Deuteronomy Comix

Stuart Moulthrop
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Late in his critique of the cyberpunk vogue, Andrew Ross turns his attention to what may be its ultimate expression -- Cyberpunk : the Role-Playing Game. Here, he suggests, we may find the national pastime and true mythology of Cyberpunks-in-Boy's-Town, a socializing ritual for aspiring dystopians. "The structure of the game", Ross observes, represents "an efficient response to the cyberpunk view of survivalism in a future world where the rules have already been written in the present. True to the adaptational educational thinking from which roleplaying games evolved, the education of desire proceeds through learning and interpreting the rules of the play, not by changing them" (160). The game of Cyberpunk, as Ross sees it, offers not the *differance* of deconstruction, not the paralogies of postmodern science, not even the "euretics" of an Age of Video. It promises a new world order that looks suspiciously familiar, a bored fast-forward into a "future" that is actually a repeat loop grafted neatly onto the past.

Yet as Ross points out, William Gibson's own myth of artistic origins stands at odds with this circularity. In an early short story, "The Gernsback Continuum", Gibson's protagonist suffers semiotic hauntings, visions not so much from Spiritus Mundi as off the covers of *Amazing Stories*. Much like the nation itself in the grip of Reaganoma, Gibson's sufferer finds himself caught in a pernicious revision of history. His 1980 is steadily replaced by another 1980, one that seems to have been projected from 1925. He finds himself falling into the American future imagined by his grandparents, a world of flying-wing airliners, shark-finned bubble cars, and perfect Aryan citizens of Tomorrowland. The only thing that saves the poor man from complete psychic collapse is dystopian therapy : a crash diet of pornographic video and hardcore journalism, which reminds him that the utopian visions of science fiction's Golden Age have no claim upon the world as we know it.

If we can read "The Gernsback Continuum" as an origin story for cyberspace fiction, then this kind of writing seems to set itself against the old utopian project of science fiction, insisting that we move not "back to the future" but instead (as the New Wave once had it) straight on from the confounded present. Novels like Gibson's *Neuromancer*, Bruce Sterling's *Islands in the Net*, and Rudy Rucker's *Wetware* describe social upheavals triggered by rampant extension of current technological development. They thus offer an important corrective to the militarist saga-mongering of *Star Wars* and other forms of recycled space opera. Yet the cultural politics of science fiction do not arrange themselves in neat dialectical patterns. The utopianism of the Gernsback era had its moment of sincerity before it was commandeered by Hollywood jingoes; and as Ross demonstrates, the dystopian refusal of the cyberpunks turns all too easily into an apology for the military-entertainment complex.

This seems clear in what may be the culmination of the cyberspace project, Gibson and Sterling's alternate history novel, *The Difference Engine*. Though these writers had earlier fled the Gernsback Continuum, in this work they fall headlong into the clutches of a far more evil empire, Great Britain's circa 1855. In the world of *The Difference Engine*, Lord Byron has somehow avoided exile and death at Missolonghi, and under his dictatorship the Industrial Radical party has set up a savantocracy using gear-driven mechanical computers for panoptic social control. As an exploration of "difference" on the level of technics, the book is admirable. But in its very project *The Difference Engine* falls back into the same *mode retro* which the younger Gibson once condemned. Ursula LeGuin remarked a long time ago on the affinity of certain American science fiction writers for the ethos of the British Raj. Fleets of battle cruisers, voyages of discovery and conquest, the inhuman Other : all are fetishes of the 19th century transferred to the 21st or beyond. In their own way, Gibson and Sterling take

us back to that racist, jingoist "future" at full steam; and of course this reversion is entirely consistent with the dystopian logic of cyberpunk. *The Difference Engine* moves to the rhythms of Catastrophism, that nastiest form of Darwinian theory which argues that natural (or social) history consists of punctuated equilibriums. According to this doctrine, all organisms and organizations follow a sequence running from irruption through expansion to apocalypse. All things must pass, suddenly and dramatically. We thus leave the Gernsback Continuum only to end up in Darwin Land, an imaginary space where chaos and autopoiesis replace any vision of social or human potential.

It may be that all attempts to imagine the future launch us inevitably back into the past; all our engines of difference may work toward the same purpose, namely the justification of class and economic interests on which technophile culture depends. Yet the concept of cyberspace -- a social order founded on broadband communication, hypertextual ediscourse, and systematic simulation -- suggests at least the possibility of a genuine cultural divergence. In the final analysis Neal Stephenson's *Snow Crash* does not deliver on this vision any better than earlier works of its kind; but if *The Difference Engine* represents the fruition of the cyberspace/cyberpunk enterprise, then *Snow Crash* may represent a limit case. This is a novel in which cyberpunk very nearly becomes something more interesting.

In his epilogue, Stephenson explains that *Snow Crash* was originally intended as a graphic novel or upscale comic book, though it changed during its development into a more traditional print product. Yet in at least one sense of the phrase, Stephenson's novel is indeed a comic book : that is, its main narrative concern lies with the struggle of Hiro Protagonist and his sometime ally Y. T. (for "Yours Truly") against the sinister machinations of an Evil Emperor Wannabe, one L. Bob Rife. Mr. Rife, who seems to amalgamate H. L. Hunt, L. Ron Hubbard, and H. Ross Perot (with hints of Bob Dobbs and Fu Manchu), aspires to World Domination. But this is by way of afterthought, since his first priority is control of information : when they used to hang rustlers in the old days, the last thing they would do is piss their pants. That was the ultimate sign, you see, that they had lost control over their own bodies, that they were about to die. See, it's the first function of any organization to control its own sphincters. We're not even doing that. So we're working on refining our management techniques so that we can control information no matter where it is -- on our hard disks or even inside the programmers' heads. (108)

L. Bob Rife, "Lord of Bandwidth" (who sounds chillingly like Perot in this passage), has made the ultimate cybernetic connection between "the animal and the machine", as Norbert Wiener used to say. If information is proprietary, and if he can control it on his company's hard disks, then why shouldn't he be able to secure it in his programmers' heads ? It turns out that L. Bob has perfected a technology for turning human brains into the equivalent of hard disks, using a virus that restructures the cerebellum. So the epos of *Snow Crash* unfolds (at least initially) as a straightforward Manichaean contest between the champions of free discourse and the conspirators of mind control. Like all the cyberspace novels, its main theatre of operations is the cybernetic frontier, the interface between mechanical information systems and the human mind.

But it would be unfair to describe *Snow Crash* as just another superhero/supervillain faceoff, even though it unabashedly tells the story of how our Hiro saves the world. *Snow Crash* is "comic" in another sense as well. Like Gibson and Sterling, Stephenson conjures up a post-traumatic world order. The setting for *Snow Crash* is a postnational, postrational America, a chaosmos of strip malls and housing developments known as "burbclaves". But these entities differ radically from the suburbs of today. After the de facto collapse of the U.S. government (for reasons never stated but easy enough to guess), the nation fragments into Franchise-Organized Quasi-National Entities (FOQNEs), which are suburban city-states functioning as sovereign countries : The Mews At Windsor Heights, The Heights at Bear Run, Cinnamon Grove, New South Africa. In Stephenson's world, the post-cold-war collapse of communism has generalized into a global implosion of community. Here one's social allegiances lie not with governments but with franchises. Police and judicial services are provided by chain outfits (MetaCops Unlimited; Judge Bob's Judicial System) and defense becomes the purview of corporate mercenaries (General Jim's Defense System, Admiral Bob's National Security). The Mafia handles

pizza delivery. Individual citizens affiliates with their chosen burbclaves. Hiro carries the bar-coded passport of the original meta-nation, Mr. Lee's Greater Hong Kong, enabling him to seek asylum in any of thousands of convenient locations worldwide.

This vision of the near future has its shadowy sides, but unlike Gibson and Sterling, Stephenson eschews the darkness of film noir in favor of black humor. *Snow Crash* may be the first genuinely funny cyberpunk novel, invested with the same dire zaniness that animates *Dr. Strangelove*, *Gravity's Rainbow*, and *Elektra Assassin*. Stephenson has Kubrick's eye for the absurdity of terror weapons, Pynchon's knack for turning jokes into profundities (and back again), and Miller and Sienkiewicz's taste for apocalyptic dementia. His comic genius puts him on a par with all these worthies. Yet Stephenson's black humor has been upgraded for the new world order, in which the focus of evil is not a General Ripper, Captain Blicero, or Colonel Fury (who have been displaced by General Jim and Admiral Bob) but L. Bob Rife, Lord of Bandwidth, keeper of the information highway. The application to our times seems clear enough. Now that we no longer have to fear the Bomb quite so much, we can try to stop worrying and love the NREN.

It might be appealing to read *Snow Crash* as self-satire or camp, a novel of liberation that liberates us from the pretentiousness of liberation novels. Stephenson's main inventive principle does seem to be a species of irony. We might call it metastasis, a trope of displacement that sets everything in the book beside itself. "Meta" worlds abound in *Snow Crash* : an Afrocentric burbclave called Metazania, a police franchise called Metacops, and above all The Metaverse, which is Stephenson's version of consensual hallucination or cyberspace. The Metaverse is metastasis (or metathesis) in its highest form : an alternative to the Meat-verse of physical reality, a rather large world made cunningly to serve the information trade. Functionally the Metaverse is very similar to Gibson's cyberspatial Matrix -- it is a virtual universe in which human agents can manipulate representations of data within a consistent spatial metaphor. But no doubt because he writes from the nineties instead of the eighties, Stephenson does a much better job of imagining the texture of this virtual environment. Gibson's Matrix is usually a vague or abstract affair, evoked as "lines of light" or some other stylized geometry. The Metaverse, by contrast, features a fully elaborated urban landscape. Its primary attraction is a great Street embracing the 10000-kilometer equator of a bigger-than-Earth sized virtual planet. This whole business, down to the size of digital living rooms and the gait of digital strollers, is mediated by rules "hammered out by the computer-graphics ninja overlords of the Association for Computing Machinery's Global Multimedia Protocol Group" (23). Anyone who has regular dealings with today's ACM may find this the funniest joke in the book.

But there is finally something troubling about the Metaverse, something which suggests a limit to Stephenson's metastases, a point at which the novel fails to send itself up. The purpose of irony is generally held to be difference or antithesis, a play of double senses that undercuts the ostensible message. Yet as we have seen, any difference that makes a difference is hard to come by in cybernetic fiction. The same might be said of Stephenson's metaworld. It is, after all, dominated by a grand boulevard or Street. So the architecture of the Metaverse is strikingly like that of the old Meatverse -- both are strip developments organized as a linear array of reduplicating sites laid out in apparently endless paratactic sequence. They are both what one commentator has recently called "Edge Cities", phalanges of development driven by an impulse to extend along a gradient of relative economic opportunity (see Garreau).

This fundamental linearity is underscored by the primary drama that unfolds in the Metaverse : a prolonged chase scene on virtual motorcyles in which Hiro and his adversary move along linear vectors at thousands of kilometers per hour, but where they remain more or less within the confines of the Street. This chase scene is duplicated on a larger scale in the non-virtual sections of the book, where Hiro makes a long roadtrip from Los Angeles to Alaska through the Pacific Coast megalopolis, the actual Edge City of the early 21st century. The primary difference between the Metaverse and physical reality thus seems to be not logical or ideological but merely economic : in the real world -- planet Earth, Reality -- there are somewhere between six and ten billion people. At any given time, most of them are making mud bricks or field-stripping their AK-47s. Perhaps a

billion of them have enough money to own a computer; these people have more money than all of the others put together. Of these billion potential computer owners, maybe a quarter of them actually bother to own computers, and a quarter of these have machines that are powerful enough to handle the Street protocol. That makes for about sixty million people who can be on the Street at any given time. Add in another sixty million or so who can't really afford it but go there anyway, by using public machines, or machines owned by their school or their employer... That's why the damn place is so overdeveloped. Put in a sign or a building on the Street and the hundred million richest, hippest, best-connected people on earth will see it every day of their lives. (24)

So Stephenson's cyberspace offers no practical alternative to the world of the burbclaves and the shattered mosaic of (dis)enfranchised society. The Metaverse is simply a happy hunting ground for next-generation yuppies : those rich, hip, well-connected legions of Young Virtual Professionals. Stephenson's meta-move is essentially delusive -- and to recognize this is to reach the point at which *Snow Crash* unfortunately stops being quite so funny. In Stephenson's imagining, the computer is not an engine of difference after all, but only an alternative medium for the same hegemonic institutions, the same uncritical devotion to linear thinking. Nothing is "free" in the Metaverse. Hiro is able to operate with unusual liberty because he was one of the original designers of the system, but even he has to pay his way by marketing gossip and low-level industrial espionage. Social and economic conditions in the Metaverse mirror those that take place elsewhere in Stephenson's world, and events in virtual reality follow the same relentless logic as actual events. Which brings us to the most important aspects of *Snow Crash* : its plot, its medium, and the interaction between the two.

To say that the book presents a contest between good and evil, tyrants and defenders of liberty, is to miss an important subtlety. What this book is really about is a struggle against viral language. The evil genius L. Bob Rife uses two apocalyptic weapons in his campaign to dominate the human race. The first is a cybernetic virus called Snow Crash, which infects digital processors in much the same way that current computer viruses do. However, Snow Crash causes infected machinery to display a version of itself in binary form, multiplexed into random on-off bursts or "video snow". Adept computer programmers who have internalized the conversion of binary code to units of expression can become infected with Snow Crash if they view the apparently random display -- making the crucial (and fortunately fantastic) connection between the machine and the animal. Once infected, the programmers' brainstems malfunction and they fall into a vegetative coma. Snow Crash also has a non-cybernetic twin, a biological virus spread through prostitution and illegal drug use (of course), whose effects on the brain are less destructive but similarly sinister. People infected with the biological Snow Crash become capable of speaking in tongues and of understanding an Adamic command language which bypasses rational functions. They turn into programmable human robots, cultist zombies in the thrall of L. Bob Rife.

To defeat these (literally) mind-boggling threats, Hiro Protagonist and his allies have to overcome both the biological and the cybernetic versions of the Snow Crash virus. Along with a great deal of mindless violence, this task involves Hiro in historical research (performed hypertextually in the Metaverse) concerning a historical referent for the Biblical story of Babel. It turns out that Snow Crash began as a "metavirus" which caused the infected brain to infect itself with other viruses. This evil agency was apparently transmitted to ancient Sumer from a source in outer space. The antidote to the Sumerian outbreak was "the nam-shub of Enki", an incantation that literally "changed the speech in men's mouths" (202), breaking down the neural connections that enabled victims to understand glossolalia, thus rendering them invulnerable to further incantatory programming. After the Babel event, as Stephenson tells it, the linguistic faculty was shifted from the brainstem into the cortex, where it diversified into all the variations of post-Adamic language. Babel was thus not a divine punishment for human overreaching, but a liberation from the first great campaign of cybernetic tyranny.

It was also, crucially, the beginning of bibliocentrism as we know it. According to Stephenson's myth (which reads like a cross between *After Babel* and *The Sacred Mushroom and the Cross*), a group of Hebrew scholars led a reform of literary practices throughout the Semitic world. Stephenson identifies these figures with the Deuteronomists of Biblical history, important figures in the cult of the Torah. Stephenson credits the

Deuteronomists with "a sort of informational hygiene, a belief in copying things strictly and taking great care with information, which as they understood, is potentially dangerous. They made data a controlled substance" (374). Needless to say, this doctrine and the nam-shub of Enki hold the keys to defeating L. Bob Rife. The Sumerian incantation reverses the effects of the biological virus, and the concept of informational hygiene saves the Metaverse from the digital form of Snow Crash. It inspires Hiro to write SnowScan, an anti-viral program that searches for the Snow Crash code, eradicates it, and puts in its place the following message :

> IF THIS WERE A VIRUS YOU WOULD BE DEAD NOW, FORTUNATELY IT'S NOT. THE METAVERSE IS A DANGEROUS PLACE; HOW'S YOUR SECURITY ? CALL HIRO PROTAGONIST SECURITY ASSOCIATES FOR A FREE INITIAL CONSULTATION. (428)

Subsequent consultations, of course, are on a fee-for-service basis. Hiro's antiviral program replaces a virus with an advertisement, thus redeeming the Metaverse in every sense of the word -- and incidentally converting Hiro from a penniless genius into a Meta-Bill Gates. In effect, Hiro becomes the founder of New Deuteronomy, Inc.. His security service will purify the Book of Protocols according to which the Metaverse is constituted by ensuring that it is replicated exactly on every iteration, free of impurities that might harbor invasive or opportunistic memes. As David Porush has suggested, *Snow Crash* can thus be read as the triumph of book culture over the threats of cybernetic programming and viral language : in other words, a true *liber/ratio*.

But we began by observing that liberation in the fiction of cyberspace is usually not what it claims to be. To go boldly toward the virtual frontier often leads us where we have all been before : in this case right to the heart of western logocentrism, the holy Book. To a certain classically liberal way of thinking, there is no doubt nothing wrong with such a recursion. If one assumes that the function of art is to trace out great circles, reliably returning to what we have always already known, then a book like *Snow Crash* deserves praise as proof that literacy can survive the assaults of popular culture and computing, that it can thrive in a world of comic books and cyberspace. But to a more critical reader -- perhaps one like Ross who wants to save the concept of the alternative or utopian in science fiction -- *Snow Crash* must be a disappointment.

The letdown is all the more severe because Stephenson makes it clear that the novel we now have before us started out to become something distinctly different. Stephenson says that he and the artist Tony Sheeder first intended to create a graphic novel using computer-generated images. This leads one to wonder why the nature of the project changed as it evolved. What aspect of the conceptual structure of *Snow Crash* demanded expression in print ? That question becomes all the more salient if one considers another curious remark in Stephenson's epilogue : "I have probably spent more hours coding during the production of this work than I did actually writing it, even though it eventually turned away from the original graphic concept, rendering most of that work useless from a practical viewpoint" (440). This statement is extremely suggestive, especially in the context of a novel that explores the connection between the animal and the machine, the meat and the meta. What would have happened if *Snow Crash* had turned out not to be a conventional novel, but had emerged instead as some form of metafiction -- perhaps in electronic form ?

The conjecture I am about to make possibly represents a misreading of Stephenson's remark about his computer work on *Snow Crash*; but even as misreading, the conjecture opens up an interesting set of questions. Why does Stephenson describe his electronic work as "coding" ? If all he set out to do was produce digital graphics, then presumably he would have spent his time drawing, scanning, transforming, and editing bitmaps. The products of this work would have been images, not alphanumeric strings or "code". Unless one sets out to create one's own computer-graphics tools (an unlikely intention for a Macintosh user like Stephenson), then the work involved in graphics production should not involve many hours of code writing. What else might Stephenson have been up to ?

Suppose that the abortive digital format for *Snow Crash* was not a series of printed panels intended for conventional bound publication, but instead a network of screens linked together by some graphic navigational scheme -- in other words, an electronic hypertext. If this were the case, then the change of media, the reversion to the more traditional format of the book, might be very important indeed. It might suggest that *Snow Crash* is in more than one sense a defense of the book and its ethos : not just the story, but the *embodiment* of a New Deuteronomy. It might thus provide a limit case for the fiction of cyberspace, a point at which it is possible either to stay within print culture or to explore alternatives.

Whether or not he ever had other notions, Stephenson has taken the more conservative option, which is indeed the preference of the cyberpunk genre as a whole. Nor can he really be blamed for this choice. *Snow Crash* as written would not make a very good hypertextual fiction. Not only is the book's world overwhelmingly two-dimensional and linear, its plot demands an exact and unvarying sequence of events. There are several complications and partial reversals, but all of these serve the general underlying logic, which specifies that Hiro must vanquish Rife and his henchmen and Save The World. This headlong rush toward singular closure is what a comic book is all about, after all -- even when, as in the Death of Superman, that singular outcome annuls the usual order of things. Had Stephenson been programming *Snow Crash* as what Michael Joyce calls a "multiple fiction", he would have had to allow for more than one outcome. He would have had to present permutations of the story where everyone's linear ambitions -- hero's, villain's, anti-hero's -- come to confusion. In short, Stephenson would have had to imagine outcomes where the defenders of the Book do not triumph, where informational hygiene does not win out, and the Metaverse goes unredeemed.

So why didn't Stephenson do this ? Perhaps it never entered his head : I have no real evidence that Stephenson ever considered producing a hypertext. Nonetheless, it seems clear that this book could not have been written in that medium. Literary structures like multiple fiction are not altogether consistent with informational hygiene, the conception of data (or language) as a controlled substance. If the power of the book resides in its cult of exact replication, then to admit the possibility of narrative variations is at least implicitly to threaten that old word order.

Of course, writing in an electronic mode does not necessarily promote utopian or post-hierarchical forms of disourse. Consider William Gibson's recent foray into digital composition, his conceptual artwork *Agrippa*. Far from opening up to permutation, this text actually erases itself after a single reading, locking the reader out of its imaginary space (see Quittner). As Joyce points out, even multiple fictions as we now know them usually consist of "exploratory" texts in which the range of variation is strictly limited, hence at some level deceptive. So perhaps the hypertextual enterprise must also go where everyone has gone before, namely to a Disneyverse of delusive referendum where every apparent difference traces back to some determinist engine. Yet as Henry Jenkins has shown, there are signs even in non-interactive contexts that a more "participatory" cultural front may be emerging. Ambiguous or polysemic forms like the graphic novel (as in Moore and Sienkiewicz's abortive *Big Numbers*) imply a fraying or complication of traditional, monolinear narrative. Forms like hypertext suggest that the language virus may be capable of even more radical outbreaks. For if our narrative forms embrace inconsistencies and contradictions, then they are no longer adequate defenses against memetic invasion. If the protocols of the imaginary world advertise their own contingency, then what is to stop someone not authorized by the Association for Cosmological Machinery from further interventions -- which are in fact facilitated by the ease of copying and modification inherent in electronic media ?

The best way to pre-empt such uprisings is to keep throwing the Book at us, which is what Neal Stephenson and most other writers in the cyberpunk line continue to do. Both in its medium and its message, *Snow Crash* militates against any departure from traditional discursive authority. Like virtually all mainstream cyberspace writers (and in contrast to figures like William S. Burroughs and Kathy Acker), Stephenson delivers our favorite kind of linear entertainment : a "slam-bang-overdrive" sort of fiction, as Timothy Leary duly blathers on the

back cover. As a form of entertainment, this sort of novel is always essentially self-serving; but what it serves up in this case is an unfortunately limited view of the possibilities for virtual culture.

So long as we continue to imagine cyberspace and other forms of artificial reality from within headlong vehicles such as *Snow Crash*, we will always find ourselves somewhere on the Street. The Street, we might remember, only looks like a straight line. In fact it is a circle that runs all the way around the planet and comes back to the place it began, back to the same old future so neatly packaged for us in dystopian novels and films. The Street, Gibson reminds us, finds its uses for everything. But perhaps we should now ask, of what use is the Street ?

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