

I. Introduction

In Greek mythology, blindness was often served as a punishment from the gods in exchange for wisdom or artistic inspiration. In Christianity, blindness is treated as a flaw to be alleviated by God's love or mercy. In many cultures' writings, blind people brought their condition upon themselves through defying the gods' will. Often, the protagonist of these tales must undergo a journey to seek someone's help to lift their condition.

I was 11 when I discovered I was nearsighted. I remember my eyesight growing blurry very suddenly and the disruption that my afflicted vision had on my life at the time. After several teachers noticed me straining to see the whiteboard from the first row, I was taken for a vision test where the optometrist told my mother that this was the strongest prescription he had written for a child. When I was 19, my optometrist told me that based on family history, I had a 30% chance of developing glaucoma, a disease that, if left untreated, leads to total blindness. Last year, in preparation for caving expeditions in Ireland, I read "The Object Stares Back: On the Nature of Seeing" by James Elkins. In the book, Elkins details the process of losing one's vision and the turbulent emotions that go along with it. Reading the book made me much more aware of the sense, and I often practiced walking home from classes with my eyes shut to see if I could adjust if the same happened to me.

With these ideas in mind, I turned to a medium I knew very well: the graphic novel comic. I wanted to push myself to create a full graphic novel, something I have dreamed about since I picked up my first copy of Spider-Man as a child. Sequential art and storytelling are my passion; film, television, and comic books all rank highly among my favorite media to consume. Science fiction and comics have

been married for a long time, and comics seemed like a logical place for me, an illustrator, to begin.

II. Contextual Background

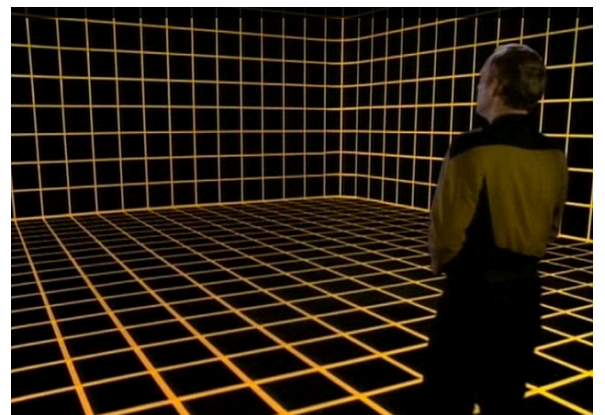
I have always been obsessed with fantasy and science fiction stories. I learned to read so I could finish the first *Harry Potter* book, and Spider-Man was the first film I remember dragging my family to. I grew up with these stories, and my childhood dream was always to add to the rich tradition of these imaginative tales.

I find that some of the most compelling stories that I have read have been science fiction novels and stories of alternate worlds where something went catastrophically wrong. A key influence in this area for me is Brian K. Vaughan's "Y: The Last Man", a story about a disease which wipes out all males on Earth save for a single man and his pet monkey. The epic graphic novel spans several years and sees some major changes within its cast of characters both physically (visually) and mentally (reflected in Vaughan's dialogue and character growth). Reading this series was life-changing for me, as it was one of my first voyages into the world of non-superhero comic books. "Y: The Last Man" showed me the potential of stories about ordinary humanity, struggle, and triumph over impossible odds within the previously fantastic and superhuman panel structure of comic books.



Spread from "Y: The Last Man"

With this project, I sought to make my own science fiction narrative using my interest in vision and fear of blindness. The catalyst that made this novel possible came from another passion of mine that served as an origin point for the story. I am fascinated by technology, and especially by new technologies that promise to perform a function better, faster or in a completely new way. A recent technological trend that has promised to be the future of entertainment and accessibility are virtual and augmented reality devices. I began my research on these devices by studying Google Glass, an augmented reality headset designed to act as an interface between the user and the real world by linking up to and intercepting data from the user's smartphone. Google Glass and the myriad of other devices currently being developed for virtual and augmented technologies led me back to the early science fiction of my childhood, where these ideas were visualized and depicted as the future of entertainment. Shows like Star Trek: The Next Generation showed an early look at how this technology could shape human interaction and leisure.

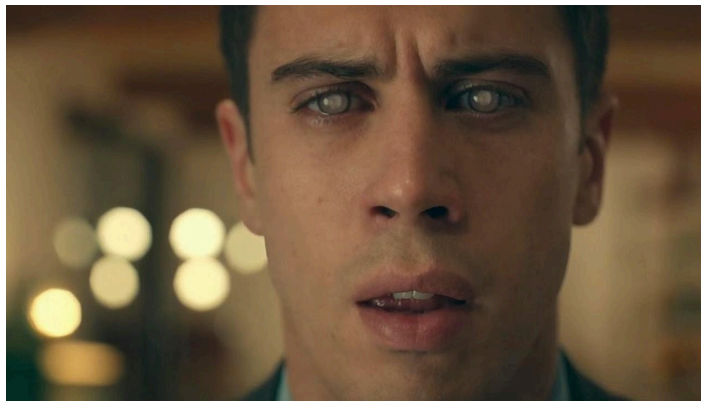


(right) Google Glass advertisement (left) image from Star Trek: The Next Generation

Modern film and television has presented a different take on these wonder technologies. Programs like Black Mirror and the short film Uncanny Valley seek to present virtual reality and similar technologies as evidence of a cultural disease rather than the next step in humanity's evolution. "Uncanny Valley" presents virtual reality as a drug that users abuse in order to escape their mundane lives. The virtual reality program turns out to be a flashy cover for the twisted truth that these virtual reality players are controlling real robotic drones that inflict violence on people domestically and abroad. Black Mirror showcases examples of technology that has gone too far, and in the episode "The Entire History of You", shows how augmented visual memory devices have a negative impact on the lives of its users. The series creator, , Charlie Brooker, summarizes the show by saying: "Each episode has a different cast, a different setting, even a different reality. But they're all about the way we live now – and the way we might be living in 10 minutes' time if we're clumsy." I have used this as a mantra for my project, as it relates directly to the story I want to convey about this emerging technology. These depictions of virtual reality technologies as a problem rather than an entertainment platform were hugely inspirational for me as I was developing my story for this project.

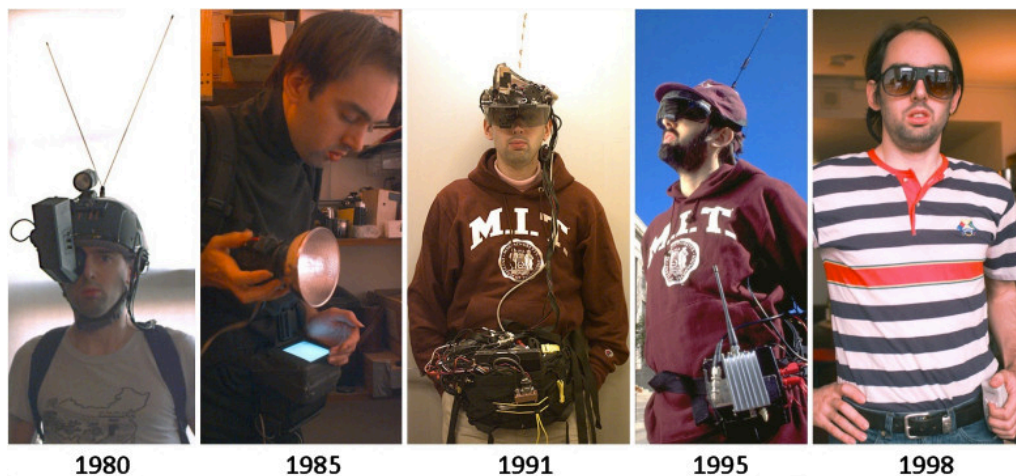


Uncanny Valley positions virtual reality users as addicts.



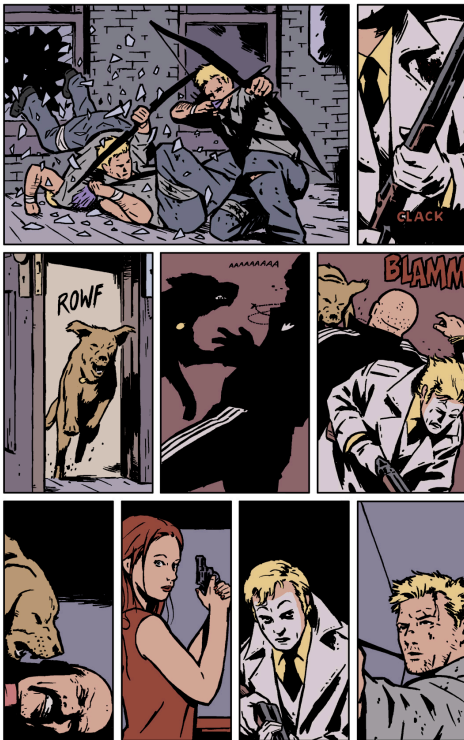
“The Entire History of You” presents the trouble with an ever-present memory through the use of recording technologies.

Through researching these mass-market devices, I came across the work of technology artist and cyborg Steve Mann, who has integrated augmented reality systems into his everyday life since the 1980’s. Mann is the inventor of many technologies that we take for granted, and he is a pioneer in the space of what he refers to as “augmediated reality”. Through Mann’s writings, I have learned where this technology came from and its original intended use (for welders and the visually impaired, ironically).



The evolution of Mann’s cyborg gear

Artistically, I examined a wealth of graphic novelists' work to establish what could lead to success for my own work. I began with comics that I enjoyed on a purely visual level, like Matt Fraction's *Hawkeye*, illustrated by David Aja. The duo work together very harmoniously; Fraction's minimalist writing style and specificity in scene description pairs perfectly with Aja's clean, geometric lines, panel organization and diagram-like illustrations. I also studied the work of Josh Neufeld, who uses monochromatic color schemes to mark key scene changes throughout his work, "A.D. New Orleans After the Deluge".



(left) David Aja's "Hawkeye" presents a clean, graphic approach to a superhero comic. (right) Josh Neufeld's work uses color as a marker to divide scenes.

III. Creative Work

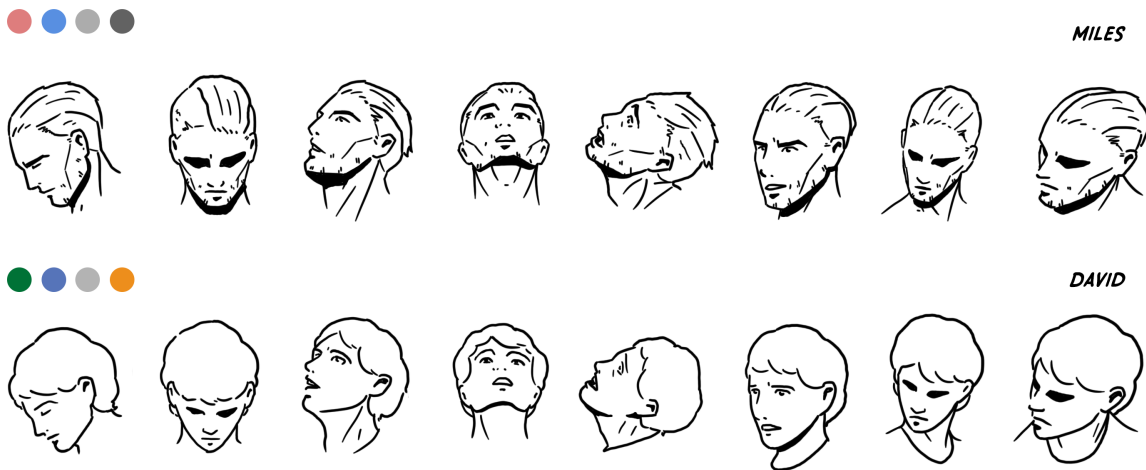
Inspiration

While I was exploring different interests that could form the basis for this story, I listened to a lot of music during studio hours. I believe very firmly that inspiration can come from anywhere, and something struck me when I heard the song “Majestic” by the band Wax Fang. The eccentric musical style stuck in my head, and I found the lyrics oddly poetic. When the song reached the line “A sight for sore eyes to the blind would be awful majestic,” I felt I had the beginnings of an idea. This is when I really started pursuing the idea of people turned blind through some means, and explored ideas of how that blindness could be inflicted.

The Reilly Brothers

Miles was inspired by several other popular characters from fiction, most notably Yorick from “Y: The Last Man”. In this saga, Yorick feels a personal responsibility as he is the last known surviving man on earth. I wanted Miles to feel the same kind of weight as he deals with the knowledge that he is at least partly responsible for blinding his younger brother. This responsibility manifests itself in Miles’ storyline, as he distances himself from his brother and deals with his guilt when a manic blind man kidnaps him. Visually, Miles ages noticeably in the first few pages after David is blinded. Miles’ face often shows stress lines and stubble that has not been considered. His eyes are often cast downwards and his back is often turned to his brother because he cannot face what he has done. His primary goal is to take care of his brother, but he wonders constantly if he is up to the task or if he has already failed him too much.

David's character was much harder to craft. With David, I needed someone who could embody the optimism necessary to move the world forward from such a disaster while maintaining a childlike innocence. David cares for his brother and wants to maintain what they had before the incident. He is mournful for his sight, but hopeful that he can learn to live without it. This is evident in his conversations with Vanessa, a woman who has been blind for many years.



Early character model sheets for the Reilly brothers

The Supporting Characters

After creating the Reilly brothers, I needed to give them a cast to interact with. The first character outside of the siblings was the crazed old man who kidnaps Miles to develop Miles' guilt complex. His design was not particularly complicated; he simply needed to present himself as vulnerable and argue for Miles to take care of him rather than going back to David. His suit is a clue to his privileged life before Event X, likely the reason he was able to purchase the Orbital Glasses that have caused his misfortunes.

Next came the characters of Vanessa and Marie, who were needed to take care of David during Miles' absence. Vanessa is the more caring figure, who escorts David to safety when he has been abandoned. Vanessa inquires about David's history, which is the first time the reader sees all the tragedies the Reillys have gone through. Marie is not so kind and doting. Marie's character was made to convince David that he was more than his blindness, and that he could move on and live a happy life. Marie's approach is tough love, which results in David's breaking down and crying, the first time he has acknowledged the emotional toll of what has happened to him.

The character of Akito was introduced to give ORBITAL a face. Akito's primary motivation is shame for what he has done in contributing to the epidemic facing the world. Akito's role in the overall storyline is offering David the solution for his blindness in the form of another technological device. David ultimately rejects this "solution", instead following Marie's advice and learning to cope with what has happened to him.

Marcus is the antagonist of the story, who pursues the Reilly brothers out of a misplaced sense of moral righteousness. Marcus is one of the people used to being shut out and ignored due to the ORBITAL Glasses. He is seeking revenge for all the people whose voices were not heard. His role in the story is to test Miles' convictions and ability to protect his brother at all costs. Marcus is responsible for killing Miles, who sacrifices himself to ensure David's escape.



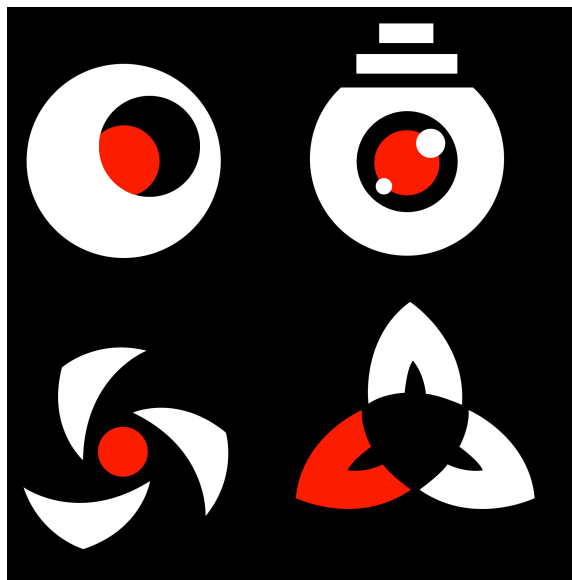
Marcus' character was based on other famous villains such as Negan from "The Walking Dead".

ORBITAL

This story would not have moved anywhere if not for the company behind it all. Some of the very first things I drafted for this project were marketing and product designs for a fictional company, ORBITAL, that would create the Glasses that started the action. I chose to make glasses because I wanted the story to seem grounded in reality, like something that could feasibly happen within our lifetime.



Model sheet for ORBITAL Glasses



Early logo experiments for ORBITAL

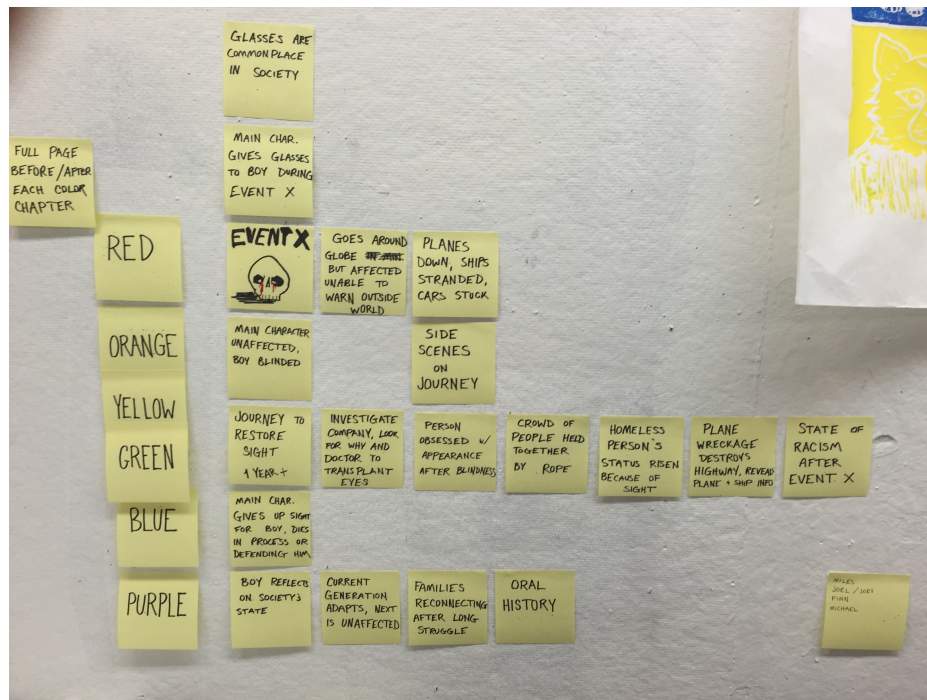
In addition to looking at Oculus Rift and Google Glass' marketing campaigns, I studied many of Apple's early advertisements and product designs by Jony Ive to help me achieve my goal of clean, futuristic designs that evoked emotions within the viewer. These kinds of advertising campaigns were a must for a tech giant like ORBITAL, which needed to look sleek and modern but also realistic.



An early Macintosh ad (above) and ORBITAL posters made as advertisements for the book (below)

Writing Process

With the idea of the story in mind, I moved on to the writing process by outlining key scenes and placing them in a loose chronological order. The job was then to connect these scenes without the story feeling too full or too lean.



My early writing process

After drafting the characters, I began with a script that outlined the contents of each page and each panel. This script proved invaluable for creating the first few pages, but quickly felt too limiting as I had ideas for the artwork that could shape the narrative. I used a guiding template for creating each page and varied it according to each page's needs. I have seen this technique used in many successful narrative works, including David Aja's *Hawkeye*.

With rough ideas of the character's appearance, I was able to assign them personality traits and motivations. I knew the older brother should be protective,

and that the younger brother would be the one to learn the most from their journey. I began writing an actual script that detailed the contents of each page and each panel. I modeled my script heavily on the script presented by Brian K. Vaughn at the end of “Y: The Last Man” in the behind-the-making section. Vaughn’s script seemed very efficient at using descriptive language to make it very evident for the artists on his team what each page should depict visually and emotionally for the story to progress. My script proved instrumental in drawing the first few pages, since I needed each page to get from a Point A to Point B to keep the pacing feeling normal. I have never enjoyed drawing thumbnails unless absolutely necessary, so I jumped right into drafting rough drafts of pages once my script was developed.

While I was working on the book for the entire year, I had many friends and family ask me about what it was I was doing. As part of my writing, I refined an “elevator pitch” that started as an awkward and spoiler-intensive pitch and evolved to a more refined book-jacket description. The artist’s statement reads as such:

“Eyes Out is a graphic novel about a dystopian society where an augmented reality technology malfunction causes a blindness epidemic. The story follows two brothers, one of whom is spared from blindness by lending his glasses to the other during the terrible Event X. In the aftermath of the catastrophe, the brothers set off on a journey to restore the younger brother’s sight by venturing out into a world that is just coming to terms with their blindness.”



Cover spread for "Eyes Out"

IV. Methodology

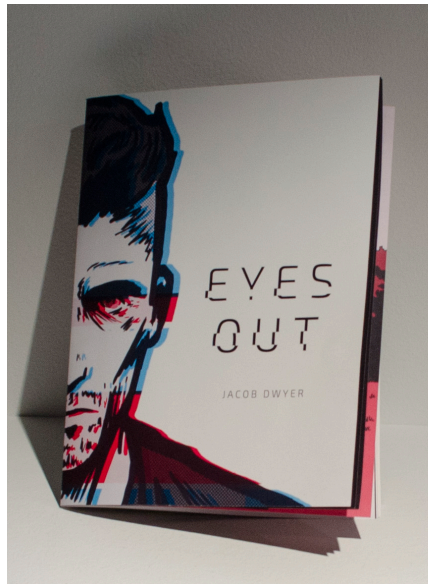
The production of the comic book presented some new opportunities and challenges for me. I have used Photoshop to color all my comics in the past, so I purchased a Cintiq drawing tablet at the beginning of the project. When I saw the line quality that the tablet could achieve, I decided to forgo traditional inking methods in favor of trying a digital process.

The first pages that I completed were rendered completely with my drawing tablet, using reference imagery to roughly place elements on the page. As I continued working this way, I realized that each page was taking too long to complete; the tablet worked as an inking tool, but could not compare to the authentic feel of paper and pencil for sketching and ideation. I began working on layers of cheap trace paper to produce to-scale rough drafts for each page. The trace paper allowed me to reuse tricky head angles and body positions from each character across multiple pages, saving time and increasing consistency in visual style.

I carried on with this method for most of the pages, only deviating to use the tablet for large city scenes and background scenery. I arranged the pages in Photoshop according to a 5 x 6 panel grid. I picked up this technique from David Aja's *Hawkeye*, which uses a fairly consistent grid structure from page to page for better visual appeal. All the pages were inked in Photoshop using the tablet, and colored with a simplistic flat color scheme. Each chapter was divided into a monochromatic color by applying a hue and saturation filter over the color layer.

Once the pages were completed, including adding panel borders and speech bubbles, they were sent to a local printer to produce bound and stapled comic books with gloss covers. I wanted to make the final product a physical object rather than an electronic version or web comic because of the attachment the reader can

form with the physical book. My favorite part of reading comic books is collecting the stories and holding the artwork in my hands. This project resulted in the production of a soft-bound graphic novel spanning 52 pages.



Images of the final product installed in the gallery

V. Conclusion

My main intention with this year-long project was to craft a well-told story that proved my abilities as a writer and comic artist. This was my first attempt at a comic longer than 10 pages long, and I set my goals very ambitiously. I worried at points that I would not finish working in time or that something would go wrong with printing, but I was able to overcome these doubts through intense work sessions and ordering from a professional printing company recommended by a former student. The stress of taking on every aspect of the book and meeting deadlines was intense, and I don't think I will attempt to complete a project of this scale in this amount of time again. I want to continue working with narrative and sequential artwork in the future. I would love to work as a part of a team, as a writer or penciller working on a long-form story or series of comic books. I believe this would make the process more enjoyable and generate new ideas that a single person could not. I am very proud of the final product, but I know there is much more I want to do with this idea, such as telling the story from other points of view or explaining more about the world these characters live in. I see this attempt not as a final product, but as a launching point for my creative career in storytelling after graduation.

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