

“Anyone who has studied the history of technology knows that technological change is always a Faustian bargain: Technology giveth and technology taketh away, and not always in equal measure.”(Postman)

In his novel *Snow Crash*, Neil Stephenson shows readers that technology, while incredibly powerful and helpful, can distract a person from their real senses, and often this leads to some dreadful consequences. Set in a technocratic future, many characters in the novel use technology to enhance their senses and information gathering potential. This can turn them into a form of cyborg, augmented with technology, even if it is not a physical part of them. It can backfire, however, and leave them in a state of perceptual entrainment, as explained by *Judy Joshua* in the paper “Informational Bodies.” The state of perceptual entrainment diminishes other senses in favor of the one currently in use, which is enhanced not only by the technology, but by the sheer focus of some characters on these gadgets. Falling too deep into this state can and does kill many characters. Technology in this novel is a brutal double edged sword, it is powerful in small doses, but it can make you lose focus on your physical senses if you rely on it too much. Devices are enthralling, giving us incredible amounts of information at once to the point that it is hard to focus on anything other than the data coming in.

Hiro Protagonist, the main character of the novel, has an ever evolving relationship with technology. At the beginning his dependence on his technology is growing, almost succumbing to perceptual entrainment of a small globe in the metaverse, experiencing as Joshua puts it, a:

“...focus in perception that takes place whenever we use a tool, whether it is a hammer, glasses, shoes, a light switch, or a computer...if it comes in contact with our sensory organs and shifts our perceptual focus, prioritizing, sharpening, and expanding certain of our sensory functions even as it minimizes the use of

others.”

When he looks at the globe, Hiro “seems to plunge downward toward the globe, like a space-walking astronaut who has just fallen out of his orbital groove.”(Stephenson) Catching himself before he is totally lost in a virtual representation of earth. Joshua writes at length about this section, saying that

“Ultimately, the tool focuses—or, more precisely, entrains—his perception so that only two event outcomes are possible: the maintenance of a sufficiently distanced perspective or collapse into the object. While the tool’s splitting or dichotomizing function may seem to be a small point, I argue that it is central to understanding the novel’s ideological underpinnings.” (Joshua)

There is a dichotomy present which shows that Hiro is not in complete control of his tech, if he is not careful it can consume him. But he is a hacker, an “astronaut” of the metaverse, and as of now he can still maintain this distant perspective. This metaphor of the orbit is important, it is a delicate balance, one wrong move and he can be jettisoned into outer space, with nothing around but himself. One wrong move the other way however and he comes crashing down into the globe, nose first into the data, falling into the sensory deprivation that comes with information overload.

The globe incident does not sway Hiro, however, who goes on to purchase a mobile computer so that he can access the metaverse while on the go. While there are many benefits to this, Hiro soon encounters drawbacks at rather inopportune times, such as the middle of a gun to sword fight with the Enforcers. Hiro “turns off all of the techno-shit in his goggles. All it does is confuse him; he stands there reading statistics about his own death even as it’s happening to him. Very post-modern. Time to get immersed in Reality, like all the people around him.”(Stephenson). Hiro's readouts give him information overload, he can focus on them but his other senses dull, making it impossible to fight. So he goes back to big R “Reality”, back to the biomass, because he knows that he needs every sense with

him if he is going to live. For most of the novel he has considered himself an outsider, seemingly better than others because he has superior tech, that he was in some ways above reality. But in this instance he has to go back to the real world, “like all the people around him”. He has to realize and admit to himself that there are some thing that his superior tech cannot do. The\is idea of shedding technology to achieve higher senses during fights is further developed in one of the climaxes to the novel, when Uncle Enzo is trying to secure the airport. At this point in the book we already know that Enzo seems to value his senses above equipment, as when talking to Y.T. they share a bond as neither wore helmets when on the job, her being a kourier, and him a soldier. They both shed gear because “They say it doesn’t affect your hearing, but it does.”. So when Enzo tells his lieutenant to “Take off your headset...And turn off that walkie-talkie. You need your ears.”(Stephenson) the point is driven home that Enzo believes that the technology his lieutenant is using will cause him to be perceptually entrained, and not as effective. The fact that the leader of the mob, someone who has the resources to basically use whatever he wants, chooses to stick to just his ears, is very telling in this situation. The gadgets and gizmos that the mob have are still not able to compete with true hearing and perception. What Hiro found out and what Enzo knows is that depending too much on technology can make one fall out of one’s orbital groove, to go back to the metaphor in the last paragraph. If someone cannot step back from their devices and go back to the normal people and normal perception, they risk falling victim to perceptual entrainment.

With this revelation, it seems that the answer is always to trust one’s own senses, but technology also does help many in the novel. When Hiro is storming the barge, he “switches his system into full gargoyle mode: enhanced visible light with false-color infrared, plus millimeter-wave radar...And it saves his life.”(Stephenson) As it allows him to see a booby trap he would not otherwise have see, which would have killed him instantly. Even in Uncle Enzo's climactic fight with Raven, he

uses the automatic glass breaker on the board he is holding to break Raven's glass knives, even though "The concussion nearly blows his head off. Uncle Enzo, if he survives, will never hear well again." (Stephenson). While a helmet may not be enough of a tactical advantage to lose his hearing over, breaking all of his opponents weapons clearly is. Just as Hiro realizes that maybe trading some of his focus for night vision would be useful. Small enhancements given by technology are an enormous help, but they must outweigh their drawbacks, and be used intelligently.

Raven is a pariah in this world, as he seems to be the character most removed from technology. Riding in a kayak and using only blades made of glass, for the most part he rejects the use of technology for personal enhancement. The only piece of tech he uses is the nuclear warhead set to go off if he dies. But he does not really use this so much as has it as a trump card, and as such he has no risk of relying on it to the point of imbalance. He becomes an antithesis of technology, and in fact one of the first things he does in the novel is to kill Lagos the gargoyle. Gargoyles are the closest common things we have in this world to true cyborgs, Gibson puts it in his essay "Googling the Cyborg": "Science fiction's cyborg was a literal chimera of meat and machine. The world's cyborg was an extended human nervous system". The gear strapped to Lagos' body becomes his perception, his nervous system. It is a part of him on every level physical. When Raven leaves him dead "The black nylon straps that hold his computer system to his body have been neatly cut where they cross the midline, and half of the stuff has fallen off into the dust" (Stephenson), he literally cut through his technology and his virtual nervous system to kill him. Raven ends up killing many who become too dependent on technology, such as Fisheye when he is wielding Reason. He insists that "This thing has millimeter wave on it...I can see these guys like it's fucking daylight" (Stephenson). A few pages after after he brags about his enhanced vision, Ravens spear comes at him and "The million chipped facets of its glass head refract the light and make it look like a meteor.". But even though it is clearly visible

to the naked eye, “Raven's weapons do not show up on radar.” and so Fisheye goes down. Both of these characters Raven kills have put all of their faith in their virtual senses and none in their real ones, and this was their undoing. He exploits those who have gone too far into augmentation, further driving home the point that true balance is what one should strive for when dealing with technology.

Raven is beaten with technology 3 times in the novel. In the first, after using an incredibly high tech skateboard to break Raven's weapons, “Uncle Enzo rolls over on his back and waves his straight razor in the air. “I prefer steel myself,” he says. “Would you like a shave?”(Stephenson). Not just a common knife, but a straight razor, just about as low tech as one can get with shaving, made of a material that has been around for thousands of years. The duality of Enzo is why Raven was beaten, Uncle Enzo understands when to use these new and incredible gadgets, and when to stick with the classics. The second time was during his brief “date” with Y.T., when he was “harpooned in the place where he least expected it” with a hypodermic needle filled with narcotics, delivered from Y.T.'s dentata. The third time is when he attempts to nuke America, and Hiro stops him just in time by using his own tech against the “nuke” that Raven brought. Each of these instances may have been avoided with technical knowledge and perhaps some enhancement devices. But he has thrown himself off balance. Not in the way Hiro did by focusing too much on his virtual perception and leaning too far into technology, but the opposite. His “orbit” had gone out too far the other direction, and he is careening into the techless void.

Throughout *Snow Crash*, we see many caught up in the allure of new technology, people who put their trust in computers and sensors more so than in their own hearing and sight. This is a flaw that is often fatal. But just as fatal is a total rejection of technology and the benefits it can bring in the right hands. One must not fall into the trap of perceptual entrainment and technological hubris, but if one totally casts away technology then they can be defeated by those who have not. Extremes on either

side create weaknesses that are exploitable, whether it be with glass or with a “RadiKS Narrow Cone Tuned Shock Wave Projector”, when one puts too much faith into one way of interacting with and viewing the world, they can be tricked, and they can be beaten. Ones orbit around the technological center must be maintained. Too close like Hiro was and there is a risk of losing oneself in virtual senses. Too far like Raven and one’s physical senses might not always be enough, and balance will be lost in the other direction. Through the use of technology in the novel and how successful characters are with their use of it, Stephenson is showing us that balance is key when working with technology, and putting too much faith, or not enough, in it can have consequences.

Ned,

This is a solid paper. Your discussion of perceptual entrainment in *Snow Crash* is fairly thorough and you have an excellent eye for interesting details. I especially liked the connection you drew between Enzo’s rationale for avoiding helmets – hearing loss – and the consequences of his using the shock wave against Raven. That’s exactly the sort of thing that’s worth unpacking in a paper like this, and I’m glad you gestured towards it.

There are, however, some organizational issues. Your transition from Hiro early in the novel to Hiro once he has Earth is very unclear; he doesn’t acquire Earth until pretty deep into the novel, after he’s already undergone several steps towards Gargoyledom. You also have a handful of paragraphs that could be split up into smaller ideas. Finally, I left this paper feeling like there was an awful lot that was left unexplored; I know that 2000 words isn’t all that much, but you didn’t mention Ng, the bona fide cyborg, and didn’t spend time on Hiro jacking into the Metaverse in the first place. Although your work with Raven was strong, it’s unclear why you chose the characters you did to examine and not others (within the paper, I mean) so the paper feels, overall, a bit choppy and confusing.

That said, you introduce an argument and you explore that terrain thoroughly. This is an improvement over your first paper, and it was a pleasure to read.

PAPER II GRADE:

B/B+

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