

# Formable Fluidity: The Key Consequence of Information Flow in Cyberpunk Fiction

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## ABSTRACT

*Cyberpunk is one of the most recent subgenres to emerge in science fiction. In the represented world of this subgenre, information is the constituting element of all the flows, frameworks and interactions. Within the cyberpunk world, information exercises both fluidity and formability in its manipulations. The fluidity occurs when information manipulates different aspects of the represented world through commodifying and simulative operations, and the formability and containment of the fluidity occur when the conventional conceptualizations of aspects such as time and labor resist losing ground to simulations and its various informational manipulations. As a result, an uneasy coexistence of formability and fluidity is materialized in various aspects of the cyberpunk world, a coexistence which the present study will address as formable fluidity. Through reviewing some key works in the subgenre, the present study investigates the impact of the formable fluidity on the temporal and the occupational aspects of the presented world in cyberpunk fiction. The study assumes that due to the highly fluid and speculative nature of information in cyberpunk fiction, time loses its durational historicity. This subgenre also favors modalities of ownership, capital and labor which have the highest level of mobility and networking, with the commitment to conventional fixities and centralities in the occupational aspects becoming contingent, unstable and temporary.*

## KEYWORDS

Cyberpunk, fluidity, information, capital, occupational, temporal

## Introduction

Cyberpunk fiction, which emerged in the late 1980s and continued its popularity during the 1990s and into the 21<sup>st</sup> century, deals with body and mind invasions, prosthetic limbs, implanted circuitry, cosmetic surgery, genetic alteration, computer interfaces, artificial intelligence, cyborgs, nanotechnology and surveillance, themes which had been only fantasized about in conventional science fiction. However, these thematic novelties do not turn the subgenre into a rationalistic extrapolation of the world within a fictional world. They rather situate the subgenre in an uneasy junction between rationality/order and irrationality/chaos. Apart from the orientation of cyberpunk fiction towards cybernetics, the subgenre is unique for intermingling cybernetics and punk counterculture. The “cyber” in cyberpunk refers to order, control and rationality, and the “punk” part refers to chaos, counter movements and anarchy in society. That is why Cavallaro, a key critic of cyberculture and the works of William Gibson, calls the intermingling of cyber and punk “an unholy marriage.”<sup>1</sup> Although the intermingling of order and chaos in the word cyberpunk seems contradictory, critics like Cavallaro believe that it exactly depicts the contradictory and illogical circumstances of the presented world in the subgenre. Unlike the conventional hard science fiction in vogue in the 50s and 60s, (e.g. during the reign of Hugo Gernsback in magazines such as *Amazing*

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1 Dani Cavallaro, *Cyberpunk and Cyberculture: Science Fiction and the Work of William Gibson* (London and New Jersey: The Athlone Press, 2000), 19.

*Stories*<sup>2</sup>), cyberpunk fiction embraces order, rationality and technological advancements on one hand, and self-deprecation, anarchy and chaos on the other hand.

The key reason for such an uneasy coexistence between rationality and chaos in cyberpunk fiction is that information has become the constituting element in this subgenre. According to Manuel Castells, in informational cities such as those in cyberpunk the industrial paradigm of capitalism is replaced by an “informational paradigm”:

The emergence of a new informational paradigm organized around new, more powerful, and more flexible information technologies makes it possible for information itself to become the product of the production process. To be more precise: the products of new information technology industries are information producing devices or information processing itself.<sup>3</sup>

Information as the new constituting element of cyberpunk fiction provides it with a considerable level of fluidity, a term which the present study denotes as an informational force which undermines conventional categories and operations in all aspects of the worlds presented in cyberpunk fiction. Such fluidity turns different aspects of the cyberpunk world, including time, into a commodity which can easily be manipulated through simulations. These simulations in turn affect other aspects of the cyberpunk world, and provide this world with a considerable fluidity.

The emphasis on informational fluidity should not create an illusion that such fluidity nor the simulative operations it provides for the cyberpunk world can bring absolute emancipation from all the conventional categories and elements. As cyberculture critics like Timothy Wilcox, Stinna Attebery, and Josh Pearson have written, neither absolute simulative freedom nor utter restriction can be the defining feature of the cyberpunk world, thus the tendencies of both freedom and restriction are “intertwined like a Mobius strip: they each have distinct identities, but we never inhabit a moment that is purely one or the other.”<sup>4</sup> Considering this intertwining, the present study assumes that a chiasmatic term such as formable fluidity can do justice to the dialectic (and not simply dual) connection between informational fluidity, and the restrictive and containable formability in its operations.<sup>5</sup>

Considering the dialectic nature of information’s formable fluidity, the present study investigates its impact on the temporal and occupational configurations of the presented world in cyberpunk fiction. The study assumes that the formable fluidity of the cyberpunk world creates a kind of mobility in the aforementioned configurations, which defy any kind of rigid categorizations. Even when one of the configurations commands some type of categorization or containment, it administers the categories on the basis of modulation and contingencies rather than administering them on the basis of any rigid or permanent categorizing criteria. The purpose of the study is to show that in the cyberpunk world, information cannot make immaterial fluidity dominant in the

2 For further information about the development and significance of science fiction magazines and hard science fiction, see Brian Attebery, “The Magazine Era” in *The Cambridge Companion to Science Fiction*, ed. Edward James and Farah Mendlesohn. (New York: Cambridge University Press, 2003), 32–47.

3 Manuel Castells, *The Informational City* (Oxford: Blackwell Publishers, 1989), 67.

4 Graham J. Murphy, and Lars Schmeink, *Cyberpunk and Visual Culture* (New York and London: Routledge, 2018), 104.

5 For more about the difference between a dualistic and a dialectic rendition of the intertwining of the material and the immaterial aspects of cyberpunk fiction, see Graham J. Murphy, and Sherry Vint. *Beyond Cyberpunk* (New York and London: Routledge, 2010), 228–233.

temporal and occupational configurations, nor can it suggest a nostalgic return to the conventional and materialistic categorizations and conceptualizations in these configurations. With such a reading from the genre, the study does not believe in a total annihilation (either utopian or dystopian) of conventional and materialistic understandings of temporal (e.g. temporal markers such as the past, the present, and the future) and occupational (e.g. labor division schemes, importance of solidified/materialistic instances of capital and labor) categorizations in the cyberpunk world. Nevertheless, it detects how such conventional and materialistic understandings and categorizations are threatened by the immaterial fluidity which information provides in such a world. In this world, such informational and immaterial fluidity is created through introducing speculative simulations in both the temporal and occupational configurations, and implementing occupational mobility and capitalistic weightlessness in the occupational configurations. A commitment to observe both the conventional/material and fluid/immaterial natures of the aforementioned configurations of the cyberpunk world defines the present study's insistence on the existence of formable fluidity, a concept which believes neither in dominance of either material/formable nor immaterial/informational aspects, and sees these aspects in perpetual and dialectic tension within the cyberpunk world.

In the cyberpunk world, when it comes to making sense of the transpiration of events in time, the intangible information one has about these events becomes more important and determining than the events themselves. In other words, people rely more on informational simulations of the past and the future events than any other immediate means of connecting with time. Although this reliance cannot undermine the importance of the actual occurrence of events, it certainly emphasizes the possibilities circulation of information can bring forth in people's simulated understanding of time (and the occurred events in it) in the cyberpunk world. Due to the commodifying speculation of time and characters' temporal experiences in cyberpunk fiction, most of the predicted future events in cyberpunk fiction (even death) become "anachronistic" and a thing of the past, and as Christian Hviid Mortensen has written, are turned into "relics of a futurity" which have never occurred naturally.<sup>6</sup> These events are predicted to a great extent, and are turned into experienceable commodities, and as a result lose their exclusive belonging to conventional temporal categorizations such as the future, the present or the past. Although events such as death cannot be put in any temporal category other than the future, the understanding of cyberpunk characters of the finality of an event such as death is destabilized due to the fluidity the future as a temporal category manifests. Therefore, the formability and containment of time within a temporal category such as the future is severely threatened through the fluidity which the commodification and speculation of time causes.

In addition to time, informational fluidity destabilizes the functioning and dividing of the labor and ownership through conventional categorizations, and places labor and ownership function within more flexible modulations. Such capitulation to flexibility reduces any centralized restrictions, since information and its concomitant fluidity undermine the fixed definitions of labor divisions and capital ownership, and turn these definitions into temporary and contingent categories. The present study assumes that acknowledging both the existence of the emancipative opportunities and the restrictions of the informational simulations will help create a distance from

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6 Murphy and Schmeink, *Cyberpunk and Visual Culture*, 6.

either a utopian celebration or a dystopian lamentation of the depicted circumstances in such a world<sup>7</sup>. Such an acknowledgment will also assist the study in its investigations into how characters with their new posthuman (and not transhuman) subjectivities and identities can understand and deal with time, occupational and ownership aspects, and the capital flow in such a world.<sup>8</sup> Referring to both the celebration and condemnation of the Frankenstein Complex (by which she means all the scientific advancements that individuals in both fictional worlds and reality face in various historical periods), Veronica Hollinger proposes that only in adapting (and not abandoning) our subjectivities and identities on the basis of the newly emerged scientific criteria in a fantastic world such as the cyberpunk world (which always present some level of fluidity and undercutting of former fixities and conventions), characters become successful in making themselves into “partial machines” rather than being transformed into either the zealots or luddites of the newly emerged scientific/cybernetic flexibilities and restrictions.<sup>9</sup> Such partiality will help the characters, and consequently readers, to both imagine the opportunities (what is referred to as fluidity in the study) and the restrictions (what is referred to as formability) a scientifically advanced society can present for its members.

The novels used to support the arguments of the study are works by the two seminal cyberpunk writers William Gibson (*Idoru* 1996) and Bruce Sterling (*Schismatrix Plus* 1985, *Island in the Net* 1988, and *Zenith Angle* 2004), along with Greg Egan’s *The Permutation City* (1994) and Richard Morgan’s *Altered Carbon* (2002). The reason for selecting these works in the study is that they are fine representatives for showing the formable fluidity of time and capital flow in the cyberpunk world. Also the selection has included both the works of the seminal and marginal cyberpunk writers to support the academic claims of the study.

## Temporal Configuration and Commodification of Time in Cyberpunk Fiction

In cyberpunk fiction, due to the fluidity of capital flow, the characters’ understanding of time becomes radically unstable, commodified and unconventional. Under a set of stable and conventional circumstances, a difference between the past, the present and the future exists, whereas in cyberpunk fiction the lines between these categories have been blurred, since information as the key commodifier of everything has turned the characters’ understanding of time into a malleable/manipulative commodity. Through the rendition of cybernetic and algorithmic simulations, and through parallelisms of economic and financial ventures, cyberpunk fiction treats time as a commodity about which readers need to speculate. As Youngquist indicates, “speculation about time [of an opportune financial deal or event] has made the delivery of information [of the deal or event] faster than the delivery of the deal.”<sup>10</sup> It can then be deduced that the delivery of information

7 For a detailed analysis of both the utopian and dystopian aspects, see Murphy and Schmeink, *Cyberpunk and Visual Culture*, 81–94.

8 For a brief introduction into differences between posthuman and transhuman identity/subjectivity, see Murphy and Schmeink, *Cyberpunk and Visual Culture*, 162.

9 Murphy and Vint, *Beyond Cyberpunk*, 86.

10 Paul Youngquist, *Cyberfiction* (New York: Palgrave Macmillan, 2010), 22.

regarding an event or a deal has become more vital than the event itself, and when the event occurs, it will be regarded as something about which the characters already have sufficient data. Therefore, the event constitutes a kind of the future that has already taken place for the characters, since the information of its near occurrence has traveled much faster than the future event itself. In this sense, the future becomes a “thing of the past.”<sup>11</sup> Since speculations about time and the information about the future events are made on the basis of the present and the past circumstances, the lines between these three phases in time are blurred, making all of them already extant.

Jeopardizing the conventional understanding of history is the first outcome of the commodified and unconventional treatment of time, since the sense of temporal duration between the past, the present and the future becomes unstable and even nonexistent. In cyberpunk fiction, characters speculate or are faced with speculations about time to the extent that only the process of remembering or feeling nostalgic matters, and historicity becomes indistinguishable from the present or the future, since it blends too much with speculations about both the future and the past. The cyberpunk characters believe that the process of remembrance is one of the only remnants with which they can still claim they are human beings. They know that the temporal product of such nostalgia (which is filled with both historically occurred past events and futuristic speculations) cannot result in pinpointing genuine historical past events, since they are too involved in speculations about both the future and the past. As a result, although characters remain acquainted with temporal categories of the past, the present and the future, these categories have lost their exclusivity and rigid formability in their treatment of time. In *Permutation City*, speculative simulations about the past become so prevalent and easy to access that Maria, a key character in the novel, believes that feeling nostalgic about the things that can be rendered available in an instant is just silly. Nevertheless, she cannot help but maintain this ambivalent feeling towards such easily an accessible simulative past. She feels that becoming involved in the process of yearning for a historical past is the only nostalgic thing that has some non-simulated element in it, and this feeling encourages her to desperately maintain an ambivalent desire for an unmediated, non-simulated past:

Maria felt herself drifting apart from her memories of the old world. The details were as sharp as ever, but her history was losing its potency, its meaning. Having banished the idea of grieving for people who had not died -- and who had not lost her -- all she seemed to have left to feel was nostalgia . . . and even that was undermined by contradictions.

She missed rooms, streets, smells. Sometimes it was so painful it was comical. She lay awake thinking about the shabbiest abandoned buildings of Pymont, or the cardboard stench of ersatz popcorn wafting out of the VR parlors on George Street. And she knew that she could reconstruct her old house, all of its surroundings, all of Sydney, and more, in as much detail as she wished; [...] Understanding exactly how far she could go was more than enough to rid her of any desire to take a single step in that direction.

But having chosen to make no effort to relieve the pangs of homesickness, she seemed to have forfeited her right to the emotion. How could she claim to long for something which she could so easily possess -- while continuing to deny it to herself?<sup>12</sup>

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11 Youngquist, *Cyberfiction*, 36.

12 Greg Egan, *Permutation City* (New York: Harper Prism, 1994), 222.

Loss of “the potency of history” is one of the key results of the promotion of simulation in urban spaces. Although Maria has access to every detail of her past, she cannot feel the historical duration and distance that one needs to feel from one’s past. The only feeling that she has is that she can “reconstruct [everything] in an instant,” and this feeling takes away the desire to visit the past with nostalgia. That is why even her nostalgia “was undermined by contradictions.” As Baudrillard has described, “our primal urge to replicate things is not leading us closer to the dream of immortality, but is creating merely a pathetic parody or a simulacra of our essences that is supplanting us.”<sup>13</sup> This “pathetic” circumstance can be observed in Maria’s loss of grip on time and especially of the historicity of the past. Such availability of the past through speculative simulations (all of which come from the cyberpunk world’s economic tendencies to speculate everything), is a “parody or a simulacra of [Maria’s] essences,” since it has supplemented the desire that she needs to maintain for the historical and durational features of her memories. When her past is available in detail in the present, she cannot fulfill one of her essences, the desire for a past memory which genuinely and immediately belongs to her, and which cannot be constructed through the simulative commodifying means of the cyberpunk world. Entangled in “an urban false consciousness which even mocks the duality of falsity/truth,” Maria even does not know about what or whom she should feel nostalgic.<sup>14</sup> She knows that some of her memories do not come from her natural “recalling abilities,” and are the result of the “introjections” of a series of simulative mechanisms.<sup>15</sup> In the novel, she tells herself that in the simulated circumstances of her environment, “they [her loved ones and friends] weren’t even dead; their lives didn’t lie in [my] past, whole and comprehensible. They were scattered around [me] like dust: meaningless, disconnected.”<sup>16</sup> Although she knows that the memories of all her loved ones are similar to “scattered dust” that have lost their historicity, she hopes that only in sustaining a contradicted sense of nostalgia she finds some hope as a human being. Although aware that she cannot long for something that ‘she could easily possess,’ Maria continues to “deny” this feeling. Using a commentary by Featherstone, the claim can be made that a person such as Maria is still a human being since she continues feeling nostalgic even when she knows that her memories and even the process of a nostalgic return to the past cannot help her escape the simulative circumstances of time which is dominant in her society.<sup>17</sup> In the cyberpunk world, characters will become like the aliens known as “the Investors” in *Schismatrix Plus* who have no genuine and human perspective of their past and history. Apart from maintaining a shattered desire, cyberpunk characters will become exactly like an alien race who have become too “disinterested” in time, since it has been accessible to them easily:

It was easy to forget how old the Investors were. Their deep disinterest in change gave them a wide but shallow field of view. They had no interest in their own history, no urge to contrast their own lives with those of their dead, because there was no assumption that their lives or motives varied in even

13 Larry McCaffery, *Storming the Reality Studio* (Durham and London: Duke University Press, 1991), 15–16.

14 Sophie Watson and Katherine Gibson, *Postmodern Cities and Spaces* (London and New York: Wiley-Blackwell, 1995), 61.

15 Cavallaro, *Cyberpunk and Cyberculture*, 130.

16 Egan, *Permutation City*, 221.

17 Mike Featherstone. *Cyberspace, Cyberbodies and Cyberpunk* (London, Thousand Oaks, and New Delhi: Sage Publication, 1995), 190.

the slightest degree. They had vague legends and garbled technical readouts concerning particularly prized objects of booty, but even these fragments of history were lost in a jackdaw scramble of loot.<sup>18</sup>

Loss of the “urge” to find any point of “contrast” in time, especially in one’s past, is when mankind starts losing its humanity. This loss of urge can be seen in *Idoru* as well. In this novel, this indifference to a sense of return to the past is observed in one character’s reluctance to even “comprehend” her position in time: “Chia’s ‘now’ was digital, effortlessly elastic, instant recall supported by global systems she’d never have to bother comprehending.”<sup>19</sup> Unlike Chia, characters like Maria in *Permutation City* or Constantine in *Schismatrix Plus* are represented as individuals who want to keep on believing in the human characteristics of the contradictory and even hopeless desire of nostalgia. Although the simulative treatment of the past destroys its historicity, turning it into an exchangeable, available, petty and manipulative commodity, it makes the characters realize that only in the shattered “process” of desiring nostalgically can they find some remnant of humanity. A temporal marker such as the past only becomes nominal in providing a very unstable formability to the temporal circumstances of a world which has been bombarded with fluid, commodifying and mutable simulations.

Jeopardizing the historicity of the most resolute occurrences in the future such as death is the second outcome of the commodified and unstable treatment of the past, the future and the present. In *Altered Carbon*, through an advanced engineered drug called “Reaper” a near death feeling is also simulated for some of the privileged characters so that they can consume even this feeling in a “cool and indifferent” manner:

Final offspring of an extended chemical family engineered for near death research projects early in the millennium, betathanatine brought the human body as close to flatline status as was feasible without gross cellular damage. At the same time, control stimulants in the Reaper molecule induced a clinical functioning of intellect which had enabled researchers to go through artificially induced death experiences without the overwhelming sense of emotion and wonder that might mar their data perception. Used in smaller doses, Reaper produced a depth of cool indifference to such things as pain, arousal, grief and joy.<sup>20</sup>

“Artificiality,” a “lack of overwhelming emotions,” “coolness” and, “indifference” are the modifiers used for defining a near-death experience created through the simulative drug effect of Reaper. Like Maria’s nostalgic attempts to recall her memories in *Permutation City*, a simulated experience of death is filled with concepts that have nothing to do with death itself. In accordance with William Gibson’s narrator in *Pattern Recognition* (not included in the present study), Murphy and Schmeink believe that due to the absence of the “sufficient now,” and the presence of “abrupt and violent changes” that may occur in the presented fluidity of the cyberpunk world,<sup>21</sup> the most final/ultimate experiences such as death lose their fixed form and position in such a world’s temporal configurations, and as a result become vulnerable to be “flirted” with parodistically:

18 Bruce Sterling, *Schismatrix Plus* (New York: ACE Books, 1996), 180.

19 William Gibson, *Idoru* (New York: Viking Press, 1996), 167.

20 Richard Morgan, *Altered Carbon* (London: Orion Publishing Group, 2002), 70.

21 Murphy and Schmeink, *Cyberpunk and Visual Culture*, 192.

Poor death, no match for the mighty altered carbon technologies of data storage and retrieval arrayed against him. Once we lived in terror of his arrival. Now we flirt outrageously with his somber dignity.<sup>22</sup>

The commodifying abilities of a drug such as Reaper destroy the “somber dignity” of a resolute temporal experience such as death, turning it into a playful experience. Like the simulated nature of the past in cyberpunk novels, death as the ultimate symbol of an inevitable future turns into a “simulated performance.”<sup>23</sup> Such a feeling of “undeath” is a “horrifying” aspect of commodification of time in the cyberpunk world since its characters cannot even count on the finality of a resolute futuristic experience such as death.

Through treating time as a speculative commodity, the cyberpunk world shows for its characters that concepts such as nostalgic desires and death drive (each represents the past and the present respectively) are truly unattainable, even when it is made to seem so available and experienceable. The simulated, commodified and speculative versions of the past and the future undermine the characters’ desire to achieve any particular desire such as nostalgia about a particular memory or even death, and thus parody the rigid formability and fixity of the past, the present, and the future as conventional temporal divisions of time.

## **The Occupational Configuration and Contingent Formability of Ownership, Capital and Labor in Cyberpunk Fiction**

The formable fluidity of information as the constituting element of cyberpunk fiction’s capital flow causes jobs, properties, and consumptive choices to adopt mobile configurations as well. Under such circumstances, information facilitates realization of measurement and containment units that can exercise great levels of flexibility. Such flexibility defies permanent sedimentations and containments, and welcomes “reusability” and “portability.”<sup>24</sup> Described as having “great modularity,” information makes the dominance of a master design or a permanent structure impossible and provides a kind of weightlessness to various aspects of cyberpunk fiction’s capital flow.<sup>25</sup> Ownership is one of such aspects. In the cyberpunk world, wealth cannot be owned and possessed in the conventional manner with which people used to own and possess solidified instances of capital. In such a world, capital becomes too “abstract and metonymic,” and loses its conventional “materiality.”<sup>26</sup> That is why as soon as one “accesses” those metonymic instances of capital (e.g. data, bits, bytes), one can be regarded as the owner of a piece of capital. That is why on occasions, administrative and corporate powers, which have provided such modular flexibility for the characters in the very first place, fear the unpredictable possibilities this can provide for characters economically. In this sense, they sometimes prefer a “spasm” in the net instead of giving in to its modular flexibility. In *Zenith Angle*, administrative frameworks prefer to shut down

<sup>22</sup> Morgan, *Altered Carbon*, 306.

<sup>23</sup> Garfield Benjamin, *The Cyborg Subject: Reality, Consciousness and Parallax* (London: Palgrave Macmillan, 2016), 151.

<sup>24</sup> William J. Mitchell, *Me ++: The Cyborg Self and the Networked City* (Cambridge and London: MIT Press, 2003), 140.

<sup>25</sup> Mitchell, *The Cyborg Self*, 140.

<sup>26</sup> Mitchell, *The Cyborg Self*, 93.

everything and become involved in “the Digital Terror,” since they realize that the modularly flexible opportunities in the net’s “last mile” are nearly impossible to contain:

They were deeply involved in the Digital Terror. The nervous system of global governance, education, science, culture, and e-commerce, it was all in a spasm. It had all broken down in a sudden terrible panic in the last mile. The last mile stood between those great, big, fat, global, huge, empty, terrifying fiber-optic pipes, and the planet’s general population. The Net had not just broken. It had been abandoned, cast aside in fear and dread.<sup>27</sup>

Administrative panic regarding the protection of “intellectual property” ownership comes from the modularly flexible nature of the very property (which is pure data and information). This flexible and modular nature defies absolute control and, although administrative powers tend to propagate “easy distribution and wide consumer access to completed, packaged, impregnably encrypted and copyrighted intellectual products,” they know that in the very nature of the data and access to it exists the possibility of undermining the conventional ownership modalities of material capitals.<sup>28</sup>

Recognizing the fluidity of capital flow and ownership in the cyberpunk world, the present study also insists that the fluidity and the flexibility of capital flow and ownership of information should not be considered as means for reaching utter redemption and emancipation from social, political and ideological restraints. Such oppositional and subversive readings will undermine the untiring efforts administrative frameworks to present restricting measures in the form of flexible and bendable choices to the characters.<sup>29</sup> As Stephen Joyce has written, “the more emancipating [the interfaces of the cyberpunk world] seem to be, substituting activity for passivity or a branching narrative for a linear one, the more they are in fact hiding the fundamental social transformation into informatics that has affected the globe during recent decades.”<sup>30</sup> This paradoxical dialectic between flexibility and control is translated beautifully in the formable fluidity which the present study recognizes in the capital and ownership configurations of the cyberpunk world. In *Idoru*, some characters show the possibilities of both restriction and its circumvention in the virtual world. Like *Zenith Angle*, the administrative frameworks always wish to restrict the internet so that, as David Bell indicates, it can facilitate a convenient platform for their “dromoeconomic” dealings. Defined as “modes of production organized around controlling the speeding flows of capital, labor, information, products, resources and techniques coursing through global modes of production,”<sup>31</sup> these administrative frameworks promote virtual communications and interactions

27 Bruce Sterling, *Zenith Angle* (New York: The Random House Publishing Group, 2004), 136–137.

28 Mitchell, *The Cyborg Self*, 142.

29 Lars Schmeink shows a kind of dualistic reading of cyberpunk fiction in Murphy and Schmeink, *Cyberpunk and Visual Culture*, 303–314. His proposition of seeing the cyberpunk world through either authoritative visuality or dissident counter-visibility fails to recognize that even in the punk, lax, radically flexible, chaotic and murky aspects of the cyberpunk world (e.g. cyberspace), the containing strategies of conventional centers of power/administration can function secretly. Any sense of absolute freedom, i.e. counter-movement of fluidity, will always be marred by some level of appropriation and containment, as a result limiting formability. Critics such as Schmeink have only depicted (quite romantically) how authoritarian and administrative frameworks can be marred by the informational fluidity, and as a result have overlooked movements in the other direction.

30 Murphy and Schmeink, *Cyberpunk and Visual Culture*, 169.

31 David Bell, *An Introduction to Cybercultures* (London and New York: Routledge, 2001), 18.

as long as they can administer them to gain economic profit. However, as both novels attest, there are somethings that characters “could and couldn’t do” due to the “different ideas” of some administrative frameworks:

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 Hak Nam 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.<sup>32</sup>

The tendency to create these “killfiles” is due to the resistance of people who want to exercise opposition to all the administrative restrictions. Killfiles are created since their dissident creators (who are also founders of Hak Nam, a virtual online community in the novel) have access to the very capital the administrative frameworks now want to delimit. Because of the change in the modality of ownership from owning a piece of capital physically to having access to it, the very sedimentary definition of ownership is changed and becomes impossible to be controlled, possessed, or restricted exclusively. That is why a killfile can easily make everything “inside out” and, can undermine all the administrative control that Bell referred to as “the dromoeconomic control” of the capital flow of cyberpunk fiction. In *Zenith Angle*, the impossibility of becoming the ultimate owner of the capital flow of data is exemplified in the simple flow of Wi-Fi signals:

Wi-Fi was just getting started, and when Van thought about it, it filled him with chills. Wi-Fi carried data that was fast, cheap, anonymous, wide-open, wireless, portable, great big bleeding menaces to data protection, to intellectual property, to information security. It was like it was evolving on purpose to make a secure life impossible.<sup>33</sup>

A “secure life” of ownership is impossible in the newly emerged virtual landscape of the cyberpunk world. Described as “the Hertzian Landscape,” the virtual landscape (and its capital flow) makes the exclusive ownership impossible.<sup>34</sup> The formability of the fluid information in this landscape is so temporary and contingent that a kind of “intricate and invisible landscape—one that is hinted at only by the presence of antennas, and can be made manifest by wardriving or warstrolling with a wireless laptop” s promoted <sup>35</sup>In such a circumstance, the so-called owners of information and intellectual properties, the key types of capital in the cyberpunk world, can only exercise contingent access to such capitals. Through referring to Stephen Joyce in “Playing for Virtual Real,” one can deduce that the characters’ unstable capital ownership in the cyberpunk world presents the juxtaposition of the part of their identity which is fixed, and resolute, and the other part which is mobile and flexible. That is why they can survive in a world which simultaneously allows ownership (in which some sense of containment and formability resides) and its radical undercutting through fluidity and openness (materialized in the idea of allowance of infinite

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32 Gibson, *Idoru*, 167.

33 Sterling, *Zenith Angle*, 138.

34 Mitchell, *The Cyborg Self*, 55.

35 Mitchell, *The Cyborg Self*, 55.

number of simultaneous proprietors of an informational commodity or a product) they face in the cyberpunk world.

In cyberpunk fiction, apart from the weightlessness of ownership, labor division and occupational configuration experience a modular flexibility as well. One of the first contingencies affected by such flexibility in the occupational configuration is that the individual's geographical position becomes less important for employees. As long as one has access to a viable connection terminal, and passes the performance simulation tests, an individual can be regarded as a candidate for most jobs in the cyberpunk world. In *Permutation City*, the employer has not even met some of his employees, and has a mere abstract understanding of their whereabouts:

Thomas kept them at a distance, communicating with them only by terminal. He sometimes thought of his staff as working in Munich or Berlin . . . far enough away to explain the fact that he never met them in person, and yet near enough to make a kind of metaphorical sense of their ability to act as go-betweens with the outside world. He'd never bothered to find out where they really were, in case the facts contradicted this convenient mental image.<sup>36</sup>

As soon as the unseen employees are connected to the "terminals," they and their activities are registered in "huge data bases" making the old "ledger-based" occupational registries obsolete.<sup>37</sup> Their geographical locales bear almost no significance, and only the required services from them matters.

Another impacted area in the occupational configuration of the cyberpunk world is the prevalence of more modular, temporary and unfixed jobs and job descriptions. In a dialogue between a pair of characters in *Idoru*, the temporary nature of employees' occupational working places is represented. Similar to the occupational circumstances in *Permutation City*, every detail of the occupational activities of employees need to be registered even though their occupational circumstances and positions are not fixed, well-registered or permanent:

People don't have their own desks. Check a computer and a phone out of the Cage when you come in. Hotdesk it if you need more peripherals. The SBUs are for meetings, but it's hard to get one when you need it. Virtual meetings are a big thing there, better for sensitive topics. You get a locker to keep your personal stuff in.<sup>38</sup>

The unstable, unfixed and temporary nature of the "desks" connotes un-fixity in employees' job descriptions as well. The more one can adapt to such ambulatory, mobile and modular occupational circumstances, the more one is going to be successful. In the same novel, Laney has indicated that "the only people who had titles that clearly described their jobs had jobs he wouldn't have wanted."<sup>39</sup> This attests to the loss of the allure of having jobs with a fixed occupational description, with such a loss also represented in the drastic change depicted in the security sectors in *Zenith Angle*. In this novel, the adoption of some drastic measures in the security sectors of the administration after the 9/11 terrorist attacks is presented. In this so called "melting of the

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<sup>36</sup> Egan, *Permutation City*, 72.

<sup>37</sup> Mitchell, *The Cyborg Self*, 94.

<sup>38</sup> Gibson, *Idoru*, 24.

<sup>39</sup> Gibson, *Idoru*, 38.

stovepipe” of the security sectors,<sup>40</sup> governmental and institutional internal channeling undermines the job description and hierarchy that were observed conventionally before the attacks:

Since 9/11, all federal security agencies had been suffering a scary process that they called “melting stovepipes.” People who had spent their whole lives inside narrow institutional channels were forced to network with other feds that they’d never met. [...] The new Homeland Security empire was going to eat up any number of proud, independent agencies. Some said six, some said twelve, and some said twenty-two. This meant that no one’s turf was safe anymore. [...] The biggest federal re-org in forty years. It meant that the right bunch of computer-security geeks, in the right place with the right tools and attitude, might break out from obscurity. Bold nerds from some mainframe garage in the Commerce Department might end up giving marching orders to the Secret Service.<sup>41</sup>

The reason for such “federal re-org” in the security sector is not because of some people have higher university degrees or a cleaner background check. As Lyon has indicated, in the cybernetic rethinking of the occupational configuration “checking one’s background for a position is not materialized on the basis of his/her the past record. The record has become only a means for realization of simulations of a number of propensities, inclinations and alternatives.”<sup>42</sup> The simulations only seek the most optimal results, and to attaining such results the old occupational sedimentations and organizational separations cannot be regarded as being efficient. That is why in *Zenith Angle* the idea of giving security and top-secret job descriptions to a non-militaristic “computer geek” becomes a viable option for attaining the optimal set of security conditions. Although the organizational configurations of the labor division are still extant in the cyberpunk world (which constitute the restrictive formability of the formable fluidity dialectic of informational flow), their undermining through giving the job to a networker with no relevant occupational background or precedence attests to the fluidity the occupational configurations experience. Under such fluid circumstances, “the organizational strata lose their economic and political relevance.”<sup>43</sup> The shakedown of organizational hierarchy in the cyberpunk world is due to the gradual loss of position of the secure sector of middle managers, the jobs of which have been kept in obscurity by people with outmoded informational and academic skills. Using Tom Moylan’s ideas in “Global Economy, Local Text: Utopian/Dystopian Tension in William Gibson’s Cyberpunk Trilogy,” one can conclude that similar to the novel’s Secret Service agent being commanded by a computer geek (a member of the newly emerged networkers in the cybernetic world), and as a result, being put in an unstable position in the occupational and organizational hierarchy, the conventional functioning of the organizational and occupational strata is “replaced by a small tier of low paid service workers and relatively well-paid contract workers who have the technical skills in cybernetics (such as the exemplified computer geek in the novel), medicine, security, or entertainment that the informational/transnational economy requires but is unwilling to pay for in the form of regular and secure employment.”<sup>44</sup> The willingness of the economic and administrative

40 Sterling, *Zenith Angle*, 49.

41 Sterling, *Zenith Angle*, 49.

42 David Lyon, *Surveillance Society: Monitoring Everyday Life* (Buckingham and Philadelphia: Open University Press, 2001), 37–38.

43 Carl Abbot. “Cyberpunk Cities”. *Journal of Planning Education and Research*, no. 27 (2007), 125.

44 Murphy and Vint, *Beyond Cyberpunk*, 86.

frameworks to both sustain and escape their organizational frameworks perfectly defines formable fluidity as the key feature of the occupational aspect of the cyberpunk world.

The apex of the modular flexibility in the geographical aspects of a job, job types, and job descriptions can be observed in the emergence of hacking culture. Such an emergence can be seen in the fact that “the scientist and explorer heroes of traditional science fiction are replaced by anti-heroes: machine-augmented adventurers and data hustlers who are swept into seemingly unfathomable intrigues in a noir world where the boundaries between real and virtual experience and human and artificial intelligence dissolve.”<sup>45</sup> Like the most occupational circumstances in the cyberpunk world, hackers should not perform only one specific job or duty, but to look for the vulnerabilities of a system or a design. Since generally, hackers are not commissioned (at least openly), they cannot be put in a specific occupational framework. As Bell indicates, the modular flexibility of the hacking culture causes “the uncovering of security deficiencies and design flaws,” and due to this the experimental and unfettered nature of this culture it also results in “many of the most progressive developments in software development.”<sup>46</sup> Therefore, hacking can be regarded as the radical case of the modular flexibility in the occupational configuration of the cyberpunk world. Hacking deals with data and information flow as its main operational medium; it cannot officially be placed within rigid occupational formats and boundaries; the geographical, national and other material-based features of hackers’ locales are of no great importance, and hackers can facilitate capital realization for themselves and others through exposing security breaches of various systems. All hackers acquire a series of simulated appearances and identities, since they are aware of the flexibility the occupational configuration (here hacking culture) of the cyberpunk world has provided for them. This flexibility can be easily molded into a series of simulated avatars and voices to give them a convenient invisibility which turns their job into ludic play as well, and gives it resilience against being contained in rigid occupational configurations. In a dialogue between two characters in *Island in the Net*, hacking is described only as ludic “play” in which hackers do not work for a conventionally defined “salary”:

For us, [a job] is like a play. You play, and you learn that you can't sit on your ass and let things go to hell. You can't just take a salary, make a profit, be a dead weight in the system.<sup>47</sup>

[...]

[Our] bottom line is ludic joy rather than profit. We have replaced labour, the humiliating specter of forced production, with a series of varied, playlike the pastimes. And replaced the greed motive with a web of social ties, reinforced by an elective power structure.<sup>48</sup>

With its modular flexibility, hacking as an occupational configuration of the cyberpunk world does not pursue a façade of “forced production.” Like other jobs in the cyberpunk world, the hacking culture undermines the conventional labor division with its “ludic” attitude. With such an attitude, this culture seeks power, social influence and even wealth through turning information

45 Robert Warren and Stacy Warren, “The Future of the Future in Planning: Appropriating Cyberpunk Visions of the City”. *Journal of Planning Education and Research*, no.18 (1998), 52.

46 Bell, *An Introduction to Cybercultures*, 181.

47 Bruce Sterling, *Island in the Net* (New York: Arbor House, 1988), 74.

48 Sterling, *Island in the Net*, 122.

and data into a valuable commodity. As a result, in its tendency towards fluidity and annihilation of occupational divisions, occupational configurations such as networking and hacking tend to seek the commodification of data and information into valued added products, and through exercising this tendency cause some sense of formability within such fluidity of occupational configurations. Although hacking culture cannot function within specific occupational job descriptions exclusively, and as a result undermines rigid occupational forms, its tendency towards creating value added commodities gives it some formability. In the same novel, hackers (referred to as data pirates) are represented as those individuals who can turn information into value added commodities (referred metaphorically as ‘new/sinister whole[s]’ in the novel), and for doing that, they need to acquire different occupational identities, duties, and different types of customers:

These pirates not only invade people’s privacy and software protocols, they also start getting involved in black markets for genetic engineering, organ transplant and neuro-chemicals. [...] The customers of these pirates are credit companies, market researchers, insurance companies, fund raisers and journalists. These pirates trade for scattered bits of information, then they collate them and sell them as a new/sinister whole.<sup>49</sup>

Due to having the utmost level of modular flexibility in their jobs, hackers do not perform under one specific job title. As a result, they can turn, e.g. into active participants in “genetic engineering, organ transplant or neuro-chemical” markets, and through such variegated participation can acquire different customers: from “credit companies” to “journalists.” They do not believe in sustaining fixity in their occupational pursuits (their putative job titles existing merely to describe the kind of data they hack and gather), since they have realized most intensely that the nature of the capital in which their cyberpunk world is dealing no longer remains fixed and conventional. With this said, the present study does not endorse the emancipatory attitudes of transhumanist critics such as Max More, who believe that networkers and hackers of the cyberpunk world can attain freedom from their bodily constraints, and as a result achieve utter fluidity.<sup>50</sup> As Evan Torner indicates, the transcendental promise of disembodiment from this world through the hacking culture was the last frontier with which science fiction has toyed, and critics such as More has promoted.<sup>51</sup> However, “the aggressive corporatization and financialization of everything and every dream in this culture” has failed to put freedom or fluidity as the sole defining moment of cyberpunk fiction, and has juxtaposed it uneasily with a commodifying formability whose modalities changes constantly.<sup>52</sup> Using the argument of Jenna Ng and Jamie Macdonald in “We Are Data,” one can deduce hackers’ attempts to “pigeonhole themselves into nominal identities and occupations in genetic engineering, organ transplant or neuro-chemical markets” attests to the impossibility of shedding all the restrictions and containments even in the ephemeral circumstances of the hacking culture.<sup>53</sup> Although hackers exercise a considerate level of fluidity in acquiring different occupational identities, they need to abide pretentiously and vicariously to occasional restrictions

49 Sterling, *Zenith Angle*, 26–27.

50 Murphy and Schmeink, *Cyberpunk and Visual Culture*, 56.

51 For seeing other references to transcendental reading of cyberpunk fiction, see Murphy and Vint, *Beyond Cyberpunk*, 116–134, 135–154, 211–227.

52 Murphy and Schmeink, *Cyberpunk and Visual Culture*, 209.

53 Murphy and Schmeink, *Cyberpunk and Visual Culture*, 181.

and occupational regulations of particular jobs to attain the information they need, and as a result they can change their circumstances in the material world. Therefore, one can recognize some level of formability and containment in the most fluid occupational circumstances (e.g. hacking culture) of the cyberpunk world.

## Conclusion

The present study investigates the impact of information fluidity on the temporal and occupational aspects of the cyberpunk world. It shows that the temporal and the occupational aspects in cyberpunk fiction cannot function through conventional categorizations. Within the temporal aspect, we saw that dividing time on the basis of the past, the present and the future does not work, since time, like most of the other aspects of the cyberpunk world, has become heavily simulated. Under such circumstances, time no longer has any historical durability in terms of either the past nor the future, and even the yearning for a memory of an event in the past, or of death, i.e. an event in the future, becomes absurd. Realizing that such events are always already accessible in the present through simulations, cyberpunk characters only rely on the process of yearning nostalgically or for a finality in the future to preserve some sense of their humanity. For them, the past, the present, and the future only become temporal forms which can be easily flexed and transgressed through commodification of time in various simulating experiences and products. The conventional markers in time only become weak forms and restrictions against the ever-present informational fluidity.

Regarding concepts pertaining to the occupations of as well as the capital and ownership of cyberpunk characters, the fluidity of capital flow within cyberpunk fictions makes obsolete conventional conceptualizations regarding the divisions of ownership and labor. Access rather than possession becomes the key modality of ownership in the cyberpunk world, and mobility, what we have called modular flexibility, becomes the chief occupational asset for both employees and employers. With this being said, our study does not acknowledge the total annihilation of the capitalistic criteria of fixed labor divisions and ownership, but attests the existence of an uneasy tension between the newly emerged informational fluidity, and the fixity and organizational formability of the former occupational, ownership and capitalistic criteria.

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