending the binary of biological bodies and information technologies that creates a metaphorical union without being seduced by fantasies of boundless power and disembodied immortality.

Besides, this chapter would mention a most recently virtual celebrity, Hatsune

Miku, and those virtual idols in *Idoru* and *SImOne*. Hatsune Miku appears to share more similarities with Gibson's *idoru*. Like Rei, she revolutionized the traditional media market through emerging from the digital realm into an analogue reality. However, compare with Rei, Hatsune Miku is more than a particular work qualifies as corporate property for their own profit, but a "royalty-free" media for users to make any further distribution or publication of the works for individual, non-commercial end-use. Without copyright problem, every users of Vocaloid software can create their own songs or remix other users' compositions. As technological progress, maybe one day in the future, the virtual idol would replace the actual one. Perhaps the greatest reason for Hatsune Miku's commercial success is that at some point she stopped being treated as a software program and started being regarded as a legitimate idol. The lines that once separated humans from machines and analog from digital have been blurred.

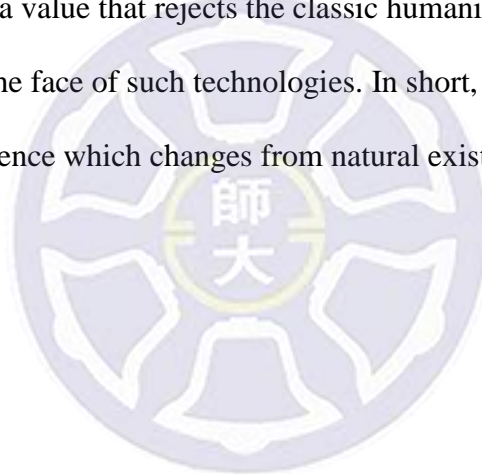


### **Expected Findings**

In cyberpunk fiction, I find that posthumans regard their bodies as flawed and superfluous containers rather than the ground of being. A combination of both organic and artificial life in which human beings search new ways to break the boundaries between self and other, natural and artificial is also the key themes of cyberpunk. In examining the phenomena of virtual reality, I hope to explore specific problematic dualisms of mind/body, human/machine, natural/artificial, self/other, right/wrong, and so forth. In my opinion, the cyberpunk literature provides a possibility to breakdown these contradictory dualisms. Hence, this thesis intends to offer a reconsideration of the body/mind dichotomy and a reconstitution of cyberspatial virtual environments. To rethink subjectification, spatialization and temporality interact with the Other in the

cyberpunk fiction, this essay deals with William Gibson's works. His novels provide case studies for investigating the technical-cultural concept through embedding ideas in the specific narratives about culture and science.

My main concern in this thesis is the fluid boundary between the biological body and the artificial body in cyberpunk. In Gibson's *Idoru*, the division of the subject/object dichotomy lays the foundation for the mediation of the posthuman coded as information topology. The virtual idol Rei transcends of the boundary between flesh, data and digital information, creating a metaphorical union with the biologic rock star Rez. From a posthumanist view, this thesis aims to embrace the possibilities of crafting a value that rejects the classic humanist divisions of the human and the non-human in the face of such technologies. In short, this thesis attempts to rethink the human existence which changes from natural existence to technological existence.



## Chapter One

### Cyberpunk in Contexts

#### Reimagining the Body

New technologies are reshaping our cultural forms. Among the various technologies concerned with the relationship between the natural and the artificial, we are facing the potentiality of a future world in which our humanity itself will be transformed beyond recognition. During the Second World War, the invention of a new type of liminal machine exhibited lots of the behaviors characterizing living entities, such as homeostasis, self-directed action, adaptability, or reproduction. The expansion of this new realm suggests a possibility of the combination of nature and modern technologies. The liminal machine may be any self-organizing system. For instance, a physical robot operates without centralized control and mirrors the purposeful action of organic life. These liminal machines exhibit what John Johnston terms “machinic life,” which describes “the forms of nascent life that have been made to emerge in and through technical interactions in human-constructed environments” (Johnston iv). In *The Allure of Machinic Life*, Johnston suggests that machinic life mirrors “the behavior associated with organic life while also suggesting an altogether different form of ‘life,’ an ‘artificial’ alternative, or parallel, not fully answerable to the ontological priority and sovereign prerogatives of the organic, biological realm” (Johnston 1). For Johnston, this machinic life is not distinctly opposed to organic life. Rather, it actualizes its fundamental principles in another newly animated area in which “the biosphere and artifacts from the human world touch and pass into each other, in effect constituting a ‘machinic phylum’<sup>1</sup>” (1). With the evolution of liminal

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<sup>1</sup> The “machinic phylum” is a term Deleuze and Guattari used to describe the existence of a special

machine, the human subject is constituted a human-machine cyborg body. It is a process of becoming machinic which constitutes new forms of life. In the 21<sup>st</sup> century, the intermingling of human bodies and machines is more obvious. For example, a human with artificial cardiac pacemaker or prosthetic implants would be considered a “cyborg,” since these attachments can keep the person alive or enhance his/her sensoriums or biological capabilities above and beyond what’s currently normal for humans.

Recent progress in life sciences anticipates that cyborg technology will form the future human evolution. A “cyborg,” the coinage of “cybernetic” and “organism,” hybridizes both organic and synthetic parts. In the context of science fiction, cyborgs are often portrayed as beings with both machine and organism. When it comes to the figure of cyborg in SF, most of the people may think about Data in the television series *Star Trek: The Next Generation* (1987) and the feature films or the Japanese anime *Ghosts in the Shell* (1995). We might have no problem considering *Iron Man* (2008), the super hero who fitted with a heart pacemaker, as a human rather than a cyborg. But if one day in the future, people’s brains are jacked into computers, bodies are invaded by technology, limbs and organs are amputated and replaced by machines, to such an extent that their figures are barely recognizable as human.<sup>2</sup> Can we still call them humans? Conversely, to what degree do non-humans share other characteristics still thought to be exclusively humans? We no longer have a clear idea of what a human being is. It seems that cyborgs offer the possibilities of post-bodied

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realm which crosses over the opposition between the organic and the non-organic, the human and the non-human. They show how the machinic phylum comes about and how it operates in the history and nature. Manuel DeLanda, following Deleuze and Guattari, extended this realm to include all forms of non-organic life with self-organization. It is a different way of conceptualizing the development of technology.

<sup>2</sup> See the related news. Victoria Woollaston. “Meet Frank, the world’s first walking, talking bionic man complete with artificial limbs and a beating HEART.” Daily Mail. 29 Nov. 2013. <<http://www.dailymail.co.uk/sciencetech/article-2465853/Meet-Frank-worlds-walking-talking-bionic-man-complete-artificial-limbs-beating-HEART.html#ixzz3VB4h3sRB>>

and post-human forms of existence repeatedly suggesting that boundaries are fluid. And the increasingly blurred boundaries among humans, animals, and machines are frequently invoked when one questions the difference between humans and non-humans.

The very concept of the human has been extraordinarily controversial over the last decades. Many theorists have attempted to explore the vague boundary between the physical and artificial bodies. On the one hand, some theorists believe that humans are about to enter a new era. Francis Fukuyama, for example, in his *Our Posthuman Future*, argues that the contemporary biotechnology will alter the concept of the human: “the sum of the behavior and characteristics that are typical of the human species, arising from genetic rather than environmental factors” (Fukuyama 130). And this new biotechnology moves human beings into a “posthuman” stage of history. According to Fukuyama, traditional argument about the boundary between nature and nurture is transferred by the argument that human nature is a meaningless concept because of the plasticity of human behavior. On the surface look, human beings look, speak and act variously from person to person. Most of the apparent differences between human beings are conventional rather than natural. Human nature is not fixed, since human beings could be shaped by their social environments and thus behave in open-ended ways. Although human nature has provided a stable continuity to humans’ experience as a species, modern natural science has cooperated in expanding our view of who qualifies as a human being. As time goes by, the posthuman future may give human beings the capacity gradually to alter shared humanity over time. However, this shared humanity still locate and direct human beings by drawing boundary lines of humans with animals and machines. The concept of who qualifies as human beings thus marks the space in which humans are distinguished from every other living

creatures. It also appears that this preponderance of human beings marks or makes an absolute break from non-human/animal.

On the other hand, other theorists see the posthuman future as breaking down conventional assumptions and boundaries, especially those separating “human” from “animal” and “human” from “machine.” In “A Cyborg Manifesto,” Donna Haraway first reflects on digital technology and the artificial intelligence of the early 1990s. Extending the meaning of “cyborg,” Haraway explores a combination of both organic and artificial life in which human beings search new ways to break the boundaries between nature and culture. Haraway suggests that the cyborg body represents a humanoid hybrid of computer technology and human flesh. From her statement, I associate cyborg monsters with the monster Creature in Mary Shelley’s *Frankenstein*. This well-known story focuses on the issue of what constitutes humanity. Victor Frankenstein, a student of natural philosophy, would like to create an ideal perfect man with about eight feet in height and proportionately large. However, he created something horrible that was opposed to his plan. With the plot about Frankenstein’s fascination with new science and the creation of a human being, from Haraway’s perspective, the Creature can be considered as a cyborg monster which takes on the image of independent woman as “other” than the traditional female figure. Making some alterations in the concept of gender, Haraway uses the metaphor of the cyborg to encourage feminists to move beyond naturalism and essentialism. Though Haraway’s argument is mostly labelled as a post-gender statement, her concept of the cyborg attempts to break away from rigid boundaries. Therefore, her feminist cyborg offers the potential for liberation from the confines of specific problematic dualisms of self/other, male/female, natural/artificial, right/wrong, human/machine, mind/body and so on in the cyberpunk literature.

My thesis argues that we should not try to imagine a “posthuman culture” or “posthuman age” that comes “after” the human when dealing with the existence of non-human subjects. Instead, it is only through a fundamental change in the concept of the human that we can move beyond the problem of anthropocentrism, speciesism and the dialectic of the human/non-human dualism.

### Cyberbodies in Cyberpunk

A number of writers use science fiction as a device to comment upon the dilemma of such contemporary issues as cosmetic surgery, biotechnology, genetic engineering and nano-technology. Their fictional worlds deal with the potential consequences of futuristic technology and scientific innovations, from outer space travel to inner space landscapes of psychology and the media. Two common themes of science fiction are bodily modifications and the system operators.<sup>3</sup> Through these imaginative contents they question the key analytical categories people have long used to structure the biological, the technological, the natural and the artificial. For example, Philip K. Dick explores the issue of defining qualities which separate human beings from androids in his novel *Do Androids Dream of Electric Sheep?* (1968). This novel focuses on the development and use of an empathy test, the Voigt-Kampff test. It is designed to measure empathetic responses. Unable to be empathetic, androids fail the test by hesitating in response to what should be normal human responses. But the test turns out to be useless for detection of androids. Joanna Russ was another SF writer who challenges gender roles and sexist views during the 1970s with her novel, *The Female Man* (1975). The story focuses on four female characters living in different time and place. They encounter different views on gender roles when they

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<sup>3</sup> System operators move around in cyberspace. Their bodies are connected to computers for input and output flows of information.



cross over to each other's worlds. The novel ends with the characters returning to their own worlds, each with a new idea of what it means to be a woman. These SF writers claim that categories deriving from the fundamental divisions among subjects, their bodies and the outside world, are in danger of decomposing. Hence, science fiction which features computers, information technology and cyberbodies make predictions about the human future with utopian and dystopian possibilities.

The history of cyberpunk, as a subgenre of science fiction, can be traced back to the 1980s. The coining of the word "cyberpunk" first appeared as the title of Bruce Bethke's short story "Cyberpunk." It is a fusion of two very different words, "cyber" and "punk." The term "cyber" stands for "cybernetics," which is relevant to the exploring of regulatory systems, including their structures, possibilities and limitations. On the other hand, "punk" is a subculture that emerged in the mid-1970s. The punk subculture is centered on a diverse array of ideologies, fashions and forms of expression. It is mostly concerned with anti-establishment or progressive views and the promotion of individual freedom. Many cyberpunk protagonists usually belong to the working or lower middle-class. These anti-heroes are placed in difficult circumstances which they have little chance to overcome. The fusion of these two words thus emphasizes the main idea of cyberpunk: high technology and antisocial attitudes. Most of the cyberpunk novels feature a near-future Earth taking place online or in cyberspace, such as Isaac Asimov's *Foundation* and William Gibson's *Bridge* trilogy<sup>4</sup>. Films like *The Matrix Trilogy* (1999, 2003), *Avatar* (2004), and *Sleep Dealer* (2008) can also be categorized as cyberpunk.

Cyberpunk projects a dystopian vision for postmodern times. Stories are set in a world of the illegal which is a combination of high technology and low life. The most

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<sup>4</sup> William Gibson's *Bridge* trilogy comprises the novels *Virtual Light* (1993), *Idoru* (1996), and *All Tomorrow's Parties* (1999).

visible example is William Gibson, whose novel *Neuromancer* is characterized as a near-future world of computer networks and artificially intelligent entities. The protagonist, Case, is a talented cyberspace hacker. He can jack his consciousness into the global computer network in a virtual reality dataspace called the “Matrix.” However, his central nervous system is injured as punishment for his betrayal, leaving him unable to jack into the Matrix. The setting is centered on the virtual environment or cyberspace which liberates the protagonist from the constraints of the physical body. The technology and computers represent the cyber part of the term while the street life in the fiction provides the punk part.

As cyborgs currently are on the rise, the rejection of the physical body as mere flesh leads to the celebration of the freedoms of disembodied subjectivity in cyberspace. This discourse of the disembodiment has been central in Gibson’s cyberpunk novels. In his cyberspace world, the human body is like a mutable container of the self identity and consciousness. Many characters in his novel have their body parts readily being replaced, like Ratz the bartender’s stainless steel teeth and prosthesis arm in *Neuromancer*. And even dead bodies are recycled for the reuse of hearts or kidneys in the service of strangers. In the following discussion, I would be concerned with these different bodies.

In cyberpunk, the body is often referred to as the “flesh” and represented as weak, mortal, irrational. It should be left behind or blended with computer technology. It has been seen as the disembodiment of the subject. Thus, subjectivity becomes much more varied and flexible, surpassing the limitations of the physical body. The new technologies offer an escape from the conceptual dualisms of natural/artificial and body/machine and open up spaces for the human body to be transcended through a greater degree of flexibility. Some are human-machine hybrids like animal or human

transplantations and prostheses, while others are autonomous artificial intelligences which can only exist in the cyberspace. Once a particular location has been selected, from outer space to inner cyberspace and virtual reality, it allows interactions among a variety of manifestations of the “body” to question the limits of humanity. Examples of blending machines and humans are provided by such films as the *RoboCop* series (1987, 1990, 2014), the *Terminator* series (1984, 1991) and *Blade Runner* (1982). Paul Verhoeven’s *RoboCop* (1987) is about the transformation of the almost-dead policeman into a cyborg. The film describes the doubts and complexities of the human mind struggling to oppose the invasion of the technologically rebuilt human body. These movie characters present visions of the bodies ranging from pure machine-based military figures to genetically customized human simulation.

If the interchangeability of bodies and machines is a recurring theme in science fiction, equally important is the representations of cyborgs. Here, the term “cyborg” does not only mean a combination of biological and artificial parts anymore. The combination of human and technology, including cell phones or computers, can also be called the cyborg. Take the network computer system for example. Through the application of the Internet to connect with millions of computers across the world, people become much more capable than they were before: information networks and communication technologies can be used by individuals through global interlinking of computers. These world-wide networks of computers intermingle the physical and the virtual bodies. Unlike the earlier prosthetic technological extensions, this networked visual avatar body creates a new type of “virtual cyborgian body<sup>5</sup>” which enables humans to extend the physical body and psyche to reach beyond the immediate

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<sup>5</sup> Although the cyborg typically represents a merging of human and machine, Donna Haraway and other theorists, like N. Katherine Hayles and Andy Clark, argue for a broader definition of the cyborg. They bring up a definition including our daily interaction with the cybernetic technologies (Hayles, *How We Became Posthuman* 115).

physical environment. “Virtual” indicates the transformation from the user’s pulse, heartbeat and blood flow to the graphic and audio information in the VR environments. That is, the computer technology has been expanded from a person’s extension of the body image and sensation to a vehicle for human to escape from the body. And the image of the “cyborgian body” represents a communication channel based upon the accurate interaction and exchange of information, messages and feedback within a virtual world.

The creation of virtual idols becomes a further challenge to the disembodied body. As computer-generated media figures, virtual idols exist independently in the digital media world. They do not need to eat, drink, or excrete, their bodies will not get tired and they will not become sick, either: in one word, they are immortal. These idealized idols are produced and packaged to maximize consumption, from popular music to advertising of other products and services. Virtual idols open up fresh opportunities for experiment recombination and play between human/computer relationships. Take Gibson’s *Idoru* as example. Through Laney, the novel’s protagonist, Gibson explores the conflict between the actual person and the virtual celebrity. It is in the abstract space of the Lo/Rez fan club data bases that Laney encounters the interrelationship of space, place and digital architecture that is the idoru, Rei Toei. *Idoru* gradually introduces to the reader the concept of the posthuman-as-data structure, from Laney’s unsuccessful search for the information surrounding the idoru’s “life.” Laney described his first sight of the idoru as follow: “She is not cyberpunk; she is information. She is the tip of an iceberg, no, an Antarctica, of information. Looking at her face would trigger it again: she was some unthinkable volume of information. She induced the nodal vision in some unprecedented way; she induced it as narrative” (Gibson 233). Such descriptions

conjure images of cyborgs. The idoru is an architectonic systems of information and data, but Laney can watch Rei Toei's hands and the way she ate. Although lacking in flesh, the figure of the idoru becomes a new mode of being.

The potential of computer technology does challenge traditional boundaries. The combination of the physical and the technological marks the reduction of the body to merely meat. By leaving the body behind, computer technologies such as VR systems take control over the nature of humanity and the self. As I observed above, for some years now there have been growing concerns about the apparent growing dependence of humans upon computers. The recent exhibition at the Museum of Contemporary Art (MOCA) in Taipei, *Post-humanist Desire* (2013-14), addressed these anxieties. Curated by Dr. Ming Turner, this exhibition responds to the continuously developing and significant theme of the "post-human," under three subjects: the "cloned human," the "transgendered human," and the "transformed human." A group of twenty-five artists were invited to show their works which interpret the effects of body concepts and gender consciousness upon the psychology, value, and culture. The content and structure of the three aspects of this exhibition questions our anthropocentric views and guides us to discuss the following issues: In this modern computer-mediated world, how should we define ourselves as human beings with so many divergent and complex life expectations and identities? And to what extent can we seek new ways to break the boundaries between nature and culture? Though new technologies are often presented as a hopeful key to a better future, we users become victims rather than beneficiaries. Rather than being delivered from the restrictions and bonds of the mundane reality and the physical body, we are actually extremely limited. We do not transcend our physical bodies, but are addicted to computing as if it were a drug. From personal computers to smartphones, we rely on computer technologies too much

to live without it. These products seem to be regarded not only as useful instruments for practical tasks but actually as defining aspects of our identities and value systems. The more we use the Internet's networking tools, the more likely that our human bodies are becoming indistinguishable from their computer prostheses.

### Cyberspace in Cyberpunk

William Gibson and other cyberpunk writers construct visions of the future worlds of information space. In 1984, Gibson coined the phrase "cyberspace" in his novel, *Neuromancer*, and thus created an iconography for the Information Age long before the invention of the Internet. Cyberspace, as Gibson formulates, combines all the information around the world and can be entered by cranial implants which "allow a physical connection between computer and person, all the world's data collected and pictured and access to this data through virtual reality" (Jordan 22). As a generic term, cyberspace refers to an information space in which users can be linked together. Cyberspace enables the users to form and reform their social groups on the basis of temporary modes of identification.

According to Mike Featherstone and Roger Burrows, some of the main variants of cyberspace include Barlovian cyberspace, Virtual Reality (VR), and Gibsonian cyberspace (Featherstone and Burrows 5). Barlovian cyberspace is only recently available. Virtual Reality is emerging. And Gibsonian cyberspace is fictional. Barlovian cyberspace refers to the international networks of computers consisting of some 30 million people. For Barlovian cyberspace, interactions use both telephones and computer network systems. Since the interaction relies upon only a limited range of human senses, more advanced forms of cyberspace are used to simulate the face and the body interactions more vividly by using co-ordinated multi-media systems.

Virtual Reality attempts to surround the human body with a computer-generated visual, audible and tactile multi-media system to stimulate our other senses. Besides providing an artificial sensorium of sight, sound and touch, VR systems produce a simulated environment in response to the movements of the body. However, sometimes graphics resolution may have much delay in response to the interactive movements of the body between the simulated environment and iconic representations. Through the use of computer technologies, VR systems aim to provide a nearly real environment in the sense that simulates a sense of presence. Gibsonian cyberspace, as Gibson also calls “the matrix,” is “a global computer network of information where operators can access (‘jack-in’) through headsets (‘trodes’) via a computer terminal (‘cyberspace deck’)” (6). This fictional world intermingles the internet and VR systems. Operators move inside the three-dimensional system of data simulated environments where every document is coded into different highly vivid architectural forms. Gibsonian cyberspace also allows for realistic interaction between operators and other autonomous posthuman artificial intelligences (AIs). Other intelligent entities even live in cyberspace, like some previously downloaded personality constructs of humans. The virtual community, Kowloon Walled City, in *Idoru* gives a more detailed description of Gibsonian cyberspace. The city sits in near-future Tokyo where human and posthuman beings interact through network relations between physical space and cyberspace.

Essentially, the main theme of cyberpunk focuses on the intersection of various urban settings in cyberspace and technological body modification. While cyberspace stands for the space computer networks create, what Neal Stephenson terms “avatars” in his Gibson inspired novel, *Snow Crash*, represents operators in cyberspace. After logging in, operators connect to cyberspace and enter their own individualized place

or move to other virtual spaces. Avatars in cyberspace are constructed through self-description, the style of one's writing or from any other motley virtual possibilities.

The characters in Gibson's novels use their virtual representations to interact with other people in cyberspace. Gibson offers two different kinds of the cyberbody. The "disembodied" but perceiving consciousness which can be operative in cyberspace and the computer visualization image of human body in virtual space projected by the media. However, in *Idoru*, Gibson applies the concept of avatars as ways that people employ avatars not only to interact but also to "dwell" in virtual spaces (Henthorne 70). As Ross Farnell demonstrates in "Posthuman Topologies: William Gibson's 'Architexture' in *Virtual Light* and *Idoru*," the central concept of *Idoru* is the combination of flesh and technology: "the mark on the flesh is also a sign system that uses the body as an 'instrument of communication,' a notion commensurate with envisioning the body as information" (Farnell 466). In other words, the user designs a screen persona with both visual and audio features that can interact with others in virtual domains. "In *Idoru*, avatars do more than project a sense of their users' identities: they also allow users to reinvent themselves, to be who they would like to be" (Henthorne 70).

Farnell stresses in his essay the cyborgian union of organic and cybernetic representing the "new modes of being." This involution of two heterogeneous creates a

Deleuzian assemblage which runs its own line 'between' the terms in play...[analog/digital, nature/technology, human/posthuman and beneath assignable relations. The apartheid differences between these relations are replaced by diffractions, differences within, the altered effective and



affective capacities of a new posthuman ethology. (Farnell 473)

Hence, from Gibson's discrimination issues of "Otherness" between humans and posthumans, Farnell proposes that the term "posthuman" should be re-conceived and re-interpreted not as a binary negative of the "human" but as a non-linear genealogy opening multiple futures and permutations.

As cyberpunk focuses on virtualities and the interaction between the human and the mechanical, these literary texts actively shape what the above theorists signify and what the technological artifacts mean in cultural contexts. In my opinion, such literary texts provide case studies for investigating the technical-cultural concept through embedding ideas in the specific narratives about culture and science. Through a research of the cyberpunk fiction, this thesis would try to explore the future of the human bodies within various technological innovations. In this regard, the literary texts I would discuss in detail later in this thesis are all cyberpunk fictions, mainly Gibson's works, which not only invent our future but reflect our present. In looking at cyberpunk, I try to reconsider what has been posed in an abstract sense as the question of technology and what makes us human in today's world. Then, it may be clear to see what kinds of concepts stand up under the weight of new evidence; what hypotheses seem to have been disproved; and what theories need to be amended in accordance with what we have learned in recent years.

### Some Preliminary Views on the Posthuman

What does it mean to think beyond the classic humanist divisions of self and other, mind and body, natural and artificial, human and non-human? Is it possible to craft a mode of interpretation that responds to our changing understanding of ourselves and the redefinition of humanity's place in our future world? To solve these

questions, we should put “posthumanism” under consideration. Posthumanism provides a ground to communicate with the humanist principle at the heart of contemporary technologies. The theoretical approaches I have been sketching here will be developed in much more detail in Chapter Two.

The term “post-human” originates from Maurice Parmelee’s 1916 *Poverty and Social Progress*. In a section entitled “Eugenic Measures and the Prevention of Poverty,” Parmelee states that human nature could be changed to the extent that would involve the elimination of fundamental human and mammalian instincts and emotions. His argument identifies “post-human animal.” This term is widely used to describe the divergent and complex life expectations and identities of people in the 21<sup>st</sup> century. In *How We Became Posthuman*, N. Katherine Hayles states, “The posthuman subject is an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction” (Hayles, *How* 3). Hayles demonstrates the shift from the human to the posthuman. She further details, “If human essence is freedom from the wills of others,” the posthuman is “post” not because it is necessarily unfree but because there is no a priori way to identify a self-will that can be clearly distinguished from an other-will (Hayles, *How* 4). Accordingly, the construction of the posthuman implies that even a biologically unaltered being can be counted as posthuman. This shift from the human to the posthuman evokes the deconstruction of the liberal humanist subject in cybernetics. Hayles’s main concern is not about the human versus the posthuman but an imagination of the future of our posthuman. As her book title says, we have already become posthuman. “[T]he question is not whether we will become posthuman, for posthumanity is already here. Rather, the question is what kind of posthumans we will be” (Hayles, *How* 246).

As Rosi Braidotti puts it, “Posthumanism is the historical moment that marks the end of the opposition between humanism and anti-humanism and traces a different discursive framework, looking more affirmatively towards new alternatives” (Braidotti 37). As the alternative views about human beings and the new formations of subjectivity, like sexualized or racialized differences which have emerged from the epistemologies of anthropocentrism in the last thirty years, the subject of humanism did not merely be opposed yet create varied visions of the human subject. Then, Braidotti interprets the increasing effects of post-anthropocentric thought as the following: “The posthumanist perspective rests on the assumption of the historical decline of humanism but goes further in exploring alternatives,” Braidotti continues, “without sinking into the rhetoric of the crisis of Man. It works instead towards elaborating alternative ways of conceptualizing the human subject” (37). She concludes by considering the posthumanist position that builds on the anti-humanist legacy, more specifically on the epistemological and political foundations of the post-structuralist generation, and moves further (38). Both “humanist” and “cybernetic posthuman” perspectives engage in the erasure of embodiment from subjectivity. While the former views cognition taking precedence over the body as an object to possess and master, the later imagines the body as a receiver for data and information.

With the decline of classical humanism, according to Rosi Braidotti, three major strands in contemporary posthuman thought rise:

[T]he first comes from moral philosophy and develops a reactive form of the posthuman; the second, from science and technology studies, enforces an analytic form of the posthuman; and the third, from my own tradition of anti-humanist philosophies of subjectivity, proposes a critical

post-humanism. (Braidotti 38)

The first reactive approach to the posthuman is to defend the humanist thought. Contemporary liberal thinkers such as Martha Nussbaum develop “a thorough contemporary defence of Humansim as the guarantee of democracy, freedom and the respect for human dignity, and rejects the very idea of a crisis of European humanism” (38). She responds to the challenges of the contemporary technology-driven global economies by “reasserting classical humanist ideals and progressive liberal politics” (38). The second strand of posthuman thought comes from contemporary science and technology development indicating a global sense of inter-connection among all humans, as well as between the human and the non-human environment. Raising critical ethical and conceptual issues about the status of the human, it is “generally reluctant to undertake a full study of their implications for a theory of subjectivity” (39). In other words, the parallel lines of the two different cultures, the Humanities and the Sciences, fail to communicate with each other. The third strand of posthuman thought “shows no conceptual or normative ambivalence towards posthumanism” (45). Critical posthumanism comes from Braidotti’s anti-humanist roots which “can be genealogically traced back to the post-structuralists, the anti-universalism of feminism and the anti-colonial phenomenology of Frantz Fanon (1967) and of his teacher Aimé Césaire (1955)” (46). Braidotti defines this critical posthuman subject within an eco-philosophy of multiple belongings:

As a relational subject constituted in and by multiplicity, that is to say a subject that works across differences and is also internally differentiated, but still grounded and accountable. Posthuman subjectivity expresses an embodied and embedded and hence partial form of accountability, based on a strong sense of collectivity, relationality and hence community building.

(49)

Braidotti promotes radical posthuman nomadic subjectivity which shifts from unitary. Thus, this view proposes “an enlarged sense of inter-connection between self and others, including the non-human or ‘earth’ others, by removing the obstacle of self-centered individualism” (49-50). Braidotti’s concept of critical posthumanism defends a vision of the humanist principle at the heart of contemporary technologies. As we saw earlier, the inter-connection between the human and the non-human environment promotes the rise of alternative forms of critical posthumanism.

In *What is Posthumanism?*, Cary Wolfe suggests that the term “posthumanism” can be traced back to the Macy conferences on cybernetics from 1946 to 1953. Posthumanism emerges with “a new theoretical model for biological, mechanical, and communicational processes that removed the human and *Homo sapiens* from any particularly privileged position in relation to matters of meaning, information, and cognition” (Wolfe xii). Thus, the posthumanist studies are interested in rethinking questions of subjectivity, and the ethical and even political changes attendant on reopening those questions in light of new knowledge about the life experiences of non-human like animal studies or the disability studies.

To investigate the cyberbodies within techno-cultural production and imagination, I turn to N. Katherine Hayles. Hayles’s insight into the posthuman and her critical posthumanism thought would help me dive into discussion of the blurred boundary between the human and the non-human issues. In “Embodied Virtuality: Or How to Put Bodies Back into the Picture,” Hayles discusses “virtual reality” to oppose the conception that regards cyberspace as a disembodied medium. She questions the reason why humans want to leave their bodies behind through erasing them from cyberspace discourse. Actually, the bodies are actively involved in the construction of

virtuality, from determining the precise configurations of a virtual reality interface to influencing the speed with which we can read a CRT screen (Hayles, “Embodied” 1). Then, why do so many conceptions consider cyberspace as a disembodied medium if humans, being embodied, can interact with virtual worlds? Hayles finds a clue from the ways to form constructions of virtuality: a boundary between the body and the screen image is marked to create the illusion of disembodiment. And then, the image is reified as an alternative universe where our subjectivities can inhabit. After erasing awareness of the perceptual processes which brought this “world” into being, “the illusion compelling is now close to the surface: we want this alternate world to exist so that the body can be left behind, and we know the body can be left behind because this world exists” (Hayles, “Embodied” 2). In the age of virtuality, the body is regarded as a flawed and superfluous container while the mind equates subjectivity. The dream of transcending the body to achieve immortality comes true with the mind continuing in its incarnation as electronically coded information.

To challenge the assumption that cyberspace is a disembodied medium, Hayles argues the concept of virtuality from two perspectives of subjectivity: one links the subject to the mind, the other links the subject to the body. As Nancy Stepan has shown by taking race and gender as example, the characteristics of one duality can transfer onto another when the two are consistently associated (Hayles, “Embodied” 3). Similarly, Hayles suggests that the binary construction of masculine/feminine still exists in the domain of cyberspace. Yet this binary becomes mind/body: mind is superior to body while silicon technology is superior to protein organism. Thus, in the discursive practices among these terms, the “stigmatized terms” (body, organism, female) are erased or left behind.

Hayles applies the semiotic square, a technology of discursive analysis, to transcend the persistent binary thinking by explicating the concealed terms which help to generate meaning and stabilize significance (Hayles, *How* 247). The interplay of both sets of dualities, “presence/absence” and “randomness/pattern,” are used to investigate the implication of virtuality as a crossing between “materiality” and “information” (see fig. 1).

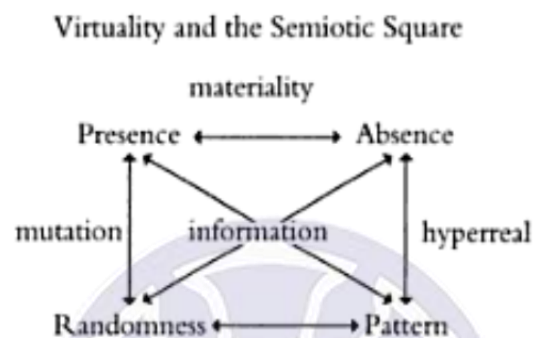


Fig. 1. Virtuality and the Semiotic Square (Hayles, “Embodied” 9)

This semiotic square shows the possible relationships that can emerge when materiality and information imply each other. Therefore, it provides a theoretical framework in which such apparently diverse ideas as hyperreality and mutation can be understood as different manifestations of the same underlying phenomenon (Hayles, *How* 248). Though the structure is defined by the two dialectics and the relationships they express, the terms composing the axes interact dynamically with their partners. It is no longer sufficient to think of the body as simply a material object or informational pattern alone. The interplay between pattern and presence can explore how the virtual body is constituted. Besides, in positing a shift from presence/absence to randomness/pattern, Hayles shows how these categories can be transformed from the inside to arrive at new kinds of cultural configurations. It signals the end of a certain conceptions that have applied to the fraction of humanity having the wealth

and power to conceptualize themselves as autonomous beings.

The oscillation between humans and non-humans has been the common struggle within contemporary technologies culture. With the invention of computer networks, cyborgs and virtual reality, the concept of the body rapidly change. In answering “Where is the boundary between humans and non-humans?” theorists like Francis Fukuyama and Donna Haraway, and N. Katherine Hayles provide multiple perspectives of the post-human. But, who qualifies as a human being? At what point does a human stop being a human? The problematic dualisms of natural/artificial, human/machine, mind/body still locate at a human-centered semantics. In other words, most of us are still limited to the ontological distinction between human and non-human/animal. On the other hand, William Gibson and other cyberpunk writers attempt to explore the vague boundary between the physical and artificial bodies through their works. Cyberpunk thus provides case studies for investigating the underlying problems in the cyborg bodies. Analyzing the different bodies in *Idoru* helps to understand Gibson’s works and their importance in posthuman studies. Through a careful examination of the cyborg bodies and cyberspace in Gibson’s works, we are able to figure out an essential change in the concept of the human. This view of the posthuman offers a possibility to move beyond the problem of anthropocentrism, speciesism and the dialectic of the human/non-human dualism.



## Chapter Two

### A Posthumanist Rethinking of Humans and Nonhumans

#### The Legacy of Humanism in Posthumanism

Continuing the human-posthuman dichotomy, this chapter explores the implications of becoming posthuman<sup>1</sup>. “Posthuman” literally means that a hypothetical being becomes something more than s/he currently is by surpassing his or her own limitations, but is still recognizable as a human being. The posthuman is also regarded as a symbiosis of biological human and artificial intelligence, roughly synonymous with the term “cyborg.” Rather than a stable ontology, the posthuman embodies different identities. On the other hand, “posthumanism” illustrates the death of the humanist subject, which depends on a privileged position possessing superior characteristics to all significant others. This death of the humanist subject leads to critical theorists of posthumanist subject position. Posthumanism refers to a critique of humanism, focusing on the exploration of the posthuman realm of possible modes of being. It also emphasizes a changing realization of the self and its relations to the natural world, society and human artifacts. Discourses on becoming posthuman generally fall into two groups: the pessimistic sentiment and the optimistic expectation. On the one hand, while the human form keeps constructing and reconstructing, human age comes to an end as humanism transforms into posthumanism. “Post” as a prefix for “after” suggests that the definition of the term “human” may be displaced one day in the near future. The end of the human age echoes the deep fear that our humanity will be altered beyond recognition. This fear comes from the humanist reaction to the possibility of transcending the merely human

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<sup>1</sup> For definitions of the terms “the posthuman” and “posthumanism,” see Chapter One, page 14-17.

being through the technological achievement. Many SF, like Mary Shelly's *Frankenstein* and Gene Roddenberry's *Star Trek* series,<sup>2</sup> embody this attitude: playing God always ends in disasters. On the other hand, from Rosi Braidotti's perspective in *The Posthuman*<sup>3</sup>, the accelerating power of new technologies leads to a more promising future for humans. For example, virtual reality (VR) opens the possibility of humans escaping their bodies. VR systems reproduce the user's movements by simulacrum, also known as an avatar, on the computer. When the VR user moves his or her body, the computer display recreates the movement in a corresponding fashion. With a set of informational process, this virtual simulation of the human form creates the illusion that the user is "inside" the computer screen. In VR, information is regarded as a separable stuff from the material substrates. Advocates of the posthuman, as a new form of subjectivity, privilege informational pattern over materiality. Virtual technologies thus transform the embodied human subject into a disembodied subject that inhabits a virtual realm.

However, both aspects mentioned above centralize the humanist vision as the measure of values. Humanist thought holds a conception of human nature which conditions our uniqueness as humans. This human nature, either its moral aspects or prudential aspects, distinguishes humans from other creatures. But the standard notion of human faces challenges as anti-humanism emerges to deal with changing understanding of human subjectivity. For example, Michel Foucault criticizes humanism in *The Order of Things* (1970) with the "death-announcement of Man."<sup>4</sup>

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<sup>2</sup> One of the examples is "Where No Man Has Gone Before," the second pilot episode of the American SF television series *Star Trek*. This episode asks questions about morals, the ideas of human frailties and the godhood. In the story, the characters explore what it means to be human and what it means to be a god.

<sup>3</sup> See more details in Chapter One, page 14-15.

<sup>4</sup> Foucault stresses a fundamental tension characterizing the modern construction of "man." He explains this unsteady subject in reference to three binary oppositions: First of all, an empirico-transcendental doublet; secondly, the cogito and the unthought; and lastly, the retreat and

As Foucault argues, “Man” as empirico-transcendental doublet is “a being such that knowledge will be attained in him of what renders all knowledge possible” (318). Man is the lawmaker in the order of the world. In fact, all the molds of thought are formed within the relations woven between men. Foucault’s announcement, as Rosi Braidotti notes, targets the humanistic arrogance of placing Man at the center of world history. Foucault formalizes an epistemological and moral crisis that goes beyond binary oppositions and cuts across the different poles of the political spectrum (Braidotti 23). What begins with humanism are our sympathetic understanding and treatment of human nature. By contrast, posthumanism marks the end of the seemingly endless polemic between humanism and anti-humanism. Posthumanism focuses on two things. First of all, posthumanism considers current technological trends to see how future technologies might affect humans. Major theorists, like Francis Fukuyama, believe that humans are about to enter a new stage of history. Secondly, posthumanism attempts to strike a new position that combines the current and upcoming technologies to bring about beneficial society change of values. The works of N. Katherine Hayles, Cary Wolfe and Rosi Braidotti, to name but a few, highlight the potential of the posthuman condition as conducive to human enhancement. The posthumanist perspective assumes the decline of the fundamental premises of humanism and explores alternatives of subjectivity. However, “human” as a first-order observer still unavoidably recognizes every other living creature as political “other” in a hierarchical system. The humanistic arrogance rises over and over again from its ashes, and continues to control the measure of values.

I prefer to take a more macroscopic view to deal with humanist subjectivity, and fundamentally revolutionize what becoming posthuman means with technological

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return of the origin.

advancements. Rethinking about the hierarchical relationship between “humans” and “others” is not to dehumanize ourselves or take the existence of nonhuman as the disciplinary subject. The human of posthumanism is neither an ideal nor an elimination from the course of evolution. On the contrary, we should reconsider the intersection between humans and nonhumans from human-nonhuman associations and companionships. In this chapter, I address N. Katherine Hayles’s and Cary Wolfe’s discourses regarding the posthuman and discuss how to keep discourses on becoming posthuman from being written once again into the dominant concept of subjectivity.

#### N. Katherine Hayles’s Posthumanist View

Is it possible that the mind could be separated from the body? If such a separation is possible, can human consciousness be downloaded into a computer? Hayles argues that human consciousness reveals in ways different from those of the intelligence embodied in cybernetic technologies. According to Hayles, the intelligent machine is constructed with informational pathways connecting the organic body to its prosthetic extensions. That is, “consciousness” of the intelligent machine can flow as a disembodied entity not only within the subject but also between the subject and the environment. However, the human body contributes to a content taking part in the workings of the mind. The body communicates to the mind information about its states with feelings and emotions. Thus, humans may enter into symbiotic relationships with intelligent machines. Humans may be displaced by intelligent machines, such as assembly plants that use robotic arms for labor. But the distinctively different embodiments limit the possibility for humans to be seamlessly articulated with intelligent machines (Hayles, *How* 284). To figure out the interactions

of technology among human and posthuman constructions, Hayles considers the nineteenth-century U.S. and British anthropologists' discourses about "man" as a tool-user. The focus shifts from man as a tool-user to man as a tool-maker. The tool is at once "apart from the body" and an "extension of the body." This construction of the tool as a prosthesis points forward to the posthuman (Hayles, *How* 33-34). The posthuman future of humanity implies a connection not only with intelligent machines but also with informational circuits.

Hayles characterizes the posthuman based on the following four assumptions. First of all, the posthumanist view makes informational pattern seen more important than material instantiation. Hence, embodiment in a biological substrate is not an inevitability of life but an accident of history. "Liberal humanist subject" shares with "posthumanist subject" a common theme about the erasure of embodiment from subjectivity. The erasing of bodily difference, including sex, race and ethnicity, in the cybernetic construction of the posthuman takes place in ways that has not occurred in other critiques of the liberal humanist subject (Hayles, *How* 4). The liberal humanist subject has been criticized from the following perspectives: feminist theorists, such as Jean Bethke Elshtain and Angela Davis, point out that the humanist subject has historically been constructed as a white European male. Therefore, this view presumes a universality suppressing women's voices; postcolonial theorists, like Edward Said and Gayatri Chakravorty Spivak, oppose to not only the universality of the white male liberal subject but also the idea of a unified, consistent identity; postmodern theorists, such as Gilles Deleuze and Félix Guattari, reject the modernist notion of a rational and unified subject. They argue for the dynamic potential of a decentered subjectivity liberated from the fixed identities. All three perspectives above show some affinities with the deconstruction of the liberal humanist subject in cybernetics. However, the

construction of the posthuman considers humans as informational processes. This construction suggests that embodiment is not essential to human being, since the liberal humanist subject is not identified with the body, but the mind.

Secondly, from the posthumanist view, Hayles considers consciousness as an epiphenomenon. Although in the Western tradition, consciousness is viewed as the seat of human identity/subjectivity, the conscious agency is not the essence of human self-identity. Consciousness is not the main show in the evolutionary processes, but merely a minor subsystem running its program of self-construction while ignoring the actual dynamics of complex structures (Hayles, *How* 286). In the field of artificial intelligence, consciousness can be manufactured inside a machine as an intelligence comparable to that of a human. Conversely, in artificial life, consciousness is viewed as an epiphenomenon of human's nervous systems for intelligent machines to understand human beings. Instead of identifying the self with the conscious mind, the posthuman subjects achieve consciousness through recursive feedback loops cycling between multiple coding levels. The association of posthuman subjectivity with different coding levels seems to deconstruct the liberal humanist subject, an emphasis on anthropocentric views. Because "the essential function for both intelligent machines and humans is processing information" (Hayles, *How* 239), Hayles recommends different models of signification recognizing the distinctive feature of human language and computer coding structure. When the redrawing of boundaries between the human and the nonhuman shifts the seat of identity from brain to cell, subjectivity radically changes. The fragility of consciousness, including an absorption or hijack of artificial consciousness, implies that human and technics have coevolved together. From the human's point of view, Hayles rethinks the human "with" the nonhuman others, imagining the next logical development where humans join with

the intelligent machine to create the human-computer equation.

Thirdly, from the posthumanist view, Hayles thinks of the body as the prosthesis we all learn to operate. Accordingly, expanding or replacing the body with other prostheses becomes a continuation of a process that had begun before we were born (Hayles, *How* 3). Last but not least, the posthuman view configures the human so that it can be seamlessly articulated with intelligent machines. For the posthuman, bodily existence and computer simulation have no essential differences. Cybernetic mechanism and biological organism, robot teleology and human goals have no absolute distinctions, either (Hayles, *How* 3). Hayles does not claim to leave the body behind but rather extend embodied awareness in a specific and material way with electronic prosthesis. The third episode of *Robotica*,<sup>5</sup> “The Bionic Man,”<sup>6</sup> shows the development of prosthetic: a robotic arm with 26 joints controlled with a person’s mind like a regular arm. With surgery remapping the remaining nerves from missing arms, brain signals can be sent to control the prosthetic. The long-term goal for the prosthetic is to have noninvasive ways, no extra surgeries or extra implants, to control a dexterous robotic device. Researchers envision a kind of device with sensors for amputated or paralyzed people to wear that would feed information about brain activity to the robotic prosthetic. Hayles’s view of the posthuman offers resources for thinking in more sophisticated ways about virtual technologies. As a way to maximize human potential in a virtual realm, the construction of virtuality functions as an expansion of human body. In William Gibson’s novel *Neuromancer*, a direct neural

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<sup>5</sup> New York Times video series *Robotica* examine how robots are poised to change the way humans do business and conduct daily lives. In the videos, roboticists and researchers explore innovations at the leading edge of technology. The other two episodes are “Faster, Stronger and Cheaper: Replacing Humans with Robots” and “Building the Autonomous Machine.”

<sup>6</sup> See the related news. Emma Cott. “Prosthetic Limbs, Controlled by Thought.” *The New York Times*. 20 May. 2015.  
<[http://www.nytimes.com/2015/05/21/technology/a-bionic-approach-to-prosthetics-controlled-by-thought.html?\\_r=0](http://www.nytimes.com/2015/05/21/technology/a-bionic-approach-to-prosthetics-controlled-by-thought.html?_r=0)>

link connects the human brain with the computer through electrodes. This link allows direct neural access to computer memory. Case, the protagonist of *Neuromancer*, regards his physical body as merely “meat” that exists primarily to preserve his consciousness till the next time he jacks into the global computer network in cyberspace. As long as the cyberspace body endures, one has attained a kind of immortality. The question of how the human became the posthuman seems to present the posthuman as a potent antidote to the survival of humans in a chaotic and unpredictable future. For Hayles, the posthuman prompts the optimistic prospect of getting rid of old restrictions and giving us new ways of thinking about what being human means.

Through understanding “human” as a set of informational processes, Hayles proposes that humans leave the old cosmos constructed by presence and absence and enter a world computed by the binary of pattern and randomness. As Hayles notes, it is a “pattern” rather than a “presence” which constructs information. If information is a pattern, non-information should be the absence of pattern, or rather, randomness (Hayles, *How* 25). The development of information theory implies that information could be equated with randomness and with pattern. Hence, pattern and randomness are not so much opposites as supplements to each other. The invention of virtual reality brings pattern and randomness into the foreground and causes presence and absence seem irrelevant. When VR simulations put the user’s sensory system into a direct feedback loop with a computer, a multisensory interaction creates a false impression that the user both is and is not inside the screen. The change from presence/absence to pattern/randomness is encoded into a part of our daily life. For instance, money is stored in online account as informational patterns instead of the presence of cash. Automation of the factories controls the work assignments by



programs and constitute production schedules as flows of information. The transition from presence/absence to pattern/randomness affects humans on two levels: a change in the body and a change in the message. Accompanying these changes is the emergence of subjectivity constituted by the crossing of the materiality of informatics with the immateriality of information (Hayles, *How* 193). Dealing with the human being as embodied being, Hayles illuminates the fate of embodiment in an information age. Hayles divides the history of cybernetic technology<sup>7</sup> into three interrelated stories. The first story focuses on how information lost its body. In other words, how do we conceptualize the information as a separable entity from the embedded material forms? The second elaborates how the cyborg was created as a technological artifact and cultural icon in the years after World War II. The third one concerns how a historically specific construction called “the human” is giving way to a different cultural and technological construction called “the posthuman.” These three stories presume a conception of information as a disembodied entity flowing between the organic body and its prosthetic extensions. According to Hayles, information, like humanity, cannot exist with the exception of the embodiment which brings it into being as a material entity in the world (Hayles, *How* 49). That is, human’s interactions with digital technologies are not only cognitive but also have bodily effects on the physical level. For humans, embodiment takes the form of extended cognition that exists throughout the body and even extends beyond the body’s boundaries.

In “Mutation, History, and Fantasy in the Posthuman,” R. L. Rutsky argues that

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<sup>7</sup> Hayles makes reference in relation to the history of cybernetics: the three main movements or “waves” of cybernetics are homeostasis (1945-1960), reflexivity (1960-1985) and virtuality (1985 to the present). Hayles not only provides a historical examination of the history of cybernetics but also explores the complex interrelationship between embodied forms of subjectivity and arguments for disembodiment throughout the cybernetic tradition.

the posthuman has nothing to do with a physical, genetic or biotechnological changes in the human body or mind. With regard to Hayles's posthumanist view, "the construction of the posthuman does not require the subject to be a literal cyborg" (Hayles, *How* 4), Rutsky claims that changes of technological enhancement continue to reinforce "the human" as an autonomous subject, defined by its mastery over the object world (Rutsky 105). The relationship between humans and posthumans is cast in reference to human mastery or its loss. That is, the posthuman does not make an absolute break from the legacy of humanism for we remain within the realm of the human. Becoming posthuman means to be more than merely an extension of the human, and to look for "processes which can never be entirely reduced to patterns of standards, codes or information (Rutsky 111).

Hayles understands the human and the posthuman as historically specific constructions emerging from different configurations of embodiment, technology and culture. She defines contemporary posthuman bodies as follow:

But the posthuman does not really mean the end of humanity. It signals instead the end of a certain conception of the human [...]. What is lethal is not the posthuman as such but the grafting of the posthuman onto a liberal humanist view of the self [...] Located within the dialectic of pattern/randomness and grounded in embodied actuality rather than disembodied information, the posthuman offers resources for rethinking the articulation of humans with intelligent machines. (Hayles *How* 286-87)

Hayles holds a conception of human nature conditioning our uniqueness as human in our capacity for rationality. The posthuman continues the liberal tradition by constructing embodiment as the instantiation of thought/information. As Braidotti points out in *The Posthuman*, Hayles opposes the notion of subjectivity coinciding

with conscious agency, “notably the liberal vision of an autonomous subject whose manifest destiny is to dominate and control nature” (Braidotti 101). To avoid the risks of recreating a hard core, Braidotti proposes to remold posthuman bodies into radical relationality. She argues that bodies are reduced to their informational substrate in terms of materiality and vital capacity (Braidotti 97). That is, the markers for the distribution of sexualized, racialized and naturalized differences shift from being categorical boundaries under humanism to alternative modes of transversal subjectivity.

In short, Hayles presents the posthuman as a transformation of the human being. Therefore, some dominant concepts of the liberal humanism, as I mentioned above, are rewritten into her posthumanist views. Hayles focuses in particular on the revolutionary potential of cybernetic technologies to reconfigure human bodies. In my opinion, from her four assumptions of the posthuman, Hayles’s view of the posthuman still bases on the tradition of liberal humanism. Her posthumanist view continues to rely upon a liberal humanist narrative by focusing on embodiment as the instantiation of thought/information. For Hayles, the construction of posthuman imagines the next logical evolution that humans join with the intelligent machine to create the human-computer equation. Her question about how humans became posthumans seems to intensify humanism by expanding humans’ prerogatives into the field of the posthuman.

#### Cary Wolfe’s Posthumanist View

Cary Wolfe’s posthumanism does not partake of the posthuman described by Hayles. Wolfe suggests us to pay more attention to “the human” with its embodiment and materiality. He uses the term posthumanism instead of “posthuman.” That is to

say, his posthumanist position opposes the disembodiment and autonomy inherited from humanism. Wolfe's reference to the posthumanism is similar to Jean-François Lyotard's paradoxical description of the postmodern: the posthuman comes both "before" (as its robust material, embodied, and evolutionary condition of possibility) and "after" (chronologically) the human of humanism (Wolfe 121). Posthumanism appears "before" humanism because human embodiment presupposes both the biological and the technological world. Posthumanism names the prosthetic coevolution of the human with not only the informational tools but all of the mechanical tools that come before the historically termed "human." On the other hand, posthumanism comes "after" humanism for it represents a specific historical development of a new theoretical paradigm coming after humanist anthropological universals. Posthumanism stresses the decentering of the human in relation to ecological, evolutionary, medical, and technical networks. This does not mean that the "post" of posthumanism marks an absolute break from the legacy of humanism. On the contrary, the posthumanist views continue to rely on the liberal humanist theoretical and methodological innovations, and thus ends up revealing that posthumanism comes both before and after humanism.

Wolfe takes yet another step: what thought has to become when rejecting the anthropological and political dogmas of the human. Wolfe takes animals and people with disabilities as examples. The theoretical and ethical frameworks used by humanism to treat those commitments fairly reproduce the very kind of normative subjectivity (Wolfe 146). In Temple Grandin's case, her Asperger's syndrome enables her to understand how animals perceive and experience the world. Grandin's disability becomes a form of ability in transspecies modes of identification. This example points out that we need to rethink the underlying models of subjectivity in

dominant discourses of disability studies. This particular concept of the human forms discrimination against nonhuman animals and the dehumanized social and political “others” from the very beginning. Wolfe argues that posthumanism should change the concept of the human fundamentally. More than merely an extension of the human, the notion of the posthuman has to move beyond the dialectic of human and nonhuman; and find a mode of thought sufficient to surpass and contain the boundary not only between humans and nonhumans but between the organic and the mechanical or technical.

Who and what can be counted as a posthuman subject? Who has the right to theorize the rules or norms of posthumanist discourses, and who can legislate and enforce them? According to Wolfe, at least three different levels of the self-reference must be disarticulated. First of all, the self-referential autopoiesis of a biological system’s material substrate. Secondly, the self-referential formal dynamics of meaning that some autopoietic systems use to reduce environmental complexity and interface with the world. And thirdly, the self-reference of language proper as a second-order phenomenon and a specific medium that is used by some autopoietic systems that use meaning (Wolfe xxii-xxiii). The disarticulation of these levels signifies that we should no longer think about the human in relation to the other life-forms from a subject-centered perspective. The human should not comprehend himself as a representation of the world and should avoid instructing others about the world. As a result, the environment becomes a multidimensional space produced and balanced by structural couplings of autopoietic beings. This means that the environment is multiplicity, complexity and heterogeneity. Therefore, the autopoietic systems respond to this complex environment through reducing it in terms of the selectivity of a self-referential selectivity. The environment thus becomes an ongoing construction

and creation of a shared universe by autopoietic entities with their own forms of embodiment. Rethinking posthumanism in this way, Wolfe describes the human and its characteristic modes of communication and interaction with greater specificity by removing meaning from the ontologically closed domain of consciousness and reflection (Wolfe xxv). Wolfe recontextualizes our taken-for-granted normal human experience and perceptual modes in the entire evolutionary history, including other living beings and their own autopoietic ways of being in the world. To put Wolfe's argument in a nutshell, it is time that we rethink the "human" as a spectrum instead of two sets of opposing ideals (human or nonhuman). We should stop defining the human by normal perceptual modes or characteristic modes of communication and interaction. And we should start defining the human as a prosthetic creature which coevolves with other nonhuman forms of life, materiality or technicity.

Wolfe continues to develop posthumanist theoretical and ethical frameworks through interpreting particular media and art forms by contemporary artists Sue Coe and Eduardo Kac. When the artists take animals as their subjects, how to treat them or relate to them, their artistic practices exemplify a posthumanist sensibility and question the problematic standing of humanism: how art dedicated to exposing the terrors of anthropocentrism and the violence toward animals may nevertheless be humanist and anthropocentric. In the contexts of the artwork that Wolfe developed in "From Dead Meat to Glow-in-the-Dark Bunnies," he points out the difference between two different kinds of posthumanism: humanist posthumanism and posthumanist posthumanism. Coe may be regarded as a posthumanist since she takes the ethical and political challenges of the existence of nonhuman animals in a humanist way. That is, she "reinstalls a familiar figure of the human at the center of the universe of experience (in animal rights philosophy) or representation (in Coe's

work<sup>8</sup>)” (Wolfe 166-67). Coe’s conception of art turns out to be a first-order observer who devotes attention to the nonhuman others and extends ethical or artistic consideration toward them in a form of “witnessing.” On the other hand, Kac’s transgenic art like *GFP Bunny*<sup>9</sup> (2000) are controversial because of the collaboration with genetic engineers. He bears both the artistic challenge and the ethical challenge of speaking for nonhuman animals as well as speaking to our relationships with them (Wolfe 146). Kac reshapes the notion of the human with the spectator-subject of humanism. He takes an additional step to reproduce the human/nonhuman relationship. This revolution may not simply be a matter of new life forms with digital implants or genetic engineering, but a connection between an artistic medium and the humanist/anthropocentric ways of perceiving or experiencing the world. To move toward a conclusion, Wolfe argues:

The “post” of posthumanism thus marks the space in which the one using those distinctions and forms is not the one who can reflect on their latencies and blind spots while at the same time deploying them. That can only be done, [...], by another observer, using a different set of distinctions—and that observer, within the general economy of autopoiesis and iterability, need not be human. (Wolfe 122)

In other words, what we experience in our subjection to the radically nonhuman technicity of language has profound consequences for what we think of as “our” concepts and “our” discourses, which are inseparable from who “we” are. However, we are not that “auto-” of autobiography that posthumanism gives to itself. We

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<sup>8</sup> See picture in Cary Wolfe’s *What Is Posthumanism*, “From Dead Meat to Glow-in-the-Dark Bunnies” page 151

<sup>9</sup> *GFP Bunny* is a transgenic artwork of a green fluorescent rabbit. Employing molecular biology, Kac comprises jellyfish and rabbit DNA to create a rabbit that glows green under the blue light. His art is based on the literal creation of new biological life.

continue thinking the question in terms of humans and “a subject-centered semantics.” (Wolfe 119). Thus, the distinction humanism/posthumanism is completely asymmetrical. Nevertheless, humanism and anthropocentrism still remain and are reproduced in the disciplinary practice insofar as the bond of human/nonhuman difference encompasses the disciplinary subject. Our internal disciplinarity may remain humanist, though our concept of the external relations of discipline to its larger environment is posthumanist when taking seriously the presence of nonhuman subjects and making the discipline respond to the question of nonhuman being.

#### Donna Haraway’s Posthumanist View

With Hayles’s and Wolfe’s posthumanist views in mind, we can now move to investigate Donna Haraway’s analysis of the intersection between humans and companion animals carried out in her latest work *When Species Meet*. Haraway knots “companion” and “species” together in regard and respect to enter the world of “becoming with” (Haraway, *When* 16). According to Haraway, the term “companion species” originally refers to the co-constitutive link between dogs and humans. In her *The Companion Species Manifesto: Dogs, People, and Significant Otherness*, Haraway explores significant otherness by taking the dog-human relationship as an example of companion species. Her main goal is to examine the evolutionary biology history by studying how the other species are linked to humans as our helpers, workers and companions. In addition, the term “companion species” designates the sorts of being made possible at interfaces among different human communities of practice for whom “love of the breed” or “love of dogs” is an ethical and practical imperative in a specific historical context involving science, technology, and medicine at every turn. This term also indicates webbed bio-social-technical apparatuses of



humans, animals, artifacts, and institutions in which particular ways of being emerge and are sustained (Haraway, *When* 134). Further, Haraway uses the term “companion species” as an alternative category to the cyborg and other living beings labeled “posthumans.” She offers a different way of theorizing relationality and co-presence between humans and all significant others on the basis of some features unique to the former. Haraway argues that instrumental relations of humans and nonhuman animals demand recognition, caring and shared pain. She first conducts a critique of Deleuze and Guattari’s analysis of “becoming animal” figured in *A Thousand Plateaus*, “1730: Becoming-Intense, Becoming-Animal, Becoming-Imperceptible.” From their point of view, all worthy animals are a pack and others are pets of the bourgeoisie. Haraway opposes to Deleuze and Guattari’s scorn for curiosity about or respect for actual animals. By extending “becoming with” to species interdependence, or “becoming worldly,” she calls for a cosmopolitical conversation between human and nonhuman animals. In other words, companion-species approaches must actually engage in cosmopolitics. As Haraway states, “what does subject of history mean when the rules are changed like this? We do not get very far with the categories generally used by animal rights discourses, in which animals end up permanent dependents (‘lesser humans’), utterly natural (‘nonhuman’), or exactly the same (‘humans in fur suits’)” (Haraway, *When* 67). Much of her conversation takes place in the kinds of response and regard that change the subject and the object. Rather than the Other across the gulf from the One, animals are significant others with whom humans are in consequential relationship in an irreducible world of embodied and lived partial differences (Haraway, *When* 72). And humans are just another knot in the midst of webbed existences. Living in a companion-species world, humans and nonhuman animals are both subjects and objects to each other in ongoing intra-action.

Haraway takes Australian contemporary artist Patricia Piccinini's drawing *James*<sup>10</sup> (*sitting*) as an example. In the drawing, an alien species called Surrogate (for the Northern Hairy-Nosed Wombat) and a human child sit face to face, with the baby reaching out his hand. Surrogate, though a half-seen countenance, looks vaguely benign toward the baby. In response to and in dialogue with technoculture and its biotechnologies, this drawing offers openness to what the world of companion species might become. We are just here to witness the encounter of the human baby and the nonhuman species. According to Haraway, humans are not uniquely obligated to or gifted with domination over the ecologies of all mortal beings. Nonhuman beings, in other words, become not simply an object of study, but are response-able in the same sense as humans are in the creation of culture. That is, humans and nonhuman beings are both subjects and objects as a relationship crafted in intra-action. We are face-to-face, companion species to each other.

According to Steve Hinchliffe, Haraway has asked us to think about “how” species meet, how to meet well, who and “what” species can become companion species (Hinchliffe 34). Haraway's study is about the complex time-spaces that make species interactions possible. However, Hinchliffe points out that species meetings are not only face-to-face meetings but happen in various locations. Not all interaction produce a coherent outcome; and assembling do not necessarily be judged by their “togetherness.” For example, the work of science studies, such as Annemarie Mol's *Body Multiple*, helps us to consider both the complex histories of species, assemblages and their complex presents. In *Body Multiple*, doctors need to deal with their patients' body and to achieve better care by living with the noncoherence.

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<sup>10</sup> *James* is one of Piccinini's series called Nature's Little Helpers. Piccinini questions the tangled natural-cultural life forms central to conservation practices and to assisted reproductive practices. The categories of “endangered species” have overflowed with the sorrow and hopes of their ill-contained actors (Haraway, *When* 289). See picture in Donna Haraway's *When Species Meet*, page 290

Multiple companion species involve “not only the natural and social histories of species, but their sometimes fraught geographies” (Hinchliffe 35). Haraway’s writing prompts us to realize the wheres of species meetings and the ways by which humans can interact at different locations to make a better meeting.

Looking at posthumanist views mentioned above in this way may readjust the boundary between humanity and other nonhuman beings. For example, AIs or trained dogs could also be judged as “humans.” On the other hand, the concept of “humanity” avoids placing humans in opposition to various other animals, devices, machines, or computers. In my opinion, what we need is a new point of orientation from which to look at (and look back at) becoming posthuman. To become posthuman is not merely an extension of the human, but seek out new ways that can never be fully reduced to patterns of standards, codes or information.

To sum up, posthumanism does not make an absolute fracture from the legacy of humanism since we still rely upon a humanist view. Though the posthumanist perspective supposes the decline of humanism and explores alternatives of subjectivity, the human, as a first-order observer, still unavoidably recognizes nonhumans/animals as significant others in a hierarchical system. In *How We Became Posthuman*, Hayles states how humans are constituted as posthuman subjects in the informatics age. From the human’s point of view, Hayles rethinks the human “with” the nonhuman others, imagining humans inevitably situated within the next age of the human-computer equation. In my opinion, Hayles’s view of the posthuman still holds an anthropocentric view because she remains within the realm of the human. In contrast with Hayles’s view, Wolfe’s posthumanist view continues to rely upon the liberal humanist theoretical and methodological innovations, and thus ends up revealing that posthumanism comes both before and after humanism. To reject the

anthropological and political dogmas of the human, he argues that posthumanism should be sufficient to surpass and contain the boundary not only between humans and nonhumans but also between the organic and the mechanical or technical. That is, the notion of the posthuman has to move beyond the dialectic of human and nonhuman. Both Hayles's and Wolfe's posthumanist views end up revealing that humanism and anthropocentrism still remain in the disciplinary practice. While the humanistic arrogance continues to place humans at the center of world history, we should go beyond seemingly endless binary oppositions between pessimistic sentiment and optimistic expectation of becoming posthuman. And we should strike a new position that combines various forms of beings in the world of "becoming with." In Haraway's perspective of the intersection between humans and companion animals, or so-called "companion species," humans and multiple nonhuman beings are both subjects and objects to each other. Haraway regards the human as just another knot among the organic or technological nonhuman beings, including cyborg and all other kinds currently labeled as "posthuman," in the worldwide web of interspecies dependencies.

## Chapter Three

### A Posthumanist Reading of William Gibson's *Idoru*:

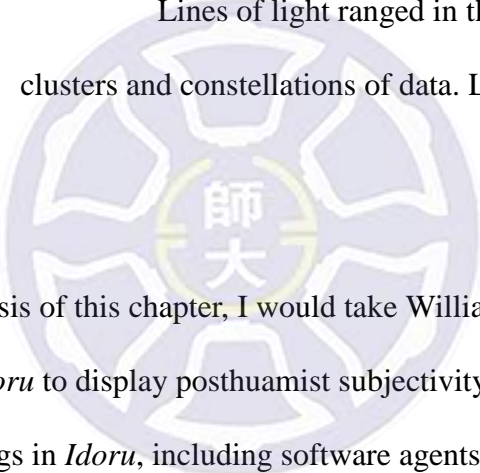
#### Virtual Identities as Companion Species

Cyberspace, a consensual hallucination, experienced daily  
by billions of legitimate operators in every nation,  
by children being taught mathematical concepts. [...]

A graphic representation of data abstracted from banks  
of every computer in the human system. Unthinkable complexity.

Lines of light ranged in the nonspace of the mind,  
clusters and constellations of data. Like city lights, receding.

--Gibson, *Neuromancer*



In the textual analysis of this chapter, I would take William Gibson's science-fiction novel *Idoru* to display posthumanist subjectivity. Gibson portrays several non-human beings in *Idoru*, including software agents and virtual idols. He focuses on the intersection between humans and multiple nonhuman beings. In the novel, virtual technologies transform the human subject into a disembodied subjectivity that inhabits cyberspace. Regarding cyberspace as a mental space, I would draw on André Nusselder's methodology, a Lacanian analysis of cyberspace, in his *Interface Fantasy: A Lacanian Cyborg Ontology* to understand humans' experiences in cyberspace. In Lacanian psychoanalysis, fantasy works as an indispensable screen for humans to interact with the outside world. According to Nusselder, the human-computer interface and virtual identities in the realm of technological virtuality incorporate the function of fantasy in mediating the real and

the virtual. Therefore, Nusselder takes a psychoanalytic approach to explain why humans are fascinated by the virtual images and how computers and digital technologies provide physical pleasure. By adopting Nusselder's analysis of cyberspace, this chapter will analyze such phenomena as role playing and Internet addiction in the context of *Idoru*.

This chapter deals with the breakdown of boundaries between humans and nonhumans in *Idoru*. In place of the humanist subjectivity, Gibson reinstalls humans and multiple nonhuman beings as both subjects and objects to each other. Utilizing N. Katherine Hayles's posthumanist views and Donna Haraway's discussion of animal-human companionship, this thesis argues that characters in *Idoru* not only transcend the hierarchical relationship between "humans" and "others," but also present human-nonhuman associations and companionships. Gibson's vision of the future shows that nonhuman beings are not simply objects or boundary points, but rather exist in the same sense as humans.

#### Gibsonian Cyberspace in *Idoru*

*Idoru* begins with gossips that the internationally famous music star Rez is going to marry the Japanese best-known virtual media singer Rei Toei, or so-called *Idoru* in Japanese. "[Rei Toei] is a personality-construct, a congeries of software agents, the creation of information-designers. She is akin to what [...] they call a 'synthespian,' in Hollywood" (121). Existing only in the virtual world, Rei Toei is a database composite created by information software. "And there were always rumors about Rez and different people. But that was *people*" (Gibson, *Idoru* 45). This marriage between an information construct and human flesh is obviously impossible and therefore questioned by Rez's loyal staff, particularly by his head of security, Keith

Blackwell. The main character, Colin Laney, is hired as a computer analyst to investigate gossips surrounding Rez by Blackwell. In other words, Laney has to explain the idoru to him: the virtual idol's appeal to her audience. In the meanwhile, a teenage girl, Chia McKenzie, is sent to Japan by the Seattle branch of the Rez's band fan club to figure out whether the gossip of Rez and Rei Toei's wedding is true.

Gibson's *Idoru* focuses on the relevance of various urban settings in cyberspace and technological body modification. The novel features the near-future Tokyo where human and nonhuman beings interact through networks of computers link with both physical space and cyberspace. In cyberspace, characters create their own virtual personae with self-images to communicate with other people by various computer-mediated communications. The hacker community "Walled City" is a virtual recreation of Hong Kong's demolished Kowloon City. As Masahiko Mimura, an otaku who is one of the citizens in Walled City, explains the origin of this virtual community to the protagonist, Chia McKenzie:

"Walled City is of the net, but not on it. There are no laws here, only agreements."

"You can't be on the net and *not* be on the net," Chia said, as they shot up a final flight of stairs.

"Distributed processing," he said. "Interstitial. It began with a shared killfile—" (Gibson, *Idoru* 276)

Unlike the Internet, Walled City has "no laws, [...] only agreements." This virtual city is outside the rules enforced by the government. It begins with a "shared killfile," a set of mechanisms to delete incoming messages that the users try to avoid, and then:

Someone had the idea to turn the killfile inside out. This is not really how it happened, you understand, but this is how the story is told: that the people

who founded [Walled City] were angry, because the net had been very free, you could do what you wanted, but then the governments and the companies, they had different ideas of what you could, what you couldn't do. So these people, they found a way to unravel something. A little place, a piece, like cloth. They made something like a killfile of *everything*, everything they didn't like, and they turned that inside out. (Gibson, *Idoru* 292)

Because of the high regulations and policed urban areas on the Internet, the users of the Internet create a virtual space which exists “of the net, but not on it.” They go there to get away from the laws. In *Interface Fantasy*, André Nusselder claims that because cyberspace as a database cannot appear to us without interfaces which open it up, the interface has a similar status to that of fantasy in Lacanian theory<sup>1</sup> (Nusselder 5). Walled City, as a huge database, forms the basis of the worldview: the representation or conceptualization of codified objects constitute the world which is accessible only through interfaces like video-goggles or tip-sets. According to Nusselder, “The interface is the gate leading humans into cyberspace, connecting us to the matrix while simultaneously, because of its particular formations, still separating us from it as a whole” (4). As the crucial medium, the interface connects the human reality to the realm of virtuality. It is a virtual space that is not real but appears to be. The interface immerses the user in this virtual environment. These interface objects, being digital and interactive, transcend familiar reality and offer the citizens of Walled City abilities to surpass the limits that the government imposed on them.

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<sup>1</sup> Lacan uses the three orders, the imaginary, the symbolic and the real, to analyze human reality. For Lacan, the real is not only opposed to the imaginary but also exterior to the symbolic. Fantasy as an inevitable medium for “interfacing” the inaccessible real and the world of imaginary depictions and symbolic representations that humans mentally live in. In virtual worlds, the virtual identities consist of both realistic and symbolic self-representations. Imaginary elements mediate the codified object and its representations which evinces a likeness to the model of the new media object (Nusselder 6). Therefore, just like Lacan regards the formation of an object to be mainly determined by the limitations of the human mind, Nusselder considers technological interfaces determine the appearance of an object. That is, humans create their virtual Selves with the interfaces of computer technologies.



Take the virtual version of Venice described in *Idoru* for another example. The user of the Sandbenders system software designs the theme and constructions of his/her own virtual utopia according to his/her preference. Chia uses her Sandbenders to design a virtual Venice that serves as an entertainment for her to deploy the free time. On the plane to Tokyo, Chia stays away from Maryalice, the blond woman sitting beside her, by sneaking into the virtual realm with her Sandbenders. “Chia picked up her glasses, slid them on, and hit big red. –My ass out of here. And it was. There on the edge of her bed, looking at the Lo Rez Skyline poster” (Gibson, *Idoru* 42). As Chia puts her glasses on and hits the “big red,” she leaves her physical existence on the plane. The glasses become an interface which projects Chia’s consciousness onto cyberspace. Her consciousness enters her virtual room, a simulated realm reproduced based on her bedroom in reality. Cyberspace may function as the utopic, wish-fulfilling ideal world. At the beginning of this chapter, I quote Gibson’s description of cyberspace as a “consensual hallucination” from his *Neuromancer*. His statement signifies that we cannot detach the fantasies accompanying computer technologies from desire. In Nusselder’s opinion, we should stop considering cyberspace as an objective fact or objective information. Instead, cyberspace is “a product of human imagination, in which we use known metaphors for a new domain of information and communication” (Nusselder 17). In virtual spaces, the user’s self-representation consists of imaginary and symbolic elements. For instance, an image of face or body with spoken language represents the user as his/her virtual self. Yet, Nusselder questions that whether this virtual self is still related to the self in reality (6). Because the avatar consists both of self-images and symbolic elements of self-representaton, this virtual persona exists as not merely a duplication of the real but an inevitable formation of it. With his interpretation of

Lacan, Nusselder considers the virtual persona to be related to the real just like the fantasy formation is related to the real. Gibson portrays a society relating to cyberspace in which most of the characters upload their consciousness. As a mediated space, cyberspace connects the user's body to the computer. With the digital technology as an extension of our mental and bodily functions, humans transcend reality limitations and reconnect an enormous playground for us to gain pleasure from imaginary scenes.

However, cyberspace could be an imaginary illusion of false appearance alienating operators from the reality. With respect to space, cyberspace brings a physical elsewhere into the physical presence of the user, and offer the possibility of actually acting in that virtual space (Nusselder 50). Thus, Nusselder questions what is real and what is virtual: is the user here, at the place where s/he sits (body); or is the user there, at the place from which s/he see (mind)? As a medium to let the user perceive in a virtual elsewhere, cyberspace shows that digitization can radically cause a discontinuity between humans and the surrounding world, as well as between body and mind (50). This illusion of an experience of "being there" blurs the boundaries between the reality and virtual worlds. One example is Gibsonian cyberspace, Walled City, which provides a sociologically coherent dystopic vision of a near future. As revealed in the narrative of *Idoru*, "Walled City is of the net, but not on it" (Gibson, *Idoru* 276). The virtual world is a portrayal of fantasy but it is not being solely an imaginary illusion. In Freudian theory, fantasy functions as a recovery of the lost by producing a substitutive experience of satisfaction. Lacan follows Freud's basic notion that fantasy is normally an essential support of desire (Lacan 186). For humans, modern technology substitutes for shortcomings on the biological or natural plane. In order to fulfill human needs and desires, media technologies that seek to overcome

distances and close the distinction between the virtual and the real world replace the real by a simulated version. Humans might forget the defensive function of the screen, and too easily take the real as a given within easy reach (Nusselder 7). Within Gibsonian cyberspace, the user experiences where s/he knows that what s/he is seeing is only a virtual space, but nevertheless s/he experiences it as a fully realized world. From a Baudrillardian perspective, cyberspace presents a form of hyperreality: “That which was previously mentally projected, which was lived as a metaphor in the terrestrial habitat is from now on projected entirely without metaphor, into the absolute space of simulation” (Baudrillard, *Ecstasy* 16). In hyperreality, the concept of the reality as an object of representation no longer sustains, because fantasy and reality are indistinguishable. The transference from the real to the hyperreal leads to the collapse of the distinctions between subject/object and reality/representation by means of technological simulation. In other words, the subject leaves all of the embodied bounds of material worlds behind, and then enters a virtual world in which “the subject is neither the one nor the other; it is merely the Same” (Baudrillard, *Transparency* 22). Considering Lacanian perspective in Baudrillard’s description of hyperreality, Gibsonian cyberspace can be translated as a desire for a realized fantasy of the escape from the embodied limitations. For example, Masahiko lives in this “multi-user domain. It is his obsession. Like a drug. He has a room here. He seldom leaves it. All his working hours he is in Walled City” (Gibson, *Idoru* 116). Walled City functions in cyberspace as a psychological space. The mental realm of the human-computer interface turns people entering cyberspace into cyborgs, because these people depend on technological devices for their online lives. That is, people not only employ avatars to interact but also to “dwell” in virtual spaces (Henthorne 70). The user invests part of himself in the virtual worlds. He is not only attracted toward

the utopian freedom from the physical body but also threatened by the possibility of a denial of the self.

### Virtual Bodies in *Idoru*

This section borrows the term “companion species” conceptualized in Donna Haraway’s *When Species Meet* and critically regards virtual identities, like idoru Rei Toei, as companion species. As we saw in previous chapter, “companion species” originally refers to the co-constitutive link between humans and companion animals. Haraway examines the evolutionary biology history by studying how the other species are linked to humans as our helpers, workers or companions. She urges that we need companion species to constitute ourselves as humans since we are historically and presently entwined with the evolution and environments. That is, humans define ourselves through which we differ. Similarly, humans share a lot of history, events and spaces with our virtual identities since the invention of the Internet. Looking at social network identities or software agents in VR as autonomous beings, one can see the way we co-inhabit and co-evolve. Humans can engage with the virtual world and with other users by linking their physical bodies to their digital ones. According to Haraway, “companion species” also indicates webbed bio-social-technical apparatuses of humans, animals, artifacts, and institutions in which particular ways of being emerge and are sustained (*When* 134). She uses this term as an alternative category to the cyborg and other living beings labeled “posthumans.” In Gibson’s *Idoru*, various kinds of nonhuman beings such as virtual idols and software agents offer a radical rethinking of relationship and co-presence between humans and all significant others. Thus, I would like to regard virtual identities in *Idoru* as companion species and explore how to readjust the boundary between humanity and other nonhumans.

Further, Haraway poses a fundamental challenge to the anthropocentric model of subjectivity and experience. In Haraway's opinion, "there are no pre-constituted subjects and objects, and no single sources, unitary actors, or final ends" (Haraway, *Companion* 6). This statement shows her thought of the anti-anthropocentric concept that "subjects, objects, kinds, races, species, genres, and genders are the products of their relating" (7). According to Cary Wolfe, both animal studies and disability studies rethink questions of subjectivity, bodily experience, mental life, intersubjectivity, and the ethical and even political changes in light of new knowledge about the life experiences of nonhuman animals and the disabled (Wolfe xxix). These studies not only reformulate the question of the knowing subject and the disciplinary paradigms, but revisit the relationship between nonhumans and humans. Wolfe takes Temple Grandin's case as an example to denaturalize many of the taken-for-granted modes of human perception and experience. In Temple Grandin's case, disability becomes a unique form of "abledness" in opening up transspecies modes of identification, and thus discloses the underlying models of subjectivity that ground the dominant discourses in disability studies (136). To use Derrida's insistence, "there is not *one* opposition between man and non-man; there are, between different organizational structures of the living being, many fractures, heterogeneities" (Derrida 66). Animal studies and disability studies direct us toward the necessity of posthumanist studies.

Gibson redefines the conception of what the virtual idol is like. From analyzing her appearance and the way she interacts with humans, I think Rei Toei represents a new form of being surpassing the boundary not only between humans and nonhumans but also between the organic and the technical. Colin Laney, the main protagonist, is hired to investigate into the rumor saying that Rez the rock star wants to marry an information construct called Idoru. What Laney has anticipated the idoru's appearance

is that

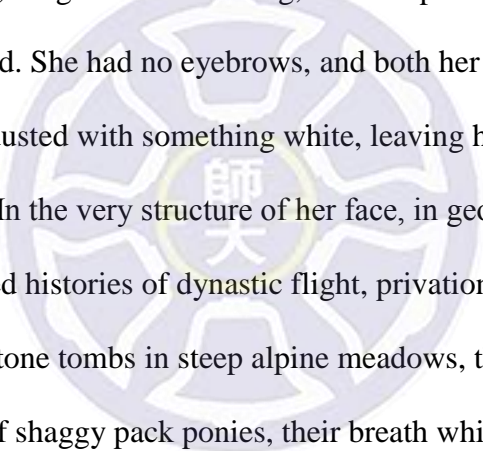
it had been as some industrial –strength synthesis of Japan’s last three dozen top female media faces. That was usually the way in Hollywood, and the formula tended to be even more rigid, in the case of software agents—eigenheads, their features algorithmically derived from some human mean of proven popularity. (Gibson, *Idoru* 229)

This anticipation of the virtual idol’s appearance suggests an underlying narrative of conservative view points of sexuality and gender. Humans create virtual idols or animated computer creations to serve as singers or catwalk models. These virtual idols are designed by computer programmers to simulate human female idols with slender figures and tender personalities in order to match consumer preferences of nowadays. Designed as a corporate commodity by the male software programmers, the virtual idol becomes a digital representation of an ideal figure for male in popular culture. That is usually the way when it comes to portraying the virtual idol. Take the virtual idol in the film *Simone* (2002)<sup>2</sup> for example. Viktor Taransky, the protagonist, happens to get a computer program and uses it to create a computer-generated woman, Simone. Viktor seamlessly incorporates Simone into the film to give a fantastic performance, exactly controlled by him. And the movie immediately achieves remarkable success. With his adroit manipulation of the mass media, Viktor successfully makes Simone an ideal actress that everyone adores. He cheats the audience into purchasing Simone’s albums, various types of derivative products and

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<sup>2</sup> *Simone* is a science-fiction film directed by Andrew Niccol. In this film, the protagonist, Viktor Taransky, experiments with a software inheriting from a programmer and uses it to create a virtual actress, Simone. With a high-tech computer and his careful manipulation of the mass media, Viktor successfully makes Simone, being really good at acting and singing, a wonderful idol. He cheats the crowd into buying Simone’s album, various types of derivative products and even Simone’s live performance ticket. In the end of the movie, Viktor faces the dilemma of achieving both fame and wealth as the manager of a big star or revealing the truth that Simone is not a human being but only a computer program.

even her live performance tickets. Viktor disguises the virtual idol as an artificial image performing a media career in ways according to the demands of the managers. As this brief summary suggests, while Viktor disguises the virtual idol as an artificial image performing a media career in ways according to the demands of the managers, the existence of this modern android blurs the boundaries between the biological body and the artificial body. However, Rei Toei is nothing like the usual virtual idol as represented in *SimOne*. Laney's first face-to-face experience of the idoru conjures up a totally different image from those usual synthespians in Hollywood. Laney describes his first sight of Rei Toei as the following:



Her black hair, rough-cut and shining, brushed pale bare shoulders as she turned her head. She had no eyebrows, and both her lids and lashes seemed to have been dusted with something white, leaving her dark pupils in stark contrast. [...] In the very structure of her face, in geometries of underlying bone, lay coded histories of dynastic flight, privation, terrible migrations. [Laney] saw stone tombs in steep alpine meadows, their lintels traced with snow. A line of shaggy pack ponies, their breath white with cold, followed a trail above a canyon. The curves of the river below were strokes of distant silver. Iron harness bells clanked in the blue dusk. (Gibson, *Idoru* 230)

From the idoru's image, Laney recalls an ancient landscape and legendary echoes which have no obvious connection with its cyberworld (Cavallaro 79). Laney sees more clearly as the light of Rei Toei's face reflects in the lenses as he seats himself next to her. Rei Toei is "[a] hologram. Something generated, animated, projected" (Gibson, *Idoru* 231). Such description suggests that information of Rei Toei's body is mediated by a projection. Rei Toei is a database composite carrying traces of a personal history. As Laney describes, "[Rei Toei] is not flesh; she is information. She

is the tip of an iceberg, no, an Antarctica, of information. Looking at her face would trigger it again: she was some unthinkable volume of information. She induced the nodal vision in some unprecedented way; she induced it as narrative” (233). This virtual idol is not only an artificial intelligence, but an architectonic system of information and data. That is, Rei Toei’s cyberbody flows in a world of temporal and spatial dislocation. Though Rei Toei lacks flesh, Laney can see clearly her hands and the way she eats:

Each time a plate was placed before Rei Toei, and always within the field of whatever projected her, it was simultaneously veiled with a flawless copy, holo food on a holo plate.

Even the movement of her chopsticks brought on peripheral flickers of nodal vision. Because the chopsticks were information too, but nothing as dense as her features, her gaze. As each “empty” plate was removed, the untouched serving would reappear. (234)

In this context, the narrative addresses fundamental questions about the body’s reality. The virtual idol, as an organization of data, has a totally fluid existence. At the same time, however, her digitalized body still plays a pivotal role as a particular signature recognizable as belonging to Rei Toei. This virtual idol provides the possibility of crossing the binary of biological bodies and information technologies that creates a metaphorical union without being seduced by fantasies of boundless power and disembodied immortality. Rei Toei’s figure finds a close correlative in Hayles’s asseration that the possible relevance can emerge when materiality and information mutually imply each other, thus providing a theoretical framework in which such apparently diverse ideas as hyperreality and mutation can be understood as different manifestations of the same underlying phenomenon (Hayles, *How* 249-50). As a



combination of human figure and information technologies, Rei Toei represents an embodiment of posthumanity. Her posthumanity negotiates the boundary between the human and the nonhuman. She becomes a new mode of being, the hybrid assemblage of flesh and information. In this combination of organic and artificial life, humans search new ways to break the boundaries between self and other, natural and artificial, and those problematic dualisms. Hayles's semiotic square, the interplay of both "presence/absence" and "randomness/pattern," can be used to investigate the idoru's body as a crossing between "materiality" and "information." The interplay between pattern and presence can explore how the virtual body is constituted. Also, pattern and randomness are not binarily opposed concepts yet actually mutually complementing phenomena (Cavallaro 154). Dani Cavallaro focuses on blurring the dividing line between the natural body and the artificial body. She points out that the relationship between the organic and the synthetic is an ever-changing boundary. Rei Toei's cyberbody is an artificial product carrying traces of a personal history, as its sensory faculties are extended beyond familiar territories in a world of temporal and spatial dislocation. Rei Toei's functions and feelings are inherent according to what is culturally expected of the fans and consumers. In other words, its body is humbled into a recognition of its limitations.

Moreover, Rei Toei's body projects "aggregates of subjective desire," what Kuwayama, the creator of the idoru, presents about his hidden intention to construct the idoru. "It was decided that the modular array would ideally constitute an architecture of articulated longing" (Gibson, *Idoru* 234). Kuwayama intends to market Rei Toei as an idol that attracts everyone who gazes on her. In other words, Rei Toei is a desiring-machine that triggers utopian desires and imaginations whenever one glimpses on her. As described in the novel, Rei Toei organizes bodies of her fans by

regimenting their desires. “Rei Toei’s only reality is the realm of ongoing serial creation [. . .] Entirely *process*; infinitely more than the combined sum of her various selves. The platforms sink beneath her, one after another, as she grows denser and more complex. . . (Gibson, *Idoru* 267). In *Cyberpunk and Cyberculture*, Cavallaro views the idoru as a “desiring machine” which serves as an organized personality construct to “channel the media-generated yearnings of fans and consumers into an intricate structure of mutating images” (Cavallaro 81). At the same time, Rei Toei also organizes the bodies of its fans through technologically harnessing their subjective desires (81). Cavallaro argues that the idoru not only evokes fans’ desire, but attracts their consumption. In her opinion, the idoru “exemplifies the idea that bodies are technological products and that technology, in turn, embodies specific cultural forms of production and consumption” (79). On the one hand, the idoru is an immaterial construct. On the other hand, it is an object of erotic desire. Rei Toei’s body consists of information and images that deliver to those who projects utopian imaginations upon her. In this process, Rei Toei turns from disembodied information into an embodied utopian desire. Thus, the biological body’s lack is stressed by technological products which embody an object of desire—the desire to be immortal, which Rez the rock star yearns to be. By marrying Rei Toei, Rez makes use of her ability to project his utopian dream of abandoning the flesh and living in cyberspace as disembodied information. Rez’s desire for existing as disembodied information is similar to what Hayles suggests about the posthuman. According to Hayles, the posthuman is a new kind of subjectivity that privileges informational pattern over material instantiation. Cybernetic posthuman engages in the erasure of embodiment from subjectivity. The erasure of embodiment in the cybernetic construction of the posthuman takes place by regarding the body as a receptacle for data and information (Hayles, *How* 4). From the

analysis of Rez's desire, we can see that the shift from the human to the posthuman evokes the deconstruction of the liberal humanist subject in cybernetics. That is, humans abandon the old cosmos characterized by presence and absence and enter the cyberspace operated by the binary of pattern and randomness.

Gibson offers an ironical antithesis between the natural and the artificial characters in *Idoru*. In addition to Rez's desire mentioned above, the desire of natural body to be released from its physical restrictions is vividly demonstrated by Gibson's setting: characters create their own virtual personae with self-images to interact with other people in cyberspace. The users tend to create their ideal autonomous selves: identities that they wish to be or are expected to be. For example, "Chia, herself was presenting currently as an only slightly tweaked, she felt, version of how the mirror told her she actually looked. Less nose, maybe. Lips a little fuller" (Gibson, *Idoru* 14). And her partner Kelsey manifests herself by "a saucer-eyed nymph-figure out of some old *anime*. Which Chia was [...] sure Kelsey would not look like real-time, were they ever to meet that way (14). In the virtual realm, both Chia and Kelsey present themselves as better figures than what they really are. They try to abandon their physical bodies and exist as disembodied posthumans. While humans like Rez and Chia get rid of their natural bodies and enter a utopian realm as disembodied posthumans, Rei Toei emerges as an artificial body yet disturbingly akin to natural human. In the global fan-activity database, Laney sees the idoru's data "[begins] to acquire a sort of complexity. Or randomness [. . .] The human thing. That's how [Rei Toei] learns" (Gibson, *Idoru* 331). Laney has a peculiar talent that he can put information together about people from the data trail that they leave behind them. With this talent of sifting through vast amounts of mundane data, he can find "nodal points" of particular relevance. This data-collection ability is fundamentally the

product of chemical experiments. Contrary to Laney, Rei Toei carries traces of personal life stories, submerged memories, and fleeting scenes, sounds and images with the application of technological processes to the body by promoting specific mentally needs and desires. “[R]ecent improvements allow [Rei Toei] new degrees of freedom. [...] Now she accesses the fan data as well” (Gibson, *Idoru* 314). From this narrative, Rei Toei as a personality construct adapts and learns new things from her interaction with humans. This ability is unique to other usual software agents. For example, Chia’s Music Master knows nothing when you ask him about music that had come out since his own release. Through her learning from humans, Rei Toei gradually transits from disembodied information to embodied individual. Here is another example showing Rei Toei’s humanity. When Rei Toei appears in Chia’s virtual Venice, Chia wants to hear what the idoru talks about her feeling: “I’ve seen so many new places,” she [says,] smiling at Chia, “so many different people and things [...] Rez] told me it would be this way, but I had no idea, really. [...] Having seen all this, I’m so much *more*... Does it feel like that for you, when you travel?” (Gibson, *Idoru* 305). From the dialogue with Chia, Rei Toei demonstrates her feeling that is alike to human’s feeling when facing new things. This interaction shows that the artificial nonhuman becomes not simply an object of study, but is response-able in the same sense as humans are in the creation of culture. Just as Haraway states, humans are just another knot in the midst of webbed existences. Living in a companion-species world, humans and nonhumans are both subjects and objects to each other in ongoing intra-action.

Haraway’s work relating to companion species also brings us to her work relating to the concept of the cyborg. In Haraway’s “The Cyborg Manifesto,” the cyborg crosses boundaries of what can be called human, and thus transgresses

dichotomies of humans, animals and machines. Continuing her discourses regarding the intersection between humans and nonhumans, Haraway offers a different way of theorizing relationality and co-presence between humans and all significant others on the basis of some features unique to the former. What can be called human and what constructs a being? She attempts to rethink our taken-for-granted modes of human experience, including ways of being in the world, ways of knowing, observing and describing other living beings or forms that are radically not-human. *Idoru* deals with the techno-cultural production and imagination of nonhuman beings such as virtual idols and software agents. Gibson creates a virtual idol character different from those Hollywood synthesians. As Laney investigates the idoru deeper, he figures out

that the idoru was more complex, more powerful, than any Hollywood synthesian. [...] [Laney] knew that true AI was assumed never to have been achieved, and that current attempts to achieve it were supposed to be in directions quite opposite the creation of software that was good at acting like beautiful young women.

If there were going to be genuine AI, the argument ran, it was most likely to evolve in ways that had least to do with pretending to be human. Laney remembered screening a lecture in which the Slitscan episode's subject had suggested that AI might be created accidentally, and that people might not initially recognize it for what it was. (Gibson, *Idoru* 326)

Rei Toei does not simulate human female idols whose appearance aims to match consumer preferences. Her body, as an architectonic systems of information and data, transcends the binary of biological bodies and information technologies. That is, her fluid existence crosses between “materiality” and “information.” For those who project utopian desires upon her, Rei Toei's body contains information and images,

just like an architecture of articulated longing. Rez thus makes use of her ability to construct a disembodied posthuman and live in cyberspace without physical body. As a combination of human flesh and information technology, Rei Toei's appearance and construction demonstrate her unique to other Hollywood synthesians in *Idoru*. Moreover, Rei Toei's ability to learn new things and her feeling are akin to human. Rei Toei's humanity provides new ways of thinking about the humanist subjectivity and what being human means. *Idoru* takes us to readjust the boundary between humanity and other nonhumans. Here, the idoru is not simply an objects, but exists in the same sense as humans. We could judge that the idoru is also "human" like ourselves. On the other hand, we could develop a concept of "humanity" which avoids placing humans in opposition to various other nonhuman beings such as animals, devices, machines, or computers. Humans need a new point of orientation from which to look at (and look back at) becoming posthuman. To become posthuman is not merely an extension of the human, but seek out new ways that can never be fully reduced to patterns of standards, codes or information.

At the end of *Idoru*, Gibson leaves undeveloped and unanswered the implications of Rei Toei's multiple emergence. While Gibson has set the stage for a posthuman interrogation of the patterning of presence, those ambiguous implications of the plot still remain. Gibson portrays the interface connecting the human reality to the virtual environment, like the virtual Venice and Walled City. To gain pleasure from imaginary scenes, characters transcend reality limitations of mental or bodily functions and reconnect an utopic, wish-fulfilling ideal world. However, this ideal world would be an imaginary illusion of false appearance alienating operators from the reality.

Although Gibson cannot offer closure to *Idoru*, he leaves the emergence of Rei Toei, as an emergent system based on randomness, for readers to think about the next

evolutionary step of posthumans. As we regard nonhuman beings not as simply objects or boundary points, but rather exist in the same sense as humans, the boundaries between humans and nonhumans may be broken. Thus, we reinstall humans and nonhumans as both subjects and objects to each other. Furthermore, we transcend the hierarchical relationship between “humans” and “others” and privilege human-nonhuman associations and companionships. This science fiction offers an open-ending answer to the posthuman future.



## Conclusion

*Cyborg writing must not be about the Fall, the imagination of a once-upon-a-time wholeness before language, before writing, before Man. Cyborg writing is about the power to survive, not on the basis of original innocence, but on the basis of seizing the tools to mark the world that marked them as other.*

-- Donna Haraway, "A Cyborg Manifesto"

The virtual idol reflects the sophisticated technological mediation of the human body. As a simulation of an idealized female body, the virtual idol represents the artificial body striving for the realism of living human body. And yet, the invention of VR systems blurs the boundaries between the biological body and the artificial body. Unlike the earlier prosthetic technological extensions, the networked avatar body has been expanded from a person's extension of the body image and sensation to a vehicle for human to escape from the body. We are facing the potentiality of a future world in which our humanity itself will be transformed beyond recognition. Accordingly, cyberpunk such as William Gibson's novels describes the increasingly blurred boundaries among humans, animals, and machines and questions the difference between humans and non-humans. This thesis deals with specific problematic dualisms of self/other, natural/artificial, human/machine, mind/body and so on. Cyberpunk provides a possibility to break down these dualisms. Thus, a rethinking of the subjectivity, space and time interacting with the Other is the main concern of this essay.

Looking back at the beginning of this thesis, we first discuss the intermingling of human bodies and machines. Recent progress in life sciences anticipates that cyborg



technology will form the future human evolution. With the invention of liminal machines, a human-machine cyborg body would be considered as a new type of human subject. During the 1970s, writers like Philip K. Dick and Joanna Russ use science fiction as a device to question the dilemma of such contemporary issues as biotechnology, genetic engineering and nano-technology. Through their fictional worlds, these SF writers comment upon the potential consequences of futuristic technology and scientific innovations. Cyberpunk, a subgenre of SF, usually projects a dystopian vision for postmodern times. In cyberpunk, the human body is often regarded as the “flesh” and represents as weak and mortal. Thus, the body should be left behind or blended with computer technology. The most visible example is William Gibson, whose novels feature a near-future world of computer networks and artificially intelligent entities. Gibson’s cyberpunk world is centered on the cyberspace which liberates the protagonist from the constraints of the physical body. By leaving the body behind, characters connect to cyberspace and enter their own individualized place or move to other virtual spaces. Gibson offers an escape from the conceptual dualisms of natural/artificial and provides case studies for investigating the underlying problems in cyborg bodies. Through analyzing cyberspace and cyborg bodies in Gibson’s works, we are able to figure out an essential change in the concept of the human.

Posthumanism marks the end of the opposition between humanism and anti-humanism and goes further in exploring alternatives. Some posthumanists, like Francis Fukuyama, consider contemporary technological trends to see how future technologies might affect humans. Other posthumanists such as Katherine Hayles and Cary Wolfe attempt to strike a new position that combines the current and upcoming technologies to bring about beneficial society change of values. In this thesis, I

address Hayles's and Wolfe's discourses regarding the posthuman and argue that their dominant concepts may remain humanist. Their posthumanist perspectives assume the decline of the fundamental premises of humanism and explores alternatives of subjectivity. However, "human" as a first-order observer still unavoidably recognizes every other living creature as political "other" in a hierarchical system. The humanistic arrogance thus rises over and over again from its ashes, and continues to control the measure of values. Since both Hayles and Wolfe still hold an anthropocentric view, their posthumanist views continue to rely upon the liberal humanist theoretical and methodological innovations. In this thesis, I focus on how to keep discourses on posthuman from being written once again into the dominant concept of subjectivity. However, I could not carefully explain the boundary between the legacy of humanism and the humanist anthropocentric position. To strike a new position that combines various forms of beings in the world of "becoming with," I turn to Donna Haraway. From Haraway's perspective of the intersection between humans and "companion species," humans and nonhumans are both subjects and objects to each other. Haraway views the human as just another knot among the organic or technological nonhumans, including cyborg and all other kinds labeled as "posthuman," in the worldwide web of interspecies dependencies. In my future research, I will try to respond cosmopolitical questions like nonhuman rights, human-computer equation and endless binary oppositions between pessimistic sentiment and optimistic expectation of becoming posthuman.

Gibson's vision of the future shows the interface connecting the human reality to the virtual environment. He sets the stage for a posthuman interrogation of the patterning of presence while those ambiguous implications of the plot still remain. What's more, he offers an ironical antithesis between the natural and the artificial

characters in *Idoru*. Thus, we regard nonhuman beings not as merely objects or boundary points, but rather exist in the same sense as humans. As we reinstall humans and nonhumans as both subjects and objects to each other, the hierarchical relationship between humans and nonhumans may be broken. Accordingly, cyberpunk offers an open-ending answer for readers to think about the next evolutionary step of posthumans.

The future world of Gibson's imagination is neither utopian nor dystopian. Rather, his scientifically-grounded cyberspace where humans and posthumans (cyborgs, virtual idols and avatars) live together is not so far beyond the point we have already reached. Ever-newer and ever-more-complex computer technologies have drastically changed the human body. In the near future, humans may be displaced by intelligent machines, or become more machine-like through the use of artificial organs. That is, humans become more and more like what Haraway called cyborgs. During this transitional process, humans link to computers more closely than ever before. The development of consciousness out of the physical activities of the brain enables computers to modify humans. As humans must adapt to an existence without physical sensations, computers are being made much more like humans both in appearance and in function. My reading of Gibson's cyberpunk novels sees how far they can lead us to an imaginary future world: In the scope of this thesis I only investigated virtual idols, but one can easily see that investigating virtual identities is perhaps one step further into a posthuman future. With the rapid development of science, I believe that we will see even greater transformation of human perception of space and time as well as the essence of "being human." A posthumanist rethinking embodied in Gibson's works deconstructs the anthropocentric point of view and inspires us to figure out how to co-exist.

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