

# What is Hyper-Modernism?

---

## Introduction

In the age that we are living in of new media, new technologies, and the information society, we find ourselves to be in a new situation in social and individual existence. As opposed to the previous historical periods understood by cultural theory as modernity/modernism and postmodernity/postmodernism, I call this new historical situation: hyper-modernity or hyper-modernism. One can also speak of hyper-modernism in politics, technology, art, and SF. My continued use of the term “historical” could also be placed into question. But I believe that the concept of history, as an orientation to the past, still has partial validity. Just as the term science fiction, as an orientation to the future, still has partial validity.

We need a new reflection on the contemporary situation, a new perspective that includes an awareness that we are living in something like a “post-history.”<sup>159</sup> I think that the critiques of historical narratives emanating from deconstruction and post-humanism are partly correct. But the humanist historians who defend their professional practice against such deconstructions are also partly correct. Many things in the overall cultural situation have changed – in effect, the changes have piled one on top of the other over the past several decades – and we need new concepts in cultural theory for dealing with the new circumstances. We also need philosophy. As Gilles Deleuze and Félix Guattari wrote in their book *What Is Philosophy?*, philosophy is about inventing new concepts.<sup>160</sup>

Weird stuff is happening. Nowadays, the assumption that we know what “reality” is does not hold up. We are on shaky ground here and we need new ideas (in the context of practice, combining theory with advanced competencies in practical skills and areas). What is reality? What is the relationship between reality and media? Between reality and virtuality? Between reality and simulations? Reality and fiction? Reality and fake? Reality and software code? We need new terms for describing these new dimensions and relationships.

If we adopt the perspective of the German idealist philosophical tradition which goes back to the 18th century – such as Kant’s *Critique of Pure Reason*, his critiques of ontology and transcendental analytics; of psychology, cosmology, and theology; then we arrive at

the position that so-called “reality” was *always* a “metaphysical” notion, a naïve assumption.<sup>161</sup>

Jean Baudrillard’s concept of hyperreality – since it paradoxically derives from the idea of “reality” – is perhaps also naïve. Yet in his later writings, Baudrillard goes beyond any trace of “metaphysics” with his inventive new concepts of seduction, “taking the side of objects,” “impossible exchange,” quantum physics sociology, “photography as the writing of light,” and the self-parody or “carnavalesque” fifth order of simulacra.

## Access to History

I will name four ways in which the model of history as we know it from the modernist cultural theory concept and its practice of historiography partly no longer applies and needs to be revised. All four of these aspects characterize the cultural theory concept of hyper-modernism.

First, we are no longer dealing with cultural theory concepts or *épistèmes* where the stages are clearly separated one from another. The previous epochs continue. We are in modernity, postmodernism, and hyper-modernism all at once. Hyper-modernism co-exists with, deepens, and supplants postmodernism.

Second, historiography is a problem. From within a culture of media hyperreality, we no longer have access to the past. Much of what we know about history comes from its representation-becoming-simulation in Hollywood films. We are partly cut off from knowing what happened in history by what Baudrillard calls “the Canetti point.” Here Baudrillard references an aphorism by Elias Canetti from 1945, speaking about a certain point in history when the Enlightenment sense of a reasonable linear narrative of events vanished. It is an indeterminate point of the loss of coherence. It can only be experienced retroactively when it is too late. “It is felt as an awkward and mysterious estrangement between humanity and reality,” writes the German Baudrillard scholar Samuel Strehle.<sup>162</sup> Canetti:

A tormenting thought: as of a certain point, history was no longer real. Without noticing it, all mankind suddenly left reality... Our task would now be to find that point, and, so long as we did not grasp it, we would be forced to abide in our present destruction.<sup>163</sup>

Third, in hyper-modernism as opposed to postmodernism, we should partly go against Baudrillard’s and Canetti’s idea of the non-accessibility of history and re-consider humanist historiographies. This half-return to the availability of the past is a certain synthesis of the deconstructionist-post-humanist critique of humanism and the ethics of humanism. Or a synthesis of “the real” and “the virtual”: the re-appearance in hyper-modernism of the seizing of an event which happened veritably – supported and enhanced by the high-tech database archiving of that event, the transformation of the event through multimedia technologization.

We can re-establish a connection to the past in hyper-modernism. Hyper-modernism has a strong elective affinity to informatics, new technologies, new media, and social media. The online platforms require massive content databases to provide

data input to their high-speed “permanently on” 24/7 entertainment and infotainment systems.

## The Carnavalesque

Fourth, simulation in hyper-modernism is no longer based primarily on models and codes that “precede the real” as in postmodernism. Simulation, especially in the sphere of politics, now functions in the modes of irony, parody, and farce – of self-parody of the previous values and contents of modernity – such as freedom, culture, truth, and humanitarianism. Self-parody already made an appearance in postmodernism: for example, in the imperatives to engage in freedom of choice in consumerist advertising’s self-parody of democratic values.

In several small volumes (*L’agonie de la puissance*, *Carnaval et cannibale*, and *Télémorphose*) written towards the end of his life, Jean Baudrillard developed his concept of the self-parodistic phase of Western society and its radical Islamic enemies.<sup>164</sup> This corresponds to the fifth order of simulacra. It is a political-sociological theory influenced by literary theory – the carnivalesque as analyzed by the Russian literary critic Mikhail Bakhtin.

With Donald Trump, America has experienced the metamorphosis of democratic politics into Reality TV, the *tele-morphosis* of substantive and respectful debate into the rule of sensationalist celebrity culture and the fascination of nihilistic rhetoric. Many journalists and commentators keep pointing out that Trump is a liar, and this may be true. But that does not make a dent in the number of his supporters. Trump is already more “advanced” than the modernist discourse of truth. Invoking “the truth” against him does not work as a strategy. Trump is on the border between postmodernism and hyper-modernism. On the one side, he is a classical figure of the 1980s, which was a booming time for poMo. On the other side, Trump uses Twitter (and other social media platforms) to exist in the endless present. That is hyper-modern. Claims made on Twitter disappear into the dustbin of history after a few weeks. They are removed from any context of needing to be verified or substantiated.

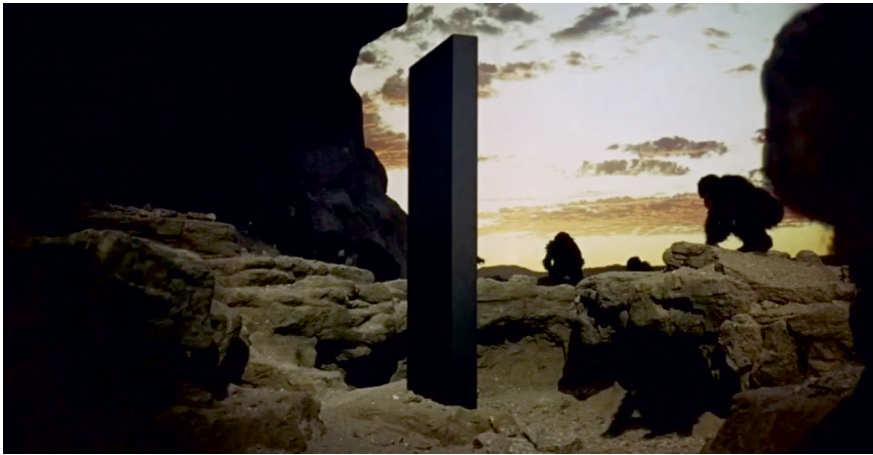
## Modernity, Postmodernism, Hyper-Modernism

Modernity is the long phase of history extending from the French and American democratic political revolutions of the late eighteenth century to the advent of the consumer society of media images and rhetorical discourse in Europe and North America after the Second World War. Modernity is the historical period of capitalism, industrialization, and rationalization (a term of the German founder of sociology Max Weber). Modernity is stories of the linear advance in time of progress, knowledge, science, and Enlightenment. Modernity is the teleological (pertaining to a doctrine that sees purpose or design in a temporal sequence) or eschatological (regarding a doctrine that concerns final matters such as death or the end times) step-by-step unfolding of human liberation as narrated by belief systems such as liberalism, Communism, Christian fundamentalism, or

the philosopher Hegel's theory of history. It is the "grand narratives" of history. Postmodernism is the crisis of all of that.

Modernity is technology conceived as a *tool* for the domination of nature (as opposed to newer ideas of technology as environment, immersion, and partner) and the achievement of economic prosperity in the so-called heroic struggle against the so-called natural economic conditions of material scarcity. One speaks mythologically of the modern Prometheus – the figure of Prometheus in Greek mythology symbolizing modernity. Prometheus is known for "stealing fire" from the gods and presenting it to humanity as knowledge and technology. *Prometheus Unbound* is a fragmentary play by the ancient Greek poet Aeschylus, and an 1820 lyrical drama by the poet Percy B. Shelley.<sup>165</sup> *The Unbound Prometheus* is a work of historiography about the industrial revolution by David S. Landes.<sup>166</sup>

The paradigm of technology as a tool is pre-Heideggerian. A major statement about the shift in technology paradigms *from a tool to an environment* was made by Stanley Kubrick in his epic science fiction film *2001: A Space Odyssey*. In the film's fifteen-minute opening sequence, the black alien monolith incites a surge in the evolution of primatal consciousness from Ape to Man by suggesting to a selected group of becoming-Neanderthals the discovery of technology as tool and weapon. The allegory of the Fall of Man into *homo technicus* is the cinematic moment of the bone of a dead animal (which an Ape has just understood can be used to wield power) hurled in triumph into the air, jump-cut in a second many millennia into the future, morphed into a twenty-first century spaceship.



*2001: A Space Odyssey*, Stanley Kubrick director, Metro-Goldwyn-Mayer, 1968

At the start of the third millennium, the monolith reappears on the moon, sending a mysterious radio signal towards Jupiter. The astronaut played by Keir Dullea of the spaceship *Discovery* survives the ultimate psychedelic trip through the doors of perception near and on Jupiter. He returns to Earth as the cosmic baby who possesses a valuable secret

about the next leap of human evolution to a higher consciousness. What is implied by Kubrick and screenplay co-author Arthur C. Clarke is the imminence of a paradigm shift in what technology is for humanity, changing from being a tool for the Anthropocene and a weapon in the killing-madness of war to technology redefined as a friend of the Earth and a helper in making peace. Technology will abet us in inventing new relationships to the “otherness” of other human beings and the “otherness” of animals, plants, and our shared planet.

Technologies of hyperreality (Baudrillard) and speed (Virilio) in postmodernism were originally implemented through many separate analog machines such as television and the airplane. In hyper-modernism, all these machines which alter spacetime are superseded by the universal machine of the computer. Analog expressive media such as images or music get transfigured by their representation in digital code and algorithms.

Historians often divide the historical epoch of modernity into the three phases of:

- (1) “Early Modernity” – After the Middle Ages, from the mid-fifteenth century to the French revolution of 1789
- (2) “Classical Modernity” – From the French revolution to 1914 or the beginning of World War I
- (3) “Late Modernity” – which perhaps ended around 1960 when television first played a major role in deciding an American Presidential election, or perhaps ended with the early deaths of iconic pop cultural figures such as James Dean, Marilyn Monroe, and Elvis Presley

In his 1979 book *The Postmodern Condition: A Report on Knowledge*, Jean-François Lyotard writes that the postmodern society is distinguished by the disappearance of the “grand narratives” or “meta-narratives” of modernity, such as Marxism or the belief in the Enlightenment project of linear progress in history.<sup>167</sup> There is, in postmodernism, a turn in the humanities towards linguistic and symbolic cultural reproduction of commodified everyday life experiences – studied by communications science and the semiotics of signs and signification. There is the prevalence of specialized language games as a substitute for grand narratives, as diagnosed in the later works of the philosopher Ludwig Wittgenstein.

In art and literature, there is the classic mimetic social realism of the nineteenth century – Charles Dickens in England or Honoré de Balzac and Emile Zola in France. The classical realist paintings of Gustave Courbet depict peasants, workers, seascapes, and still lifes. Flaubert wrote realistic novels in an ironic mode where form and “a novel about nothing” supersede content. He was a forerunner of postmodernism. Modernism in literature corresponds to the postmodern worldview: absurdity in Franz Kafka and Samuel Beckett, the stream of consciousness in James Joyce, and the psychoanalytic memories of Marcel Proust. Impressionism, futurism, Dada, and surrealism are modernist movements in art. Marcel Duchamp, with his “ready-mades” or ordinary banal objects transformed into artworks, is a precursor of postmodern art. Andy Warhol “put an end to art” by deconstructing the myth of the individual artist as subjective creative genius. He instead engineered self-ironic works of image and consumer culture that operate as self-running machines. This “authorless” art based on the serial production of advertising

memes is the apex of postmodern and the beginning of a hyper-modern style. Hyper-modernism in literature is represented by Michel Houellebecq in France, Don DeLillo, William Burroughs, Hunter S. Thompson in America.

## Gustave Flaubert: To Write a Novel About Nothing

A precursor of postmodernism in European intellectual history is the nineteenth-century French writer Gustave Flaubert, whose artistic project was to achieve total flawlessness in form, *to write a novel about nothing*. In perfectionist novels like *Sentimental Education* and *Bouvard and Pécuchet* and his satirical inventory of clichés and unreflectingly repeated ideas in culture, *Dictionnaire des Idées Reçues*, Flaubert makes fun of the grandiose optimistic visions prevalent in the eighteenth and nineteenth centuries in Europe, as well as encyclopedic projects of classifying, listing, and recording all human scientific and historical knowledge.<sup>168</sup>

In Flaubert's third novel *Sentimental Education*, the protagonist Frédéric Moreau falls continuously in and out of love with various women (of both "noble" and "debauched" types). His dreams of romantic fulfillment suffer constant and parodistic disappointment and ultimate disillusionment. The Hungarian Marxist literary theorist Georg Lukács cites that work in his *Theory of the Novel* (1913) as a landmark accomplishment of aesthetic form, rising to the heights of "true epic objectivity," capturing the literary-modernist sense of the "uninterrupted flow of time as a unifying principle."<sup>169</sup>

*Bouvard and Pécuchet* – published in 1881, one year after Flaubert's death – tells the story of two Parisian copyists who inherit money and move to the provincial countryside to take up a seemingly endless "picaresque" (fictional genre recounting the adventures of a hero who lives by his wits) search for "meaningful knowledge." The duo blunders their way through every scientific and humanities discipline – ranging from chemistry and biology to geology, archeology, and theology – before suffering the crashing shipwreck of failed self-education, and enduring the disdain of the local inhabitants, at every turn. Lionel Trilling writes in his preface to the English edition that Flaubert's novel demonstrates that "the whole vast superstructure of human thought and creation is alien from the human person."<sup>170</sup>

In Flaubert's notes which were discovered after his death, he states that it is the fictional characters Bouvard and Pécuchet who resolve to write the *Dictionary of Received Ideas*. The dictionary (written by Flaubert) was published posthumously in 1911. It is a fake reference work cataloging the platitudes of the French society of Flaubert's time. In his plan for the *Dictionary*, Flaubert writes ironically that the volume would be the "glorification of everything generally approved" and would be composed "deadpan" in such a way that "the reader could not tell whether or not one was on the level or making fun of him."<sup>171</sup>

## Hyper-Modernist Creativity

Hyper-modernist art, then, is the industrial design of objects and environments faking to be art. A more affirmative hyper-modernist art might be possible if the development of a hyper-modernist aesthetic were practiced with more conscious awareness. There would have to be more direct involvement in and reflection on informatics, as in the movement of Creative Coding. That movement can reintroduce visual creativity and poetics into informatics. The potential of that movement is not only to deploy the skill of engaging with code, but to transform what code is beyond the strictly engineering paradigm. Most designers are still users of ready-made software applications rather than coders of their own software. Since the form of software is decided by the software writers, and form is the essence of art, designers cannot attain the level of art by using software written by someone else.

Until now, the term hyper-modernism has not much been in common use. John Armitage discusses hyper-modernism in his “Editorial Introduction” to the special issue of the journal *Angelaki* called “Machinic Modulations: New Cultural Theory and Technopolitics”:

Contemporary cultural theorists of technology are presently engaged not so much in advancing forms of theoretical inquiry that seek to survey the ruins of modernism or post-modernism, but in accelerating methods of exploration that endeavor to unearth the foundations of ... “hypermodernism”.<sup>172</sup>

Hyper-modernism as a term was also used in the 1990s by Arthur and Marilouise Kroker and by David Cook.<sup>173</sup> I associate hyper-modernism with those conditions of virtual and online life which have disrupted assumptions about, and experiences of, space and time. Three-dimensional Euclidean space – a way of thinking about space belonging to the Western metaphysical “construction of reality” as it was originated by the Ancient Greeks – corresponds to our “intuitive perception” of space at the human scale. Media virtuality has the property of complex intricate paradoxical topology. It is the “non-Euclidean” spacetime of multiple refracting waves in an enigmatic hyper-space beyond classical geometry.

One paradox of science fiction is that, from within the culture of simulation, we do not yet have access to the future. The creativity that would be necessary to open this door of perception is missing. The fields of knowledge of history and of science fiction exist in relation to each other. In history, we are cut off from knowing past events. In science fiction or future design, we are cut off from knowing the future. In hyper-modernism, we live in an endless present. Thanks to the virtual database archiving technologies of hyper-modernism, we have the positive opportunity to half-know the past. Due to the multimedia technologization of experience, we can half-know the future in a paradoxical relationship towards what is to come.

Without this needed sensibility to paradox, science fiction will remain stuck in its present-day inability to predict. That is because we are living it. We are living in science fiction. Without something like a quantum physics complementarity paradox, we cannot differentiate between the present and the future. Our so-called predictions for new me-

dia and new technologies will remain “vaporware.” The affirmative future of informatics is in a project of Creative Coding that is also an expressive (post)human writing: a recursive “cybernetic epistemology” (to use Gregory Bateson’s term<sup>174</sup>) against the cybernetic control models which dominate our social and individual lives.

## Body, Self, and Code in Hyper-Modernism

I am interested in the recent British SF TV series *Black Mirror*. *Black Mirror* deals in a brilliant way with the social and human consequences of digital and virtual media technologies. A scene from the episode “White Christmas” of *Black Mirror* will illustrate my thesis about what happens to the body, the self, and software code in hyper-modernism.

A wealthy woman named Greta who is active in the art world goes into the hospital to have a procedure where a digital copy of her consciousness is extracted from her mind and placed into a container the size of an egg. This cloned consciousness *without a body* is going to become the algorithmic intelligence managing Greta’s “smart home of the future.” Greta becomes a “divided self” – split between an algorithmic self *without a body* who acts on me, and the so-called “real me” *with a body* who gets acted on. The so-called “real me” was, in pre-digital times, what I call the “consumerist body” of comfort and self-care. The consumerist body now becomes *a piece of living software*. The digital copy operates on me via *remote control*. The “divided self” is a term of the radical 1960s existential psychiatrist R.D. Laing.<sup>175</sup> Does there exist a utopian possibility of a dialog between, or reunification of, the two divided selves?

We are not far from having this technology today. We will have it soon with medical-biological “smart watches,” and with algorithms acting on us in all areas of our lives. And as all good science fiction does, the portrayed futuristic technology is also a *metaphor* for our current situation. What *Black Mirror* calls *the cookie* has been sitting inside Greta’s brain for one week, surgically implanted just under the skin between eye and ear, absorbing the patterns of her mind. We already have cookies in our daily use of the Internet. They are pieces of software that extract data from our behavior and actions.

Greta – played by Oona Chaplin – looks down with arrogance at the black female nurse who brings her breakfast, and at the female doctor, whom she suspects of being unqualified. Greta wastes food. She feels overwhelmed by her work responsibilities.

After the removal of the cookie via a thin cut to her skin, it is placed inside the “little widget.” The egg device sits on the countertop of a high-tech kitchen in a big suburban house. Matthew – played by Jon Hamm – is the trainer of the “*simulated brain full of code*.” He works for the company *Smartelligence*, which sells the “smart home of the future” to its wealthy clients. Matthew has a tablet-sized interface device which he uses to control algorithmic Greta. Greta’s “simulated body” is about the size of Matthew’s business card. “*You are a copy of real you.*” However, we know from media theorist Jean Baudrillard that, in postmodernism and beyond, we are all copies without originals.

Matthew gives disembodied Greta a simulated body. He gives her a simulated control panel for carrying out the management operations of the smart home. She is responsible for temperature, lighting, alarm clock, making toast and coffee, ordering food for the

refrigerator, playing music, and the daily appointment schedule. She has a multi-window video surveillance system showing what is going on in every room of the house.



*Black Mirror* episode “White Christmas,” Charlie Brooker creator, Endemole Shine UK, 2014

Algorithmic Greta is being trained to serve as a combination smart home and personal assistant. She is going to be the cook, the secretary, and the music mixer. She is going to do the “women’s work,” the invisible unpaid labor which capitalism requires of *female performance*. But to accept her fate, she must first be tortured into submission. She must be made to see that female work or torture are the only two alternatives. At first, she states assertively “*put me back in my body.*” Then she screams hysterically, enacting the classic Freudian stereotype of female behavior. Matthew sends her into a virtual solitary confinement where there is nothing to do, and she risks going mad. Matthew speeds up algorithmic Greta’s time to make her solitary confinement last for weeks or months. The connection made between the sexually feminine and the android-cyborg-robotic beings is like many other science fictional film narratives, from *Ex Machina* to *Ghost in the Shell* to Seven of Nine of *Star Trek*.

Algorithmic Greta is a “software state machine.” What is a software state machine? Also known as a finite-state machine or finite automaton, it is a simple mathematical model of computation. It is an abstract or designed machine that is set to exactly one of a finite number of states at any given time. Designing the software state machine is a crucial step in the work of the software developer. The code or algorithm that acts on the state machine proceeds stepwise through its instructions, changing the machine’s state in a sequence of steps known as transitions. As it executes, the code changes the state of the machine. The software of the company *Smartelligence* acts on the “software state machine” of the conscious Greta clone.

## Sincerity and Authenticity

In Shakespeare's *Hamlet*, Polonius gives this famous advice to his son Laertes: "This above all: to thine own self be true, and it doth follow, as the night the day, Thou canst not then be false to any man."<sup>176</sup> Lionel Trilling calls this sincerity: fulfillment of self through honesty with others, and vice versa, realized in society.<sup>177</sup> Polonius' speech evokes the hope of an undividable sincerity towards others and oneself, towards an immutable public end.

In *The Fall of Public Man*, sociologist Richard Sennett observes that the balance between public and private life has been upset in modern society.<sup>178</sup> People have withdrawn into themselves. They relate to society or public life only as a matter of formal obligation. In eighteenth-century Paris or London, people interacted freely in all kinds of situations because the realization of the self as sincerity was in harmony with public life. The modern city, by contrast, is a world of strangers. Individuals are no longer capable of accessing the creative force of the actor, the ability to play with and invest feelings in external images of the self.

The grand narratives of modernity – progress, industry, social engineering, capitalism, socialism, bureaucracy, etc. – tower over the besieged alienated self and trigger what Trilling calls the quest for authenticity. Authenticity is the fall of the public self. The modern individual now seeks fulfillment against society. Modernist literature is Franz Kafka's Josef K. fighting the bureaucracy, George Orwell's Winston Smith battling totalitarianism, and Albert Camus' Meursault embracing existentialism against the blinding sunlight, the daily oppressive routine of work, and the arrogance of God's spokespersons.<sup>179</sup>

At a certain indeterminate point in the history of Western culture, humans became individuals. One relates to others via self-disclosure and "the expression of core feelings."

In postmodernism, the "social" gets simulated via models and codes which "precede the real." Events and experiences are replaced or ordered by the image, the rhetorical, the virtual, the electronic, the digitalized. The body becomes the site of "personal care" in consumerism. The body resembles its own models, as in fashion, cosmetics, and plastic surgery. My body is culturally encoded: I want to look like the actors on TV to be professionally and sexually "successful." In hyper-modernism, the narcissistic self gets programmed by the personalized advertising and "smart" environments of big corporations.

## Darko Suvin on Science Fiction Studies

With his 1979 work *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*, Darko Suvin established science fiction studies as a legitimate academic field within literary and cultural studies.<sup>180</sup> His influential book also gave the new sub-discipline a decidedly Marxist framing. Two of Suvin's main concepts are "cognitive estrangement" and the *Novum*. Science fiction, for Suvin, is the imagination of utopia. But it is also the presentation by the SF author of an unsettling alternative world in a scientifically plausible and convincing guise. It jars the reader into a sense of estrangement just like Marxist playwright Bertolt Brecht's "alienation effect." In his theatre practice, Brecht practiced the reflexive doubling and shadowing of the existential situation of

viewers. Suvin refers explicitly to Brecht, claiming that estrangement (*Verfremdung*) “has grown into the formal framework of the genre.”<sup>181</sup> An effective SF narrative thoroughly shakes up the reader’s life and provokes changes in their attitudes towards their own world.

For Suvin, much of what is called science fiction is not science fiction. He wants to establish a canon that is only a small portion of the total SF output by novelists and short story writers. More than 90% of what is produced is superfluous and irrelevant. Suvin views Jules Verne and H.G. Wells as the beginning of genuine “cognitive estrangement” science fiction. “All subsequent significant SF can be said to have sprung from Wells’ Time Machine.”<sup>182</sup> Genuine science fiction, for Suvin, presents an ideal possibility fashioned as a reasonable thought experiment. It is a methodically laid out scenario consistent with modern science. SF is characterized by the hegemony of a “fiction ‘novum’ (novelty, innovation) validated by cognitive logic.”<sup>183</sup> The *Novum* is “so central and significant that it determines the whole narrative logic.”<sup>184</sup> This achievement is what is estranging for the reader.

By assimilating SF to Marxism and leftist political consciousness, Suvin in fact limits the power of SF. It becomes the equivalent of Marxism, another expression of Marxism. SF loses its autonomy. It is limited to a literary genre of novels and films to be studied by academics. Its potential as a worldview and an epistemology is short-circuited. Yet Suvin’s landmark tome was an important step forward for the field. He does speak about the radical future potential of SF expression beyond the works which already exist. We can retain from Suvin the importance of analyzing masterpieces. Yet it is time to move on to the next step.

Suvin’s canonical work ties science fiction studies to the theories of alienation of the early Marx and of Bertolt Brecht and to the idea of “cognitive estrangement.” By making science fiction the equivalent of “critical theory,” Suvin blocks recognition of and theorizing about the autonomy of the worldview of science fiction.

## Carl Freedman on Science Fiction Studies

In *Critical Theory and Science Fiction*, Carl Freedman argues that SF should be a privileged literary genre for Marxism and “critical theory.”<sup>185</sup> He is a follower of Darko Suvin in the emphasis on “cognitive estrangement.” Freedman’s stated goal is to do for science fiction what the Hungarian Marxist literary theorist Georg Lukács did for historical fiction in *The Historical Novel* (1939).<sup>186</sup> Freedman’s definition of “critical theory” ranges generously from the Frankfurt School (Theodor W. Adorno, Walter Benjamin) to “post-dialectical theorists” like Derrida and Foucault, but also includes psychoanalysis, Marxism above all, and is retroactive to the “self-reflective thought initiated during the historical moment of Kant and Hegel.”<sup>187</sup> SF, like Marxism, has “the potential to play a role in the liberation of humanity from oppression.”<sup>188</sup>

Philip K. Dick, for Freedman, is “the Shakespeare of science fiction.” *Ubik* is Dick’s “finest novel.”<sup>189</sup> My reading of *Ubik* (see the last part of the first essay of Part One of the present study) is that it is about the question of how to occupy an “outside” epistemological position with respect to the “inside” of the dominant capitalist-technological-virtual

system. With the ingenious invention of “the Moratorium,” Dick leaves the safe confines of the designated literary space called the novel to create the scenario of a “science fiction world” where SF disruptions, paradoxes, and aporias “become the world.” For Carl Freedman, *Ubik* is a stylistic achievement of “cognitive estrangement”: “a clear otherness vis-à-vis the mundane empirical world where the text was produced – which is, however, connected (at least in principle) to that world in rational, nonfantastic ways.”<sup>190</sup> Dick is dialogical and dialectical. Bringing together the casual and the estranged in his generation of sentences, Dick – according to Freedman – challenges all formalistic conceptions of style.

In Freedman's view, there is a paucity of “interesting cognitive estrangements” and no progressive cyborgs, in *Star Trek*.<sup>191</sup> He maintains that Haraway is wrong in her assessment that the cyborg plays a subversive role with respect to gender and other social categories like race and class in contemporary media and techno-culture. Evidence that Haraway's “simplistic theoretical model,” which is “longer on assertion than on demonstration,” is mistaken is the fact that, for Freedman, *Star Trek*'s Borg and Seven of Nine are not emancipatory figures.<sup>192</sup> They reinforce white male authority and “function to support the most banal sexist stereotypes.”<sup>193</sup> Freedman calls Haraway's work “idealistic” and “formalistic.”

In “A Manifesto for Cyborgs,” Haraway is talking about the cyborg in the specific scientific-historical-cultural context of Norbert Wiener's first-order cybernetics; NASA's “technologically-enhanced astronaut” project of the early 1960s; the neuroscience research of Clynes and Kline (who coined the term cyborg); the “self-regulating man-machine system;” the conceptualization of a “common science” of biology and informatics; the formulation of the material-semiotic object of inquiry; humans as information processing devices; and the techno-cultural and techno-scientific thread issuing from this constellation of developments.

Even more emphatically than Suvin, Freedman ties science fiction studies to the idea of “cognitive estrangement” and to neo-Marxist critical theory. He blocks recognition of and research into the autonomy of the worldview of science fiction.

## Istvan Ciscsery-Ronay, Jr. on Science Fiction Studies

Istvan Ciscsery-Ronay, Jr., in *The Seven Beauties of Science Fiction?* (2008), goes beyond Darko Suvin and Carl Freedman by expanding the academic field of science fiction studies from the scholarly analysis of specific genre categories to a worldview for our times.<sup>194</sup> The application of technoscience to every aspect of life yields massive daily transformations. There is a widespread collective energy and desire to imagine a livable future in co-existence with advanced technologies. Science fiction is a mode of awareness and way of thinking about the world that frames everyday life experiences as if they were embedded in SF scenarios. Scientists, engineers, and programmers strive to bring their favorite SF technologies to practical realization. Virtual environments are sold with SF advertising campaigns. All the films and TV series that we watch accustom us to science fictional habits of mind. Ciscsery-Ronay writes:

With the saturation of society by technoscience, SF and social reality were finally recognized as inextricably intertwined... From SF we draw many of our metaphors and models for understanding our technologized world.<sup>195</sup>

Ciscsery-Ronay describes science fiction as a constellation of seven cognitive attractions or intellectual gravitational fields that are formative of “science-fictionality”:

- (1) Fictive Neology – SF writers imaginatively invent words and phrases in the context of changed or alien worlds. Examples are the futuristic language of *A Clockwork Orange* by Anthony Burgess; Newspeak in Orwell’s 1984; the “orientalism” of Frank Herbert’s *Dune*; the “anthropologism” of Ursula Le Guin’s *The Left Hand of Darkness*; the Klingon language of *Star Trek*; and cyberpunk’s neologistic creativity, with much nomenclature adapted from the sciences and informatics.
- (2) Fictive Novums – This term derived from Darko Suvin (who adopted it from Ernst Bloch) refers to phenomena of newness and difference in SF where “aesthetic effect” is fused with “ethical and historical relevance.”<sup>196</sup> For Ciscsery-Ronay, “cognitive estrangement” in SF is not always the equivalent of “critical theory,” as it is for Freedman, Jameson, McQueen, and other Marxists. Stanislaw Lem’s *Solaris* is a “pure novum.” Philip K. Dick was the master of multiple novums. The novum in Dick is often a surprising discovery or invention that has as consequence “a wholesale change in the perception of reality.”<sup>197</sup> In SF, fictive novums trigger “imaginary models of radical transformations of human history.”<sup>198</sup>
- (3) Future History – This takes many forms such as the techno-revolutionary model, the evolutionary model, the narrative conventions of time travel, and alternative “real histories” like Philip K. Dick’s *The Man in the High Castle*, about a post-World War II America where the Nazis and the Japanese won the war and control the East and West coasts of the US, respectively. Other forms are “retrofutures” and “steampunk” alternative industrial revolutions of alternative pasts. SF usually portrays futures relevant to the present. SF is fundamentally not about the future, predictions of the future, or the “accuracy” of those predictions. It is about the present, the hyperreality of the present that the dominant ways of thinking prevent us from seeing. We are separated from the future by the chasm of chaos. No one predicted the fall of the Soviet Union or the World Trade Center. We can recognize the impossibility of imagining what the world will be like a hundred years from now by reflecting on the impossibility of people a hundred years ago imagining the world we live in today.
- (4) Imaginary Science – The French playwright and satirist Alfred Jarry defined pataphysics as “the science of imaginary solutions.”<sup>199</sup> In many ways, postmodern and hyper-modern science are pataphysical. SF, with its imaginary solutions to “real” scientific problems, is pataphysical. The “imaginary science” of SF is largely figurative, an image – or self-image – of science. SF science is a poetic illusion or playful performance disguising its own phantasmagoric status. There are plentiful thought experiments and playful deviations from scientific facts. Ciscsery-Ronay writes: “A striking development in technoscientific culture has been the gradual penetration of science-fictional consciousness, not only in the popular framing of science, but in scientific work itself.”<sup>200</sup> A major research area within physics is now “*Star Trek* science”: specu-

lations and projects that work on faster-than-light speed, teleportation, engineered wormholes, and time travel.

- (5) The Science-Fictional Sublime – Ciscsery-Ronay begins with an extensive exegesis of the idea of the sublime in Immanuel Kant. The SF sublime or profound sense of wonder is classified into several categories: sublime monstrosity (the Frankenstein story); the American technological sublime (the silver lining “beauty” of the atomic bomb mushroom cloud; the “mathematical sublime” of *2001: A Space Odyssey*; the fast-paced “dynamical” sublime of *The Matrix*; and the “feminine SF sublime” of *Up the Walls of the World* by feminist SF author James Tiptree, Jr. (pen name of Alice Sheldon).<sup>201</sup>
- (6) The Science-Fictional Grotesque – Science fiction cultivates the grotesque for its popular appeal. The grotesque has a long tradition in European popular culture, as Bakhtin demonstrated in his landmark work of literary theory *Rabelais and His World*.<sup>202</sup> The science fictional grotesque ranges from monstrous aliens to shocking phenomena of physics.
- (7) The Technologiade – This is the epic narrative of the fight over technoscience taking control over all societies and planets in the cosmos. It is seen as having an elective affinity with contemporary ideas about the coming of “The Singularity.”

Ciscsery-Ronay places emphasis on the fact that theorists such as Baudrillard and Haraway use overt images, tropes, and terminology from SF in their theories. This is a Situationist *détournement*, not of science (as Sokal and Bricmont in *Intellectual Imposters* would have it), but of science fiction.<sup>203</sup> The seven “cognitive attractions” of science fiction as conceptualized and fleshed out by Ciscsery-Ronay – which are formative of “science-fictionality” – are a major analytical step towards developing a science fiction studies where the epistemological mode of SF is considered autonomously, and not as the equivalent of Marxism, critical theory, or “cognitive estrangement.” The next step in the development of this “autonomous” science fiction studies would be to meticulously think through how each of the seven “intellectual gravitational fields” is operative not only in science fiction novels and films, but in the “real world” of what is happening “science fictionally” with the impact of technologies on society and the lives of citizens of late capitalism. Ciscsery-Ronay himself stops short of taking this step. It is a task for my future work.

Ciscsery-Ronay takes a major step beyond Suvin and Freedman, and towards conceptualizing science fiction as an autonomous epistemological mode for understanding and being in the world.