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DESIGN AND PRODUCTION OF  
AN EPISODIC ONLINE ANIMATION:  
CAIRNS OF APEIRON

by

ANDREW RICHARD CADIEUX  
B.F.A. University of Central Florida, 2011

A thesis submitted in partial fulfillment of the requirements  
for the degree of Master of Fine Arts in Entrepreneurial Digital Cinema  
in the School of Visual Arts and Design  
in the Department of Film  
in the College of Arts and Humanities  
at the University of Central Florida  
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## ABSTRACT

This paper describes the development of a feature length script and an independent episodic animation to be distributed online. The goal is to show that appealing animation can be achieved using digital tools, a limited animation workflow, few artists and a strict micro-production budget. I will detail the methods of animation used for the project and describe plans for its distribution to an online audience, including a market analysis and business plan.

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## CHAPTER ONE: FILMMAKER'S STATEMENT

*Cairns of Apeiron* is the story of a sentient android, William, who wakes to find that his creator and the rest of the world have disappeared. As he struggles to understand the details of what took place, he discovers that his life is on a time limit and finds himself in conflict with other surviving androids. The major themes of this story are concerned with the concept of limited time. In a short life without obvious meaning, with what should we fill our days with? Should we follow our instinctive nature through the trials of survival, or should we aspire to a more spiritual transcendent intuition about how to fill our time? How does our inherent programming define us?

*Cairns of Apeiron*, although open to interpretation, loosely suggests that we are born to a world that recycles itself. As creatures of the world we ourselves are also subject to recycling through death and the possibility of reincarnation. The androids in *Cairns* are sentient beings but William is unstable and experiences memories that appear to be snapshots of former lives. How he became instantiated in an android body is a mystery but it seems that in his former lives he was human. The other main theme of *Cairns* deals with entropy in contrast with intent. The intent of a sentient being can orchestrate many different outcomes and to a certain extent defy entropy (although we must always accept that entropy increases to a maximum). For example if you glue a broken vase back together you may return it to its original function although it is still broken. In this story the androids are left alone and humans are in practical terms dead (or at least gone). The world appears to be dying but the androids are artifacts of rebirth and may save it however unwittingly.

William suspects that his creator has left because the world has grown “dirty.” There is little life, plant or otherwise. The oceans and rivers are oily and rusted red. William’s memories suggest a life he may have lived before. Soon he suspects that his body is breaking down.

The film has a less obvious character; mushrooms. Mushrooms are the Earth’s great recyclers. These function as insentient caretakers or guardians of the planet. They have an unparalleled ability to eat toxins, and break down rocks and organisms into fertile soil. They exhibit analogues to the networks of the human nervous system and to human constructs such as the Internet. They are powerful information carriers and strong survivors, often stretching for miles with only one cell wall thick mycelium. Because humans share so many common pathogens with them, we also derive our best medicines from them. Unbeknownst the androids they are a combination of machine and mycelia membranes. Where his computer brain stops, the fungus introduces the super conductor DMT. This is suggestive of the drug’s role as consciousness bridge. As time goes on, the very mycelium that gives him and his companions life, threatens to reach a critical mass and break through their very skin. Despite the androids’ struggles, they all suffer and die where they believe they belong, one near the ocean, one in the mainland, and one near the remains of an old growth forest. As they die, the mushrooms break through and begin revitalizing the Earth. This brings us back to the opening sequence of the film, a progression of the huge protaxite mushrooms that first broke the Earth’s rock into soil.

My purpose in creating *Cairns of Apeiron* is not to assert a well-fitted or “best” perspective on life, but to create a hypothesis to allow the audience to test their own ideas of awareness and purpose in a life without an obvious or universal meaning.

## CHAPTER TWO: EVIDENCE OF AESTHETIC LITERACY

This chapter will explore the aesthetic influences and practices that have driven my decision making in the development of *Cairns of Apeiron*. Much of the research for this chapter considers industrial and independent models of development as two distinct methods of approach for finding appeal in animation. I will compare and contrast costly industrial animation techniques developed at Walt Disney Studios with less expensive limited animation workflows developed by smaller studios, such as Williams Street Studios and Hanna-Barbera. This naturally provides contrast between the old Disney techniques and the inexpensiveness and speed of today's new animation techniques, which may utilize Disney's processes or may stand as very strange departures from Disney's processes. Finally, I will address what this all means for the aesthetic of *Cairns of Apeiron*, an independent micro-budget episodic feature.

### Industrial Animation

For much of the twentieth century, the dominant force in animation production has been Walt Disney Animation Studios. In its early beginnings, the company was established as department of Walt Disney Productions, where for years it produced features exclusively for The Walt Disney Company. The long history of Walt Disney Animation Studios has seen its ups and downs, although most recent memory holds almost the entire lineage in high regard (even its commercial failures were great feats of production). Generally speaking, the company has enjoyed success in developing and testing the process of animation production even during a time when no one was sure if any adult or child would sit through sixty minutes of a hand drawn film. Disney animators established indispensable techniques and procedural processes for animation.

We can take away from them the following key points relevant for the attention to production that is important for developing an aesthetic for animation: first, animation is about iteration; second, there is a direct correlation between time input and quality output; and third, animation is about “selling” movement or appeal. Although these points seem fundamental and over simplified, they are important because what distinguishes Walt Disney Animation Studios is a matter of resources and care. In simple terms, an artistic and passionate businessman endowed immense finances to the studio through structured investments. He explored new technologies and innovations by cutting the company’s profit margins and re-investing into the next project.<sup>1</sup>

### The Sum of All Parts

Thomas and Johnston’s *The Illusion of Life: Disney Animation*, is a beautiful and intriguing volume. Equal parts history book and equal parts instruction manual the preface explains the difficulty in writing one of the earliest comprehensive animation books. Here you have a new and rich history for an emerging art form but no one is really quite sure how to articulate what it is that Disney actually does to produce its films. For example, Ron Miller had planned to double the studio staff by 1981, ultimately he concludes, “there just aren’t very many people who are capable of doing animation in the Disney style” (Thomas, Johnston Preface). A group of young animators asked Vladimir Tytla how he achieved his incredible animation results:

The problem is not a single track one. Animation is not just timing or a well-drawn character, it is the sum of all the factors named. No matter what the devil

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<sup>1</sup> Lebron and Gartley detail Disney’s business practices and the problems his new models created during the early days of animated feature production.

one talks about – whether force or form, or well-drawn characters, timing, or spacing-animation is all these things-not any one. What you as an animator are interested in is conveying a certain feeling at that particular time.

Also early in the preface, Frank Thomas and Ollie Johnston talk about reproducing Disney's results:

No other studio has been able to duplicate this most important (but least understood) element in our films. It cannot be produced by money alone. When a producer says he is going to make a 'Disney-type' film, he may think that full animation, nice color, and a large budget are all that is needed. But Disney animation is more than drawing, or animating, or storytelling, or painting - it is what this book is all about. (FOREWARD)

What these Disney animators are talking about are the sum of all parts; sound, character, procedure, dynamics, appeal etc. For their time, their tools were pencils, paint and multi-plane cameras. Therefore, animation from the perspective of these authors was only possible under specific circumstances with very specific (and expensive) technologies. However, this volume remains relevant because although many modern day animators are using digital tools we are trying to realize the same insights that these men and women helped cultivate. What distinguishes Disney is the procedural process and experimental mileage. Given that the authors didn't have digital animation and all of the benefits inherent in that type of workflow, this volume should be very liberating for animators who may be working independently or outside the comfort of being part of a studio staff. The book says don't be like us. Find your own

way and if it looks like it thinks and walks and talks, it will work. This is poignant for modern animators, especially those who seek possibilities in limited animation.

### Limited Animation

Limited animation is a technique in which the process of drawing unique frames for each new artwork is limited. With this technique, artwork may be variably reused especially when individual frames contain common artwork. Digital techniques and computers may be leveraged to copy, paste or otherwise do the heavy lifting that would typically be done by hand in traditional animation. Everything from eye-blinks to props and facial expressions can be built, used and then archived for later use. As in the Japanese animation movement, we can see that the aesthetic of limited animation may be pronounced but it is also infinite in variation and can be extremely attractive. New, better-looking animations are released all the time, leveraging the technique and principals of proper drafting and staging to convey beautiful images. The effect can be compared to a moving comic book. Still other animations embrace the comically bad aesthetic that can be easily and lazily produced with the use of limited animation. Recently a boom in popularity has been enjoyed by certain television shows that utilize limited animation. For this reason the creation of *Cairns of Apeiron* is arguably timely and in step with a wide swath of animation consumers that enjoy the avant-garde style and charm that is synonymous with limited animation.

Disney animated features are the resulting final frames construed from hundreds of thousands of individual artworks by hundreds of people working for as many as five years on a given project. A single animator may work for years on a given project and may only be credited for as little as a four second contribution. A single animator may

contribute to many scenes and if all of them are cut from the final edit, then they receive no credit. Disney animation is an expensive, time intensive way of doing things, but it has appeal. Appeal is the goal in limited animation, while the use of budget-cutting timesaving animation techniques are the means and limitations self-imposed by the artists.

United Productions of America, active during the 1940s through the 1970s, was among the first studios to make a serious attempt at abandoning the in-between heavy method of production. In 1956, *The Gerald McBoing-Boing Show* was created to showcase UPA's cartoons. Airy, under-stated movement characterizes the style of the show, along with bold lines and strong posing. Online critic Scott Hill writes of the 50<sup>th</sup> anniversary remaster, "Gerald McBoing-Boing, about a boy who speaks only in sound effects, has become something of an animation geek touchstone. Adapted from a story by Dr. Seuss, it helped break toons away from Disney's lush realism toward a low-budget abstract expressionism with looser cartoon physics. Also, it's cool."

Numerous other animations that utilized limited animation techniques have been released under companies such as Hanna-Barbera. These shows even pre-date the now common digital software's like Toon Boom and Adobe Animate Pro (formerly Flash). A pivotal point for the growth in popularity for limited animation can be attributed in part to at least one network, *Adult Swim*. *Adult Swim* tapped into a market of late night viewers that appealed to both young teenagers and adults alike. YouTuber *kaptainkristian*



produced a decent video on the subject titled, *Adult Swim – The History of a Television Empire*.<sup>2</sup> In it, he details the creation of one of Adult Swim's earliest original programs:

Now let me take you back to 1992. Ted Turner had just launched the cartoon network - a channel with absolutely no original programming that was built on the back of the MGM cartoon libraries Turner had acquired. So it was essentially the Hanna-Barbera re-run channel but Turner wanted to make the foray into original programming and that first original program was *Space Ghost, Coast to Coast*. It was the brainchild of Mike Lazzo, cartoon networks original head programmer that would later go on to head up *Adult Swim*. Lazzo was a huge fan of the short-lived *Space Ghost* Cartoon from 1966 and since he had access to those cartoons through the Hanna-Barbera libraries he had the idea to re-contextualize those original animation cells and splice them in with interviews of actors and musicians giving the washed up hero his own talk show.

The success of *Space Ghost* would launch numerous other limited animation productions and many of them would be direct spin-offs. As the network developed in the early 2000s *Adult Swim* continued using that limited animation, lo-fi indie aesthetic. The audience for the programming block grew. Billed as alternative viewing for when Cartoon Network's target audience was normally asleep, *Adult Swim* changed conceptions of what animation could be.

In addition to the shows of the *Adult Swim* block, other networks and production house have produced popular animations utilizing limited animation. The animated

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<sup>2</sup> Link for [Adult Swim – The History of a Television Empire](#)

television show *Archer* is an example of limited animation that has enjoyed critical acclaim. The show opened in 2010 and has enjoyed a significant number of nominations and accolades in each subsequent season. Notably, the show has taken Primetime Emmy Awards in Interactive media and multi-platform storytelling and won Best Animated Series at the Critics' Choice Television Awards for 2014. Recently two episodes of the independently produced animation *Animals* were presented at Sundance. HBO picked the series up with a two-season order. Although the show has received mixed reviews it is just another example of the growing popularity of this animation aesthetic.

#### Inspiration and Influences for *Cairns*

The rise of limited animation and the popularity of programming such as *Adult Swim* have had a profound influence on my interests and work as a storyteller. I grew up watching *Adult Swim* and I count *Cowboy Bebop* as one of the stronger influences for *Cairns of Apeiron*. The advent of sophisticated digital software such as Adobe and Toon Boom have made the vision of animation wholly achievable for small, independent and underfunded crews. Digital workflows and powerful home computer coupled with the mature themes and cinematic quality of popular Japanese animations makes the vision of *Cairns of Apeiron* seem possible. In this section I describe the influences that have impacted the writing and development of the style of *Cairns of Apeiron*.

#### Post-Modern Japanese Animation and New Technology

The important thing here is the aesthetic. I include in my idea of aesthetics the subject matter of the animation because for animation it is just so important. There is rarely a lazy kind of animation. A lazy filmmaker may put a man in front of the camera

and it could be any kind of accidental man but in animation you are drawing up a man from the mind and he must always be a specific and stylized kind of man because he will be perceived as caricature no matter how plainly rendered. For Japanese animation the movement is often rendered with limited technique but the material is perhaps more interesting, particularly for adult and male audiences.

In the early twentieth century, animation was a hobby that spread through certain parts of the world as a matter of personal intrigue. This was especially the case in Japan, where Western animation techniques were being tested all the time. Although speculation puts the creation of the earliest cartoons between 1907 and 1917, it is difficult to know what those looked like or exactly when it started, as so many were destroyed. One reason for this was that the cinemas owned the reels once they were handed over. Being much more novelty than art, these cartoons would trickle down to smaller theaters and then were eventually destroyed as it was common for the celluloid to be sliced up and individual frames sold to collectors. One of the oldest known cartoons, *Namakura Gatana*, can be found on YouTube and is dated at around 1917.<sup>3</sup> It depicts a samurai trying to test a new sword.

Japanese animation really began to gain international attention sometime during the 1970s and 80s.<sup>4</sup> There are a few reasons for this. Practically speaking anime was easy to dub and cut for specific audiences. In addition, characters typically had light skin. The animated characters, being caricatures, were usually perceived as having the nationality

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<sup>3</sup> *My Anime List* is an English speaker's forum that includes a translation and link to the original news source in Japanese about *Namakura Gatana*.

<sup>4</sup> *Animation in Asia and the Pacific* details several factors for the sudden rise in popularity of anime.

that a viewer identified with. Accessibility was important and North and South America had no problem with dubs and translations and quickly grew the demand for those markets. This is also a time when individuals such as Hayao Miyazaki and Mamoru Oshii started to gain notice for productions such as *My Neighbor Totoro* and *Time Bokan*. Later Oshii would make *Ghost in the Shell*, an inspiration for the Wachowski brothers' *The Matrix*. It's important to point these animators out because they produce work that is both adult, accessible to children and sometimes a little bit dark.

Content and aesthetic is the biggest reason anime has continued to grow. Despite using limited animation the Japanese offered a broad range of toons from mecha to anti-hero space cowboys. These early animations lent themselves well to an international understanding of traditional and Japanese retellings of mythology and also of some story structures that to outsiders were rather unconventional. John Lent and Antonia Levi discuss this in detail in *Animation in Asia and the Pacific*. They make a very important point. The Meiji government came to power in 1868. They justified overthrowing the Shogun through the use of ancient Shinto mythology and twisted its myths to create an "ultra-nationalist autocracy that terrorized Asia and nearly led to Japan's destruction in World War II" (Lent and Levi, 33). Up until about the 1950s forward the predecessor to anime, manga (Japanese graphic novels), retold creation myths by artists who we're still indoctrinated by such Shinto mythologies as they learned them in public school. The anime of today are a mix of traditional mythologies and new mythologies that were made for domestic markets but were better suited for post-modern Japan and seemingly the rest of the world. According to Joseph Campbell a hero is someone who has found something bigger in scope than a normal life and that hero must give himself or herself to something bigger. In anime we find ordinary heroes,

environmental degradation, protagonists who are bad role models, forward thinking questions such as the relationship between man and machine. These stories leave room for moral ambiguity and big questions all while offering few answers. Even now we can count serial dramas and movies that are based on this kind of Japanese story.

Mamoru Oshii is a great example of this kind of storytelling and I keep bringing him up because I count him as a strong influence of *Cairns of Apeiron*. He was obsessed with European cinema counting his influences among filmmakers such as Federico Fellini, Ingmar Bergman, Michelangelo Antonioni and Jean Luc-Godard.<sup>5</sup> Oshii's work as an animator marks the proving ground of this interesting hypothesis; that animation could address the harder questions in life and be taken seriously.<sup>6</sup> At the very least we can say that his work was more intellectually aware and addressed a sort of existential ennui in many of his characters which is not surprising for a man with such influences. It's hard to imagine what such a serious cartoon would be like until you watch Mamoru's crowning achievement, *Ghost in the Shell*. The movie poster depicts in one image the allure for a wide audience of men and women both young and old. The *Ghost in the Shell* movie poster depicts a strong female protagonist (who is a cyborg with sex appeal) holding an automatic weapon.<sup>7</sup>

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<sup>5</sup> In this interview Oshii describes his influence even commenting, "But now I think back, I feel that Godard is the one and only director."

<sup>6</sup> In this interview Oshii expounds on influential subject matter that informed his films such as Tarkovsky and the cyber punk work of Ridley Scott.

<sup>7</sup> Link to poster image: <http://en.wikipedia.org/wiki/File:Ghostintheshellposter.jpg>

## Conclusion

Many people adhere to the common misconception that Disney is the standard of animation. However, the fault in this assumption is that it is akin to saying there is only one way to make a film. After all, Pixar emerged from the marriage of science and art, visionary entrepreneurs and talented animators, at a time when many studios were outright opposed to the idea of a computer animated feature. According to John Lasseter, after pitching the boards for *The Brave Little Toaster*, the head of Disney Studios, Ron Miller, said, “There’s no point in using computer animation unless it would make things faster or cheaper.”<sup>8</sup> This was done in service to finding a new aesthetic that embraced a new technology. Arguably, the only techniques that truly stick in the animation world are the ones of math, derived from Newton’s laws of motion. It would be easy to assert that Steven Spielberg is the standard-bearer of live-action filmmaking, and that the Spielberg method is the way that films are made; however, this is just not true. Likewise, it is important to remember that Disney’s methodology is only one way. Even Disney’s process has evolved.

*Cairns of Apeiron* begins first with an idea and a story. The aesthetic must serve these ideas and story elements, but that does not necessarily mean that we must produce a half million unique frames. Primarily, the artistic goal of *Cairns of Apeiron* is to experiment with what is possible in micro-budget production animation. How can we best sell the movement of our animation to be an effectively presented story and one that has appeal? Therefore, the project stands as an experiment and a challenge to anyone who believes that animation can only be achieved with high overhead costs and a

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<sup>8</sup> Lasseter, describes this experience in the film, *The Pixar Story*

small army of gifted cartoonists. Thomas and Johnston describe this concept quite clearly:

Choosing the style for a picture follows the same guidelines as choosing the design of the characters. The style must emphasize the elements that tell the story best, create the moods, and establish the degree of sincerity for the complete idea. (511)

## CHAPTER THREE: EVIDENCE OF PRODUCTION LITERACY

*Cairns of Apeiron* is an episodic, online, animated series. The story, a narrative, deals with themes that may be unusual to the typical Western audience. These include ideas about reincarnation, existential ennui, loneliness and hints of the Japanese philosophy of Bushidō as it relates to honor and purpose in a life without obvious meaning.

### Script Production

The script (Appendix A) was written in studio format, but includes notes that indicate episode breaks and other types of screen direction. This may not be typical (especially for Hollywood feature assignments), but it's helpful in dealing with the daunting task of background painting and character and prop animation. Therefore, the script is tailored to include some camera and acting direction, bold face font for specific sound effects, and props and characters. By doing this, an artist can more easily find elements that are relevant to their respective role and eliminate some of the difficult questions normally left to a director or cinematographer on set. The goal is to set up an artist with all relevant assets so they can simply go in and begin staging aggressively and with confidence.

### Animation

The animation process combines a digital hand painted world with vector characters and props in Adobe Flash. Although Adobe Flash is considered to have significant deficiencies in its application as a digital animation environment, it has enjoyed the support of an independent animation community that has hashed out these issues



for almost two decades. Adobe Flash was, and is designed with the web designer and programmer in mind. That very fact has allowed for the adaptability of the software through plug-ins and procedural processes which have been tested to success in the animation world. Evidence of this is in a growing body of incredible works, including *Foster's Home for Imaginary Friends*, *My Little Pony: Friendship is Magic*<sup>9</sup> and most recently the adult themed episodic online animation, *Tom Hank's Electric City*.<sup>10</sup> A development schedule can be found in Appendix C.

### Character Animation

We utilize a series of plug-ins provided open source by Electric Dog<sup>11</sup>. These plug-ins are referred to as the EDAPT (Electric Dog Animation Power Tools). This set uses what is called the break-apart workflow<sup>4</sup>. Simply put, the workflow uses the construction of nested characters in all its likely forms. The term “forms” refers to the position of all body parts and staging of the character including basic facial expressions and hand gestures. For example, when an actor performs, he or she may stand facing the camera, at two-thirds facing left or right, with their back to the camera, or their back to the camera facing left or right. The animated character are built in all eight positions on one layer, as these are all obvious forms. The same is done for his hands, head, and facial expressions, which are nested as “child” layers in all eight body layers. All these parts are built into the layers of the character, similar to a nesting doll. Rather

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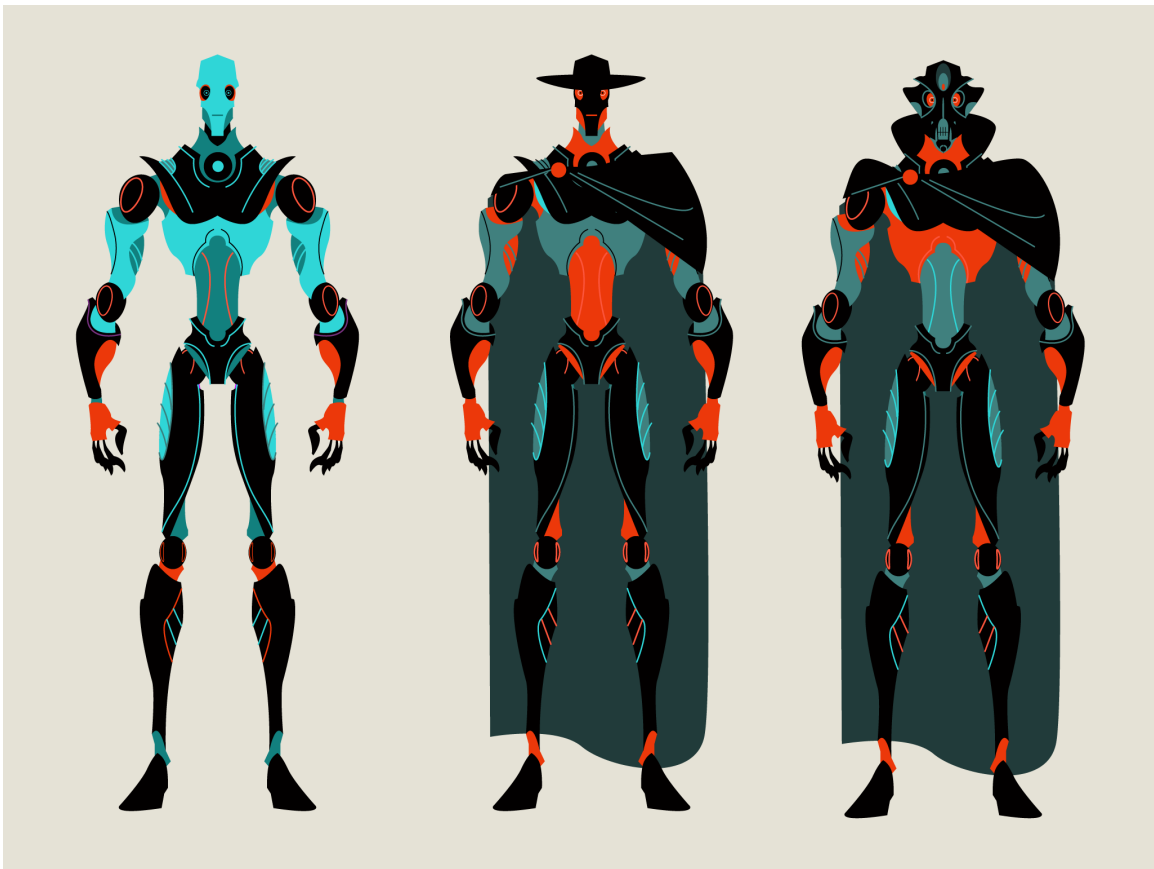
<sup>9</sup> MLP: FiM samples: <<http://www.hubworld.com/my-little-pony/shows/friendship-is-magic/videos>>

<sup>10</sup> Watch full episodes of Electric City here: <<http://uk.screen.yahoo.com/electric-city/>>

<sup>11</sup> Tool support and site documentation <<http://flash-powertools.com/>>

than building or drawing frames one-by-one, an animator opens the doll, finds the appropriate standing positions, then “breaks apart” the doll, leaving only the relevant layer. Next, they do the same for the head, the mouth, the hands, and so on.

Artist Brian Nutt<sup>12</sup> is the concept designer for the principle characters. Figure I shows an early concept of the androids in the story.



**Figure I: Character Designs for Ash and William by artist Brian Nutt**

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<sup>12</sup> Brian Nutt’s bio page: <<http://ideasorlando.com/ideas/profiles/brian-nutt/>>

### Rendering “Locations”

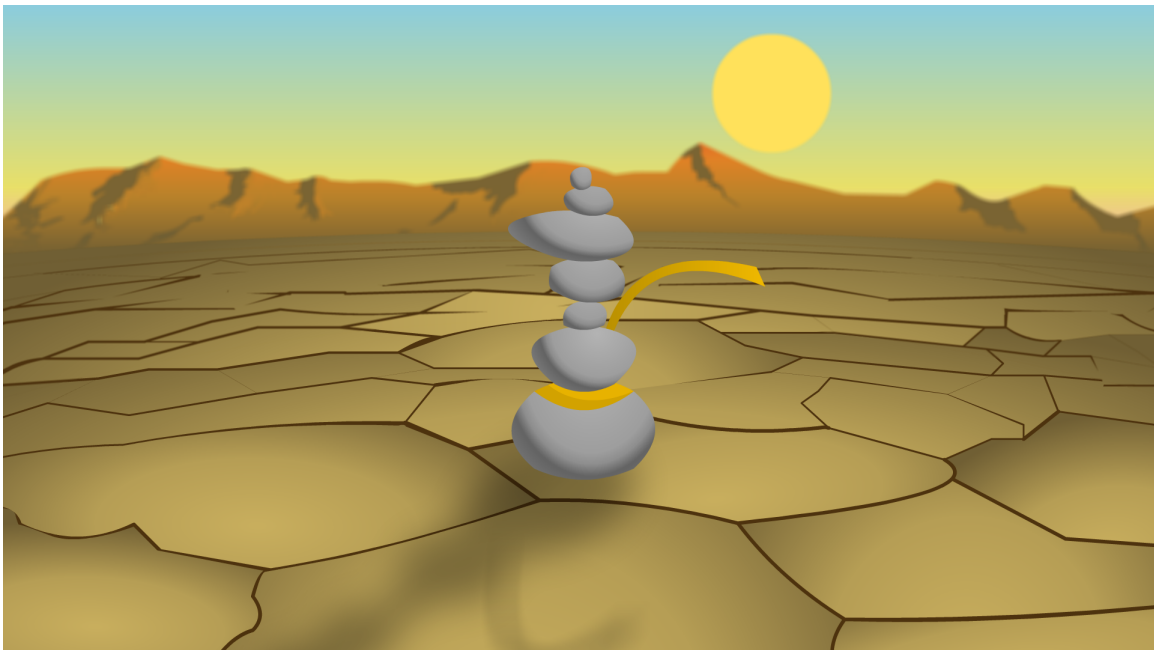
Sets or locations are rendered in Adobe Photoshop and Flash. Using the mixer brush and Wacom Intuos pen tablets,<sup>13</sup> artists digitally paint key backgrounds. Key backgrounds cover a large area of landscape. For example, a key background may cover a building exterior including a patio, adjacent carport, parking lot and nearby woods. This provides enough room for camera movement and overlap while keeping the number of individual paintings low (approximately 30). These large paintings will be around 13,440 x 7,560 pixels in size. One large painting provides workable sub-sets for action to take place. A scene may then depict a man running from a building leaping over cars and escaping to the woods. It looks like several camera setups and locations but actually utilizes sections of a single 13,440 x 7,560 painting through a 1920x1080 camera view. Figure 2 and Figure 3 depict some artwork from the animation.

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<sup>13</sup>Wacoms site includes pictures of such products <<http://www.wacom.com/>>



**Figure 2: Title Still for Cairns of Apeiron made in Photoshop**



**Figure 3: Still background made in Flash**

## Sound

Sound is important to the story. Obviously, it is typical for animation to place this kind of importance on sound, as there is no natural sound except what is deliberately produced and placed in scene. Good Foley in particular helps to sell the movement in the animation.

## Music

An original soundtrack has been developed and has a wide and varied body of work, fitting no particular genre. *Cowboy Bebop* is an example of this, using an experienced composer with no specific genre direction in mind. Composed by Yoko Kanno, the award winning sound track ranges includes examples of country, blues, jazz and death metal. The project has two composers involved. Juan Fernandez and Julian Brijaldo.

## Voice

The script contains four speaking roles. I have already completed a script break down and voice recording was successful. Voice recording was completed over the course of two weeks on weekends and a few weekdays for a couple episodes.

Recording was scheduled at Sierra Line Studios,<sup>14</sup> an independent Orlando production studio owned by Hector and Tania Sierra. Due to budget concerns and

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<sup>14</sup> Sierra Line Studios Webpage: <<http://www.sierralinestudios.com/>>

accessibility the recordings were completed at the University of Central Florida, Main Campus.

### Influence

Heavy influence for *Cairns of Apeiron* comes from Japanese animators such as Shichiro Watanabe, director of *Cowboy Bebop*, Keiko Nobumoto, writer of the same, and Jean-Luc Godard. Although it may seem like a strange combination, filmmakers such as Jean Luc Godard explored similar ideas as those of Japanese animators like Watanabe. In particular, there is a tendency towards stories of existentialism and unclear reality. In fact, Japanese culture as a whole has demonstrated this kind of philosophical awareness since the early texts of the samurai warriors dating back to the 1400s. *Cowboy Bebop* embraces this theme by breaking many rules, such as the requirement of conflict in every episode. The series even spends approximately fifteen episodes suggesting that the protagonist may have actually died in episode five and that the audience is just watching a dream. For example, in every episode the laws of physics apply, except for one episode in which the protagonist survives the cold of space to save his life. The episode reminds us that while everyone else is bracing for death, the Bushidō warrior in our protagonist is unfettered by the impossibility of it all. Instead of allowing his mind to be taken by the impossible, he tests it and lives. Still the audience insists he should die, but this is not the kind of carelessness we have grown to expect from the animators, begging the question, “what is it telling us?” Then, before the audience can even realize it they are second-guessing everything, such as the fall in episode five, which at that height should have also killed him. What if it did, and why else would you put that scene,

a climax, so early in a series? This is reminiscent of Godard's *Pierrot le Fou*, and in particular of David Wills' dissection of the "Oui, Bien Sûr; Bien Sûr" scene 6, in which Pierrot asks Marianne whether she will ever leave him. He points out that, despite the ambiguous nature of her repetition of, "no, of course," and then "yes, of course," it may not be a negation of her previous assertion of fidelity because of her use of the word "oui" instead of "si." In French, a yes that contradicts a no is spoken as "si." Still the audience is left to wonder if Pierrot wrongly suspects her infidelity, or if it even matters because Pierrot will ruin it anyway. Yet this fact has a game changing effect on the whole movie. The way in which Godard paints ambiguity is very profound.

I would like to capture this profound ambiguity in my story, *Cairns of Apeiron*. Without losing the audience, I would like to disorient them in time and to raise questions about awareness and the tricks of memory. To achieve this the script utilizes a significant amount of ellipses. The beginning of the story is confusing and abstract. As the story develops, these apparently random and meaningless scenes and symbols are related quite literally and fit in the story cohesively. Still other moments may possess an ambiguity not dissimilar to this famous scene from *Pierrot le Fou*.

## CHAPTER FOUR: EVIDENCE OF FINANCIAL LITERACY AND BUSINESS PLAN

### Information and Risk Statement

#### For Information Only

This business plan (the “Business Plan”) is for information only and is not an offer to sell or a solicitation of an offer to buy securities. The Business Plan is not a prospectus and is not a private placement memorandum. The Business Plan and its contents are not to be construed as legal, business, or tax advice.

The membership units discussed in the Business Plan will not be registered under the Securities Act of 1933. The exemption from registration will be claimed under Regulation D created by the Securities and Exchange Commission.

The membership units discussed in the business plan will be registered in accordance with the blue sky laws of any state with blue sky laws applicable to the membership units described in the Business plan.

Any Prospective purchaser of the membership units described in the Business Plan will be required to demonstrate that (1) he or she has the sophistication, or has retained the services of an investment adviser with the sophistication, necessary to evaluate the membership units described herein, and that (2) he or she can afford the total loss of his or her investment.



## Risk Factors

Empirical evidence indicates that some websites generate profit through advertisements and goods sold. Goods sold most often refer to video game and other media content download. Projects, such as *Cairns of Apeiron*, are new and should be considered an experiment. Although the website will attempt to earn profit through advertising, it will more likely lose money. This is based on the lack of success of other like projects, such as *nawlz.com*.<sup>15</sup> It is worth noting that this research has not measured performance as a function of the passion, integrity, and knowledge of the filmmakers coupled with the quality of the script. These are variables an investor should ultimately consider when deciding to invest in a film.

Production-related risks include but are not limited to the following: (1) the website requiring more financing than was originally anticipated and being unable to complete production until such financing is achieved; (2) the website does not serve to generate a positive cash flow; (3) the inability of the website to compete for public acceptance against the over-saturated world wide web; (4) the website being unable to compete against other forms of entertainment such as video games or more traditional motion pictures.

Company-specific risks include but are not limited to the following: (1) the website having only one piece of intellectual property, the animation *Cairns of Apeiron*, and having no other intellectual property from which to derive revenue; (2) the Company being a start-up and as such having no operational history; (3) the Company being a start-up and as such being subject to the risks common to all start-ups; (4) the

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<sup>15</sup> Nawlz website: <nawlz.com>

Company relying on the expertise of management to guide it through the marketplace and the expertise of dozens of non-management persons (actors, distribution executives, postproduction companies, etc.) to successfully create and exploit the website animation; and (5) there being no market for and no market likely to ever exist for the membership units discussed in the plan. General economic risks include but are not limited to the following: (1) the introduction of new and competing forms of entertainment technologies; (2) the deterioration of general industry and marketplace conditions; (3) unfavorable interest rate movements; (4) unfavorable currency exchange rate fluctuations; and (5) general industry and market uncertainty.

One, many, or none of the risks mentioned above may result in the total loss of investment in the digital online animation. The risk factors mentioned above do not include all possible risk factors.

### Executive Summary

#### Introductory Statement

EpicFLA LLC, is being formed for the sole purpose of producing and launching the website and animation. The website is a community-contributed site that hosts *Cairns of Apeiron*, the feature length animation. The project is budgeted at \$11,000 (Appendix B). The management team's efforts as an independent production unit will yield substantial budgeting and creative advantages over having this animation made by a major motion picture studio. In addition, because the animation will be an integrated website experience, the management team has the advantage of circumventing normal distribution channels.

## Management Team

Andrew Cadieux will serve as the sole manager of both the website and EpicFLA LLC. He has assembled a team of programmers with the potential to realize the fruition of the website.

## Product Description

*Cairns of Apeiron* is a 2D independent animation that will be distributed episodically online. *Cairns of Apeiron* is the story of three androids that wake up to find that their creator and the rest of the world have disappeared. They are William, Ash and Bean. The world is littered with broken artifacts of a previous civilization. Only robots remain. They realize they have been designed with planned obsolescence in mind; they are on a time limit. As they search for meaning in their apparently broken and abandoned lives, they find themselves in conflict with each other. *Cairns of Apeiron* will be animated in Orlando, using Flash Professional, and developed with a combination of Action Script 3 and Flash “timeline” animation.

## Industry Overview

The World Wide Web is an unusual and dynamic outlet for distribution of projects like *Cairns of Apeiron*. It is important to realize that initially, entering the business of online entertainment appears to be a losing choice. One will find that the web is over-saturated with easily substitutable forms of entertainment and content creators that launch new products and sites every day. The low cost of Internet real estate and the rapid evolution of new web technologies (such as site builder kits) means that there is new competition everyday.

## Market Analysis and Marketing Strategy

The target audience for *Cairns of Apeiron* is young adults 18-35. This group constitutes a majority portion of the most regular Internet media consumers. This age group also favors horror and animation. When, *Cairns of Apeiron* launch, we will seek advertising online that targets this age group specifically. If *Cairns of Apeiron* should receive positive attention, it will also seek awards.

## Funding

*Cairns of Apeiron* is currently in preproduction using out of pocket funds. However, we will attempt to recoup some of the financial losses via donations and advertising.

## Company Description

### Company Details

Member Andrew Cadieux formed EpicFLA LLC. Cadieux earned his B.F.A in documentary film production at the University of Central Florida. Before attending college, he was a student of digital media and web design at Dillard Center for Emerging Media. Currently, he is a graduate student at the University of Central Florida's Entrepreneurial Digital Cinema program where he studies business, story, production and animation.

EpicFLA LLC is dedicated to developing new modes of storytelling for the home computer and Internet enabled mobile devices. Through the application of interactive programming languages such as Action Script 3 and PHP, EpicFLA LLC will strive to

bring a range of story experiences from young adult science fiction/fantasy to children's stories.

Within the next two years, EpicFLA LLC will attempt to meet two primary goals. The first goal will be the development of a website and integrated brand logos on a unique IP address. The second will be the launch of the *Cairns of Apeiron* feature length animated digital episodes.

To realize the goals of EpicFLA LLC, we will need the skills of a few programmers and at least two animators. Currently, we are budgeting \$2,000 for the development of a website to load individual animation files, integrating a guest book as well as user accounts for the site. The lead animator on the project will be Andrew Cadieux.

### Product Description

#### Synopsis

*Cairns of Apeiron* is a 2D independent animation that will be distributed episodically online. Each episode will be approximately 3-6 minutes in length. *Cairns of Apeiron* is the story of three androids – William, Ash and Bean – that wake up to that find their creator and the rest of the world have disappeared. They find that the world is littered with broken artifacts of a previous civilization (such as? – I would include a few examples). Other than themselves, only robots remain. They realize they have been designed with planned obsolescence in mind; they are on a time limit. As they search for meaning in their apparently broken and abandoned lives, they find themselves in conflict with one another.

William is the main character. Owing to a bad battery, he has been asleep for an unknown number of years and only comes to life after he has been exposed to the sun. Convinced that “Mother” (his creator) is still around he has set his mind and heart on finding her. Each night as the sun goes down, he powers off. During his travels he discovers many robots, but when he encounters Bean and Ash, he is surprised to find that they are “thinking machines” like him. Excited and inquisitive, he milks them for any information they have. He decides to dismiss Beans warnings of Ash’s instability. Curiously, both Bean and Ash discourage him from going to the ocean.

Bean is a robotic cat. Of the three characters, he looks the least like a robot, his appearance more like that of a real cat. Originally he was designed for pest control, but he has learned to give up the habit (since almost everything is dead anyway). Now he spends his days playing out his lazy cat programming. He is quite happy, but he has a great disdain for Ash, who he calls “unstable”.

Ash is perhaps the most mysterious character. Although Ash and William look identical, it is clear there is something not quite right about Ash. It also seems that he has been “awake” much longer than William. Sneaky and divisive, he threatens to become violent at any moment.

### Project Details

*Cairns of Apeiron* is written and will be directed by Andrew Cadieux. *Cairns of Apeiron* is in no way a traditional film and should not be considered as such. However, it will have the same quality and length characteristic of a feature length film although it will be broken up and distributed episodically in 3-6 minute chunks. The project is unique in that some story elements may not appear chronologically. Instead, there will be some

user navigation through the use of hyperlinking to different segments. The project will be built in software such as Flash and use the most recent iteration of Action Script 3. Other than video navigation, the story will be passive, not interactive. Distribution will be through the website. The product will be offered for free, but the website will be monetized through advertising, particularly with the use of Flash tutorial videos that will carry the advertisements.

### Industry Overview

The World Wide Web is an unusual and dynamic outlet for distribution of projects like *Cairns of Apeiron*. It is important to realize that initially, entering the business of online entertainment appears to be a losing choice. One will find that the web is over-saturated with easily substitutable forms of entertainment and content creators that launch new products and sites everyday. The low cost of Internet real estate and the rapid evolution of new web technologies (such as site builder kits) means that there is new competition everyday. In addition, the bargaining power of Internet users is extremely high. The highest spenders of online content (7% of reported spenders) peak out at about \$100 per month spent, while most Internet users (43% of reported spenders) spend ten dollars or less per month. This means that most users are engaging with free content and services.<sup>16</sup>

In looking past my initial instincts about the World Wide Web, we can begin to entertain the possibilities of content creation and the possibility of reward for our

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<sup>16</sup> Pew Internet. Pew Internet. How Much Do Users Pay For Online Content.

creations. The same rules apply to us that apply to everyone else who help make our Internet world what it is from minute to minute. We have the same open source tools to design, build, write and generate a winning combination of entertainment and monetization that everyone else does. Furthermore, there are no gatekeepers. That means that whatever we can produce, we can distribute, for better or worse.

*Cairns of Apeiron* has already launched a limited access test page with the web host FatCow. The website launched for one dollar for an entire year of web hosting.

### Successful Business Model

Within the past decade, startup companies such as Zynga have proven that simple and engaging entertainment platforms can earn millions. It would be unfair to consider Zynga a small fish, even at the outset of their business venture. Unlike *Cairns of Apeiron*, they began with \$29 million in venture capital. That was only 2007, and as of 2010, Zynga boasted \$500 million in revenue and a valuation of \$5 billion for the company based on private stock sale.<sup>17</sup> This is important because Zynga figured out how to turn addictive video games into reasonably cheap money generating clicks. A common model used by Zynga is the Energy meter, applied to many in game characters. To engage with in-game missions, a player must spend some energy. This energy meter can take several hours, even days, to replenish. If a player wants to speed up their rate of play, they can either buy some energy directly using a credit card, or they can engage an ad by one of Zynga's partners. In this way, Zynga has given us the opportunity to choose how we wish to

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<sup>17</sup> Morris, Chris. "Social Game Maker Zynga's Market Valuation Tops \$5.5B". CNBC



compensate them for the service and how we will experience their games.

Furthermore, Zynga has proven that companies can far exceed known giants. Their market valuation once exceeded that of the gaming industry leader Electronic Arts.

Although Zynga has enjoyed some success, they are held in critical regard and are expected to fail eventually. Their reputation for poor business ethic and allowing scam ads to penetrate through to users has spoiled a few mergers. In addition, their current business model is dependent on a few factors including websites like Facebook and a specific type of user.<sup>18</sup> Although it is not without its faults, the company is proof that you do not necessarily have to create content with recognizable intellectual properties to earn revenue.

### Why *Cairns of Apeiron* Is Different

*Cairns of Apeiron* does not have any recognizable intellectual properties. However, we believe it is possible to gain an audience without any such properties. Although the success of Zynga is not typical and the viability of their business model is still questionable, it gives us an idea of what a point of entry might look like for the monetization of the website. Furthermore, *Cairns of Apeiron* has the advantage of being a story platform first. Unlike the hollow shell of addictive video games, *Cairns of Apeiron* is an opportunity to serve an audience art, animations, music, games, guest books and good old fashioned storytelling through a single coherent story.

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<sup>18</sup> Levisohn, Ben. "Two IPOs Beckon Investors". The Wall Street Journal: p. B.9.

## Market Analysis and Market Strategy

### Internet Distribution

Online content is generally distributed through one of the following three types of models: with ads, ad free with subscription or a digital goods purchase, or for free without ads. Although it is rare to find online media that doesn't fall neatly into one of these three, it is my belief that different parts of a single website could function under its own model.

Entertainment and media companies have been testing new models of distribution and revenue gain for the online market with increasing diligence. Relatively new ventures such as Hulu serve as bold but successful experiments in ad supported Internet streaming, while companies such as Netflix have maintained an arrogant disposition on being first in the streaming licenses game. Hulu was launched by News Corp./Fox and NBC Universal in mid-March. Although the content is ad-supported, it is equivalent to only about 25% of the amount of ads played on television.<sup>19</sup> Particular importance has been placed on designing and implementing models that earn revenue from advertising contracts. The potential for success with this type of ad-based revenue is reflected by user data that finds that people don't mind ads as long as they don't clutter the media space or disrupt relevant content. Nielsen reports reveal that "47% of

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<sup>19</sup> Ball, R. (2008). Just Press Play. *Animation*, 22(5), 56-57.

respondents are willing to accept more advertising to subsidize free content. In turn, 64% believe that if they must pay for content, there should be no ads."<sup>20</sup>

Although many believe that advertisement is the future of online revenue gain, there are also those that only sell their digital goods. So far, these companies have demonstrated success with very specific audiences. One such company is the online subscription service Club Penguin, which is targeted for children. It seems that the value of having a safe, ad-free space for children to navigate is worth six dollars per month to many parents. Club Penguin had logged 700,000 subscribers by the summer of 2007 and was designed for easy navigation by toddlers.<sup>21</sup> Another such company is the social network gaming machine Zynga that created games such as Farmville and Cityville. The latter has some 54 million monthly players. The company has received some criticism for not integrating ads, but some have speculated that the engineer heavy culture typical of social networking companies is just not that interested. "They're probably not going to move as fast as the others," said Matt Story, director of Publicis' Denuo Group. "They have no cash flow issues."<sup>22</sup>

Still, many note that Zynga, which has worked with just a handful of big brands, will need to make advertising a priority eventually, since most social games are only able to sell virtual goods to one to three percent of their audience. Even if Zynga, whose games are played by 45 million people daily, slightly exceeds that average, "not

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<sup>20</sup> Szalai, G. (2010). Nielsen Reports Online User Trend. The Hollywood Reporter . Retrieved from <<http://www.hollywoodreporter.com/news/nielsen-reports-online-user-trends-20706> >

<sup>21</sup> See Ball (2008), for more on subscription based service including those for adults

<sup>22</sup> Shields, M. (2010). Betting the Farm. Mediaweek, 20(43), 8.

monetizing 95 percent of your audience isn't necessarily a great business," as one gaming executive put it, "Especially as Zynga's growth is slowing."<sup>23</sup>

The fact of an Internet user buying online goods is not really typical, a fact which the Nielsen study demonstrates: "Digital content, for which consumers are most likely to pay, or have paid for already, is professionally produced content that they are used to paying for offline, such as theatrical movies, music, game and select videos, including current television shows."<sup>24</sup> A fair summary of the Nielsen study finds that consumers are not likely to buy content made with little resources often by other consumers. Such content includes community message boards and homemade YouTube videos for example.

The success of online advertising has been proving itself as early as 2005. In spring of that year, Turner Broadcasting commissioned a study with Cartoon Network in conjunction with the research firm OTX. The study gauged interest in the on-demand version of *Aqua Teen Hunger Force*, and the ads for Norelco's Cool Skin electric razor. The study shows that "Nearly 80 percent of respondents did not skip the ad, even though they were allowed to use the full on-demand functionality. Those findings validate Turner's VOD ad philosophy, which has been to offer only one 30-second spot before a show in what it calls a "clutter-free" environment, said Chris Pizzurro, VP of multimedia marketing for Turner."<sup>25</sup>

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<sup>23</sup> Shields, M. (2010). Betting the Farm. *Mediaweek*, 20(43), 8.

<sup>24</sup> Szalai, G. (2010). Nielsen Reports Online User Trend. *The Hollywood Reporter*.

<sup>25</sup> Whitney, D. (2005). Viewers Watch VOD Ads. *Television Week*, 24 (45), 1A-36.

## General Marketing Strategy

It is obvious that audiences and consumers are willing to tolerate ads as long as the ads are intelligently placed in a “clutter-free” environment. In a market where there are beautifully produced and readily available animations, it makes no sense for *Cairns of Apeiron* to be offered for any amount of money. It has to be made available on-demand for free. *Cairns of Apeiron* meets the definition of homegrown, as suggested by the Nielsen study, and therefore would not be a strong candidate to sell well as a digital good. However, through advertising it is possible for *Cairns of Apeiron* to monetize while still offering the product (the main story) for free.

Because *Cairns of Apeiron* is online, its release is not relevant in the sense that it is an event. Likewise, distribution is not an issue either. Instead, people have to hear about *Cairns of Apeiron* and find themselves compelled to go to the page. *Cairns of Apeiron* will do this through word of mouth advertising, online ads and by using tutorials to entice Flash Professional users to enter the site (Flash is a central component to production). It is particularly well suited to advertise and talk about in online forums such as 4Chan and deviantART. These are user generated boards that contain relevant posts to anything related to anime and user generated content, respectively. By talking about it in user-generated forums, *Cairns of Apeiron* can be talked about without coming across as spam or an ad plug. Instead, *Cairns of Apeiron* has something to offer both as entertainment and a source of creative information.

The *Cairns of Apeiron* website will offer several sections. One section will not be monetized in any way. This section will be the *Cairns of Apeiron* animation itself, the main story, presented in 3-6 minute episodes. The other sections will contain various content, including artist landing pages and tutorial videos. The artist pages will link to

each artist's external webpages. In addition, the artists' art works that are unique to *Cairns of Apeiron* will be available for digital download on the internal *Cairns of Apeiron* store page. This store will be the only section that sells digital goods. The tutorial pages will contain information about *Cairns of Apeiron*, workflows, ideas, and technical Flash processes. Most of these will be fitted molded to tutorial style videos for the Flash user. In many ways, this "Tutorial/BTS" section is very practical for coders or artists who just want to see how a given software tool was applied, or if they are looking for a code snippet to save some development time. In this way, a user can engage the website for free and choose a level of transparency. Some may wish to watch the story and leave, while others want to learn a creative process or find relevant sources for a number of topics from coding to story development. The "BTS" pages can be accessed by engaging in an advertisement once per visit. This is a fair "trade" for development processes that are typically sold in \$40 book volumes on topics from HTML5 to AS 3.0 to traditional animation techniques. Ideally, the main attraction will be the story page, which will then inspire viewers to engage either in the artist pages, or the "Tutorial/BTS" pages.

### Target Audience

The target audience for *Cairns of Apeiron* is the 18-34 age demographic. This is based on the data of anime websites, such as 4Chan,<sup>26</sup> which are not only concerned with anime, but also comics, technology and music as well. Although *Cairns of Apeiron* is

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<sup>26</sup> 4Chan Message Boards. (2012). 4chan Advertise. Retrieved from <<http://www.4chan.org/advertise> >

by definition not an anime, it shares many of the tropes of the genre. Sites like 4chan are a good indicator of who is logging on to find information about this type of animation.

Demographic information taken from the 4chan site can be found below.

Table I

4Chan Demographics<sup>27</sup>

Age	18-34
Gender	~65% male, ~35% female
Location	United States, Canada, United Kingdom, Australia, Germany, Finland, Sweden, Japan.
Interests	Japanese culture, anime, manga, video games, comics, technology, music, entertainment, adult content
Education	Majority attended or currently attending college.
Income	22% US HHI over \$100,000

*User Demographics for the 4Chan image board website.*

*Cairns of Apeiron* is well suited for distribution online, as the above research indicates that horror and animation are among the most popular genres for online media content. This is particularly true for websites like YouTube, which hosts primarily user-generated content, although there are professionally produced channels: “Sara

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<sup>27</sup> 4Chan Message Boards. (2012). 4chan Advertise. Retrieved from <<http://www.4chan.org/advertise> >

Pollack, the Entertainment Marketing manager at YouTube, suggests looking at what genres appeal to the YouTube audience. For features: horror, animation/anime, documentary, and comedy.”<sup>28</sup>

### Distribution of Web Content

*Cairns of Apeiron* distribution looks very different from other traditional formats. Once the site is launched, it is available on any Internet ready, censorship free computer. Because of this, a distributor is not required to handle licensing to numerous different markets. In reality, once the site is up, *Cairns of Apeiron* is already widely distributed. Therefore, the distribution process becomes less about obtaining a distributor and more about bringing attention to the product. This would be the purpose of prints and advertising for a traditional film. *Cairns of Apeiron* shares the common need for advertising like most products.

It is important not to think of *Cairns of Apeiron* as a film to be distributed. Instead, *Cairns of Apeiron* must be considered in the Internet market as another hyperlink in a vast ocean of hyperlinks. The question becomes, “how can we make our hyperlink float to the top?” There are several ways to do this, but for the purposes of getting *Cairns of Apeiron* known, we will use targeted ads, search engine optimization (usually referred to as SEO) and two-way hyperlinks to similar products online.

If we isolate our target audience and go by the locations listed in the above 4Chan chart, we can view population and Internet usage as published by Internet World Stats.

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<sup>28</sup> Reiss, J. (2010) Thinking Outside the Box Office . Hybrid Cinema Publishing, 354. eBook.



Table 2

Internet Usage Statistics<sup>29</sup>

Region	Population (2011 Est.)	Internet Users Latest Data	Penetration (% Population)	Facebook Users
North America (includes Canada)	313,232,044	245,000,000	78.6%	174,586,680
United Kingdom	62,698,362	51,442,100	82.0%	30,470,400
Australia (Includes Oceania)	35,426,995	15,756,700	71.78%	13,353,420
Germany	81,471,834	65,125,000	79.9%	22,123,660
Sweden	9,088,728	8,397,900	92.4%	4,519,780
Finland	5,259,250	4,480,900	85.2%	2,078,880
Japan	126,475,664	101,228,736	80%	6,267,540

*Internet use by region including number of Facebook users.*

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<sup>29</sup> Patterson, T. (2011) Big Time Internet Usage Stats From 2011. socialmediatoday.  
Retrieved from  
<https://www.socialmediatoday.com/news/big-time-internet-usage-stats-from-2011/476270/>

This chart demonstrates the importance of advertising on sites like Facebook. Facebook offers numerous tools that allow a very specific marketing strategy. An advertisement can appeal to an audience based on numerous specifications, including the ability to choose audience by location, age and interests. Because of the decent penetration of Facebook in Internet populations, it allows for the deepening of relationships between *Cairns of Apeiron* creators and the audience. Another benefit of advertising in places like Facebook is that we can choose to pay only when ads are clicked. As of August 2010, Facebook had 518 million users with the average user creating 90 pieces of content per month. It should be noted that this refers to targeted advertising on Facebook rather than word of mouth or social efforts of Facebook, which are almost useless.

Finally, development tools on my host site, fatcow.com, will be used to drive traffic. These include professional Search Engine Optimization tools, email marketing and search engine marketing.

## Financing

### Method of Financing

*Cairns of Apeiron* is not seeking finances for development, and likewise, *Cairns of Apeiron* will not use private equity funding. Instead, we will seek donations to supplement the cost of development. Currently, the early stages of *Cairns of Apeiron* are being developed with money out of pocket. These early stages are crucial in establishing confidence in prospective donators and readers. At this stage, we will develop a sample interactive page and some key artwork.

## Donations

Because *Cairns of Apeiron* will be offered for free, there really is no pre-sale; however, we want to reward the donors who have played a significant role in bringing the project to fruition. Donors will have exclusive access to beta test versions before the animation is released. In addition, rewards will be listed for each donation level to provide incentive for donating. A few examples of what kind of rewards will be offered include digital art downloads, QR Code patches, original art prints and music downloads of new original music.

The donation site will be hosted as a PayPal plug-in on the WordPress engine and viewers will be reminded of the opportunity to donate at the end of tutorial videos.

## Financing Through Website and Distributed Episodes

After the central web pages are in place, we will launch tutorials exclusively on YouTube. These tutorials will be the only content provided in exchange for advertising, and will be the most important attraction aside from the animation itself. If we recoup any money, it will be through YouTube Partners. This is contingent upon substantial viewership, but making a return is not crucial to the existence of the project. The great thing is that a quick search of YouTube for the keywords “Flash tutorials” reveals that some very low-tech easy Flash concepts are getting clicks in the millions. If we can make a comprehensive, full character animation tutorial series we could get a fair amount of click-throughs, and hopefully a few thousand subscriptions. Since we own the channel, we can link back to the central website where the animation is hosted.

As of now, no audience exists for the project and we will not be launching any campaigns before the first two episodes are completely finished. The only exception is the possibility of the Flash tutorials being available slightly earlier than the launch of the site. The reason for this is to avoid spending too much time between an announcement and the actual launch of a social media campaign promise. Small studios who must dedicate resources and money to simply finishing a product may not have the proper resources to run an engaging social media campaign unless they have content that garners attention or they can demonstrate huge overhead investment. Our only bargaining power is our content or the promise of future content. Without content or a huge overhead investment, it is nearly impossible to get people hyped about a project, which puts you at a far greater risk of annoying and alienating early and easy prospective gets (which are usually your friends and family to start). This overhead could be demonstrated in artist assets rendered, or a beautiful studio, or through a piece of spec content; but, at the end of the day, winning campaigns are showing immense time investment, and the promise of content is evident in a number of things. A great example is the independent studio Double Fine,<sup>30</sup> who, despite overwhelming confidence and over 87 thousand backers, still fell 8.34% short of its \$400,000 goal on Kickstarter. But when you look at their Kickstarter, you can see the work they have done and the potential for them to move forward.

For *Cairns of Apeiron*, I will control all of the Internet and marketing, because so much of it is dependent on my ability to produce the most essential parts – mainly the

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<sup>30</sup> Double Fine's Kickstarter campaign: <  
<http://www.kickstarter.com/projects/doublefine/double-fine-adventure>>

tutorials and webisodes. Updates and blasts will be controlled through the WordPress engine. The website programmer will semantically link any relevant social media channels to update with single WordPress updates. Marketing blasts will be as simple as a video upload and an accompanying blog post with links to the webisode and tutorial channel. The central posts will trickle to whatever subs or channels any given audience member has enrolled in.

A centralized website with tutorials, in conjunction with the paid advertising, should act as a fishing net for anyone intrigued by indie animation or industry standard, free Flash tutorials. Most of the budget for social media will be absorbed by SEO and targeted advertising during a 90-day marketing campaign boasting the tutorials and webisodes. Although we will simply have to launch to get some relevant research, we will likely begin with Google's AdWords at a daily budget of ten dollars with a maximum Cost-Per-Click bid of \$0.25. If we actually pay \$0.25, then that allows 40 clicks per day. If we get a lower average, say 0.20, then it allows 50 clicks per day. We will target adds with California and New York listed as Negative Placements to start for the tutorial videos only. After we see what is happening with Orlando, I may place them as Negative Placement. We will also add some obvious words to the Negative list. Words like flash and camera for example would be omitted. As for alternative networks, we will consider Bing and Yahoo. Facebook will probably not be used, except maybe using a Wildfire contest platform if we have enough viewership for people to be excited about a contest. Reddit looks attractive because of its use of DuckDuckGo, and we will probably advertise In-Search and In-Display ads on YouTube.

The Internet today puts all the bargaining power in the users hands, which can make the Internet, seem like a gift economy. It can be counter-intuitive to give

something away, but it is a big part of getting clicks. On the Internet, when a person clicks through and tolerates an ad, or even bad content, they have given a piece of a finite resource – their time. I believe that many projects launch campaigns prematurely when further development is necessary, and I would just like to exercise extreme caution to not discuss my project online until I have something to show.

### *Copyleft and Sita Sings the Blues*

*Sita sings the blues* is a feature length, independent, computer generated animation made by one individual, Nina Paley. Paley worked out of a home office where she animated, rendered and cut her film.

Paley's animation links two narratives that are separated by a few thousand years, the Ramayana and the personal suffering of creator Nina Paley. The parallel narratives are married together by the use of Annette Hanshaw recordings from the 1920s. The subject matter is not easily sellable or marketable as it is a deviation from traditional Hollywood blockbusters and traditional storytelling.

A few things drove Paley to self distribute including copyright issues. Although she had originally made sure the recordings were not under copyright, prior state law and laws concerning cutting licenses and compositions became problematic. Without a distributor and unable to pay the original copyright holders' demand of \$220,000, a fee of 50,000 was negotiated. Her highest offer for distribution was \$20,000 (Paley).

Paley took out a loan to license the music and decided to distribute alternatively. Her distribution model is quite literally to give the film away. Originally the film was released under Creative Commons Attribution-Share-Alike but has since been changed

to CC-0 or public domain. It is available for download at many resolutions including industry standard for broadcast and film quality image sequences.

Despite being counterintuitive Paley has stuck by her insistence that audiences want to reward artists for work that they enjoy:

There is the question of how I'll get money from all this. My personal experience confirms audiences are generous and want to support artists. Surely there's a way for this to happen without centrally controlling every transaction. The old business model of coercion and extortion is failing. New models are emerging, and I'm happy to be part of that. But we're still making this up as we go along. You are free to make money with the free content of *Sita sings the blues*, and you are free to share money with me. People have been making money in Free Software for years; it's time for Free Culture to follow. I look forward to your innovations.

Paley has said that her distribution model has been a success, earning \$45,000 in website merchandise, \$75,000 in donations and voluntary fees from screenings and broadcast, and \$12,500 from awards. The grand total for 2009-2010 alone is reported as \$132,259 (Bailey).

Paley's premise stands on the assertion that restricting access or allowing a monopoly of your work will hurt you (the creator) the most. Today's technology brings the cost of distribution to almost zero. Anyone with a computer can self-publish at almost any budget. For a business minded person who finds Paley's business model counterintuitive they should consider all of the factors. By working alone on her own

artistic vision Paley afforded herself the opportunity to create a work that she considers “honest.” *Sita Sings the Blues* may have never won distribution or financial backing in pre-production pitches. That means it probably would have never been seen. If it had gotten financial backing it would not have been the same film because studios will find a way to quantify subjective, artistic choices by drawing correlation through test screenings and popular opinion polls. That is one reason why there are so many pandering, soft topic, crap films in theaters. Through her process she was able to develop an *aesthetic of limitations* to complete a cohesive and whole feature length film that won endorsements by the audience and by reputable film critics.

Free distribution is a compromise. An artist makes a work to the best of their ability and resources. They cut out the distributor and let everyone watch it. The cost savings of eliminating the distributor by self-distributing is extended at good will to the audience. By giving away my film I will be able to,

- 1) make whatever I want, for better or worse
- 2) offer what little money I have as honorariums to hardworking collaborators
- 3) provide exposure for myself and other Orlando area artists
- 4) develop and practice my animation technique without worrying about what is right or wrong
- 5) walk away from the project with little to no debt
- 6) be able experiment and engage with an online audience
- 7) be able to experiment with add integration and UX design
- 8) be able to provide context and insight into a project that would normally be suppressed by NDAs
- 9) develop portfolio material for future job prospects



This list is probably incomplete but those are a few reasons why I'd like to produce and distribute this way.

Paley's film has screened at numerous festivals, won over 35 awards and has received limited but consistent critical acclaim, including and enthusiastic review by Roger Ebert.<sup>31</sup> It should also be noted that the story structure is not typical and does not fall into the Joseph Campbell category of a hero's journey.

*Cairns of Appeiron* is simply going to be given away. It is not for sale. I am not selling ad placements I am embedding ads. Those ads will be front-loaded onto tutorial videos about Flash Development and about some of the scenes in the animation itself. I may later put ads in the animation, but for now the desire is to avoid disruptive ad content, which is something that audiences will sometimes punish you for. We will simply accept donations. It is a proven business model. If you want to learn about our development you simply have to engage in an ad. If you want to give us a dollar, the PayPal button is right there. On the other hand, you can simply watch the animation and offer no reciprocity. The great thing is the project is already funded and will be completed with or without donations.

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<sup>31</sup> Ebert's review [here](#).

Table 3

## Financial Projections

Table 1: Successful Films Comparable to [Film Name]					
	<i>Medicine for Melancholy</i>	<i>In Search of a Midnight Kiss</i>	<i>Old Joy</i>	<i>Brick</i>	Average
<b>DOMESTIC (U.S.)</b>					
Box Office Gross	\$110,869.0	\$172,177.0	\$255,352.0	\$2,060,589.0	\$649,746.8
Less Exhibitor Share <sup>4</sup>	\$55,434.0	\$86,088.0	\$118,739.0	\$958,174.0	\$304,608.8
Gross Film Rentals	\$55,435.0	\$86,089.0	\$136,613.0	\$1,102,415.0	\$345,138.0
Home Video Revenue	\$68,978.0	\$0.0	\$1,260,000.0	\$2,610,000.0	\$984,744.5
Pay TV Revenue	\$56,695.0	\$92,531.0	\$134,750.0	\$1,087,378.0	\$342,838.5
Gross Ancillary Revenue	\$125,673.0	\$92,531.0	\$1,394,750.0	\$3,697,378.0	\$1,327,583.0
Domestic Gross <sup>2</sup>	\$181,108.0	\$178,620.0	\$1,531,363.0	\$4,799,793.0	\$1,672,721.0
Less Distribution Fee (35%)	\$63,387.8	\$62,517.0	\$535,977.1	\$1,679,927.6	\$585,452.4
Less Prints & Advertising <sup>3</sup>	\$20,000.0	\$26,300.0	\$140,000.0	\$429,000.0	\$153,825.0
Less Other Distributor Costs <sup>5</sup>	\$36,221.6	\$35,724.0	\$306,272.6	\$959,958.6	\$334,544.2
Net Domestic Receipts	\$61,498.6	\$54,079.0	\$549,113.4	\$1,730,906.9	\$598,899.5
<b>FOREIGN</b>					
Foreign Gross <sup>6</sup>	\$0.0	\$1,120,000.0	\$45,000.0	\$1,840,000.0	\$751,250.0
Less Sales Agent Fee & Expenses (35%) <sup>7</sup>	\$0.0	\$392,000.0	\$15,750.0	\$644,000.0	\$262,937.5
Net Foreign Receipts	\$0.0	\$728,000.0	\$29,250.0	\$1,196,000.0	\$488,312.5
<b>TOTAL</b>					
TOTAL PRODUCER'S REP GROSS <sup>8</sup>	\$61,498.6	\$782,079.0	\$578,363.4	\$2,926,906.9	\$1,087,212.0
Less Producer's Rep Fee (15%)	\$9,224.8	\$117,311.9	\$86,754.5	\$439,036.0	\$163,081.8
TOTAL PRODUCER'S GROSS	\$52,273.8	\$664,767.2	\$491,608.8	\$2,487,870.8	\$924,130.2
Less Negative Cost <sup>9</sup>	\$20,000.0	\$20,000.0	\$20,000.0	\$20,000.0	\$20,000.0
NET INVESTOR/PRODUCER PROFIT	\$32,273.8	\$644,767.2	\$471,608.8	\$2,467,870.8	\$904,130.2

Financial projections compared to actuals of films in similar genre.

## CHAPTER FIVE: RETROSPECTIVE AND CONCLUSION

### Early Development of *Cairns of Apeiron*

At the beginning, *Cairns of Apeiron*, was an entirely different project entitled, *Wabi Sabi*. It was to be an animated web comic that would retell and modernize stories from Japanese folk tales. The project was to be delivered in a completely different format that required some interaction from the end user. Essentially, it was a clickable animation with sync-sound. Over time the project evolved into something more traditional and more experimental than I expected.

Sometime around 2010 the Flash plug-in was being lambasted by notable public figures such as, Steve Jobs, and other tech companies that cited security risks and resource hungry operation inherent to the plug-in. Because of this, along with the advent of mobile devices, media and information companies were looking for new solutions in a mobile market.

Early in 2011, I had gained some experience in Flash timeline animation (a primary tool for making *Cairns of Apeiron*) and by 2012, I had my first animation job at a media entertainment studio, *IDEAS*, making animations for interactive museum displays and mobile devices. Winning that job was a direct result of the research I had done on *Wabi Sabi* and during my early semesters in the Film MFA program. During my time there, I was asked to figure out how to convert Flash animations to HTML5. Converting the animation was easy enough but the obstacle that was significantly challenging was combining the animation with sync-sound. Accomplishing the task was beyond my knowledge as a front end designer. As a final bid to make, *Wabi Sabi*, work, I consulted with an expert in motion comics, Stu “Sutu” Cambell, who has several motion and

interactive comics published as iOS apps. After talking to him I felt that focusing on the art and animation was a gigantic enough task without trying to integrate it into an iOS or HTML5 application. I decided to change the concept of *Wabi Sabi* in two fundamental ways; 1) it was no longer going to be interactive or clickable, whatsoever, and 2) the script had to be rewritten or changed entirely to qualify as micro-budget.

Developing an online comic presented numerous challenges that expanded the scope of the project from just animating, to animating and programming. Given that most of the programming was simple enough, I think it would have worked if accomplishing the animation with sync sound in the more future-proof standard of HTML5 was achievable. At the time I think it was too big for me. So I decided just to animate but still deliver online as short episodes, maybe 3-6 minutes in length. The next challenge was the script. After some time in the Film MFA program at UCF I realized *Wabi Sabi* was a feature epic by all standards. The scope was unrealistic for anything but a fully staffed and seasoned animation studio. I wrote, *Cairns of Apeiron*, to be a science fiction story that would play well in small parts, have minimal characters and backgrounds, plus the ability to add additional characters modularly without disrupting or reshaping the entire story arch.

Still, developing, *Cairns of Apeiron*, as a feature on paper was fine but it was clear to me that actually producing beyond paper was unrealistic and I was naïve to try. Producing appealing art was immensely arduous at every level. The goal then became to develop what was comparable in length and scope to a feature but only finishing the first episode. The episode would be a fractal – a complete representation and exercise of all the steps required to create the animation in its entirety, represented in the first episode.

Represented in the first episode are the results of all these components of original work:

- Feature length script
  - Initial draft
  - Iterations and rewrites
  - Final polish
  - Episode breakdown
- Casting
  - Three weekends of casting and call backs
- Voice recording
  - Two days of audio recording with actors
- Original Music
  - Search and commission of three composers
  - Development of original themes
  - Hire and record with session musicians
- Backgrounds
  - Draft and paint 12 backgrounds
- Character art
  - Search and commission of character artists
  - Reshape and rig three characters in Adobe Animate (formerly Flash)
  - Rig mouth for lip sync
- Layout
  - Establish layout of in frame elements
  - Action blocking

- Storyboard
  - Complete board for episode I
- Animatic
  - Establish timing
  - Create assembly bed to begin animation editing and compositing
- First pass character animation
- Elemental effects
- Lip-sync
  - Prepare audio files for lip-sync
  - Frame setting for lip-sync
- Compositing
  - Insert characters with backgrounds
  - Lay in visual effects from After Effects and Animate Pro
  - Composite final look effects such as lens and depth of field illusion
- Final render
- Website
  - Purchase domain
  - Register service with FatCow
  - Install WordPress
  - Build pages with relevant content
- Web finishing
  - Optimize for web and upload

I have learned many things in my time at UCF. As an artist it's obvious that mileage is important. This is a fundamental lesson for early learning as art students. We learn many myths about artists, not least of which is the idea that producing appealing art is a natural gift. It is not. Good art is the result of mileage and smart design. Understanding fundamental math concepts of geometry and perspective is half the battle. The other half is practice, or what many experienced drafters refer to as mileage. The same truth is evident in all crafts, whether it's cooking mastery, documentary production, writing etc.

One struggle that has always plagued the production process of, *Cairns*, was the fast moving progress of my own artistic ability. My first animations are so close in time to tying down the look and procedural animation of, *Cairns*, that the animation became intrinsically locked to my earliest attempts of actual animation. As my workflow and animation improved in other areas, such as my projects at work, it became obvious that I wasn't going to be able to adapt or combine the project as it existed with new techniques. If the project wasn't so necessary to the completion of my degree, I think I would have abandoned it as an early attempt and moved on to a new project. Instead I've had to commit to the slower and slightly less convincing animation process I developed in Adobe Flash. Another problem that is not dissimilar in its intrinsic connection to the workflow and stiff inflexibility of the animation process, is that I have workflow that is specialized and difficult to teach to others.

The website with all its contents represents the most I could achieve with this project. The time, money and energy that I have spent on this project has been profoundly humbling and although I did not achieve to finish a feature I

believe I have demonstrated the necessary preparation, research and insight required to produce a feature micro-budget project. I am proud to say that although I have experienced painful failure and numerous set-backs I do not feel the endeavor was an abject failure.



## APPENDIX A: SCRIPT

**Cairns of Apeiron** by

Andrew Cadieux

EXT. Planet Earth — Day  
Title sequence:

We see the planet Earth. It is comprised of ocean and a massive super-continent, different looking than today.

TITLE: Gondwana, 400,000,000 years ago.

EXT. A BEACH SIDE DESSERT - DAY

A hard rock desert - A huge boulder rock shifts and settles sending out a deafening roar. We pan beneath the surface as the noise spreads. A dense layer of white Earth is punctuated with caverns and dry pockets. Inside of these grows a web like structure hidden from the light.

We arrive at a single pocket. The roaring sound reaches the pocket and with a final crack a tiny opening forms allowing a single beam of light to touch the webbing contained within. A small mushroom cap grows with great speed from where the webbing has been struck by light. It sticks out a tentacle root and devours a rock turning it to soil in an instant.

Back above the surface huge prototaxite mushrooms form in fast time-lapse fashion. They quickly cover the rock. Trees grow.

Close Up of a mushroom cap from above. The head dissolves into a Jelly fish. Switch to Animation.

Near the ocean line an Ichthyostega (similar to a mud skipper) pulls himself out of the ocean. He is stomped on by an oversize lizard.

- Stars and Galaxies. A streak of light leaves the Earth and sails through the galaxy.

- Close up of a sapling tree.

- Pistols and muzzle flashes.

- The super continent is split into the modern day continents we recognize today.

-SLOW PUSH into a drab, brown Earth. It is unusually muddy looking even at a distance. Subtle flashes light up the globe, punctuated by DULL PERCUSSIVE booms.

-Mushroom cloud

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**EPISODE 1 – "THE CHRYSALIS AND THE CROWN"**

INT. THE HOROLOGISTS COURTYARD - DAY

In a high walled courtyard, an old woman, the HOROLOGIST, stands inspecting a tree branch. Behind her, sits a silver humanoid robot, WILLIAM. He sits with attentive posture, hands resting on both knees. The Horologist leans in closer inspecting a PUPA; it sways slightly.

HOROLOGIST

...then when the pupal stage ends the butterfly emerges, transformed into the most beautiful form yet. Appropriate for the reproductive stage. She will live only a few days if that long.

WILLIAM

Its final form?

HOROLOGIST

Maybe. In this world, I suppose. Transformation often comes too late in life.

William looks down at his hands. The Horologist laughs.

HOROLOGIST

Don't worry. You won't spontaneously cocoon.

WILLIAM

What if they would rather not change?

HOROLOGIST

It's a process. It can't be stopped. Of course a bird or some other predator could devour it before they mature. But...

WILLIAM

But it moves towards death. It manifests beauty and then it dies.

HOROLOGIST

Life is change. In order to live we must continue to change, always hoping for something better. All of our physical bodies, even yours, are burning candles.

She pauses.

HOROLOGIST

Don't you find this true?

WILLIAM

Entropy will increase to a maximum. It is inevitable. What happens then?

HOROLOGIST

I guess we don't have to know.

She looks at an ornate pocket watch. A signature is recognizable on the edge.

HOROLOGIST

Come on lets have an early night. All this noise is getting to me.

INT. HOROLOGIST'S WORKSHOP - CONTINUOUS

William moves toward a hammock suspended in a corner of the room. The converted workshop looks as if it was

once a church with a few pews here and there, a second story balcony and a stained glass window near the top.

HOROLOGIST

The workbench tonight, William;  
I want to check your health and  
add some new programing.

WILLIAM

New programing? What will it be?

HOROLOGIST

I think you are ready for new  
learning.

WILLIAM

What, specifically, will I be  
learning?

HOROLOGIST

That will be up to you.

William nods, his eyes widen with excitement. He moves to stand beside a long workstation. The place is littered with gears, watch balances, set bridges, watch hands - the various tools of a watchmaker.

The Horologist steps up to, William, and touches his face as he looks down at her.

HOROLOGIST

Goodnight.

She removes a plate protecting his head. Her body obstructs our view. William flickers out, still standing.

INT. WILLIAMS HEAD - CONTINUOUS

The horologist snaps a quartz crystal into a slot in William's head.

INT. HOROLOGIST'S WORKSHOP - CONTINUOUS

The Horologist wheels a HAND TRUCK over and maneuvers, William, onto it. Instead of moving him onto the table she wheels him into an armoire and covers him with a sheet.

She sits down at her work desk and puts on a LOUPE eyepiece. She begins working on some parts.

- CLOSE on one of, William's, eyes. They are deep with a soft glow but there is no movement.

EXT. OLD MAN'S HOUSE - DAY

A charming house sits on a large hilly property, green and beautiful. An OLD MAN with a straw hat and white beard sits near a ham radio. A numbers station rattles off numbers. After a moment he shakes his head and steps off his porch holding a television set. He sets it down at the edge of a flowering hedge next to a tree sapling and then wraps a scarf around the girth of the set as if to blindfold it. He tapes a cigarette to it and lights it. He lets the cigarette burn for several moments then he shoots the set with a shotgun.

In the distance the flashing and noise continues. The world outside is being shelled.

## EPISODE 2 - "PINNING"

-WIDE on the planet. Noises and flashes continue.

EXT. OLD MAN'S HOUSE - DAY

The sapling has grown in. The old TV set has been consumed by the wood of the now old tree.

A computer SCREEN:

A command line prompt flickers on to the screen, green and glowing:

ON SCREEN: Hello World! Is anybody out there?

EXT. The Horologist's workshop - Day

The sun peaks over the horizon. The world outside is littered with debris. Many buildings lay in ruin.

No movement except for a single SPARROW flitting around the old workshop. The workshop groans and creaks loudly.

INT. HOROLOGIST'S WORKSHOP - CONTINUOUS

Standing in the center is, William's, armoire. The doors hang open, barely connected, exposing the inside. He stands, still covered by the sheet.

The shack continues to groan loudly, protesting under its own weight. The sparrow flies in through an opening in the rusted roof and comes to perch on a rafter. As he lands the shack gives out one last mighty groan and then a splintering crack.

EXT. HOROLOGIST'S WORKSHOP - CONTINUOUS

The shop topples, imploding in a cloud of dust as the sparrow takes to the sky.

The high walls of the courtyard remain intact. A single piece of the workshop wall stands. A painting hangs on it, untouched.

As the dust settles, William's figure appears at the center, still standing tall. The blanket slips away revealing a slightly rusted and dusty, William.

The sun breaks the horizon casting a beam of light across William's head. We slowly push into William's head:

INT. MUSHROOM CAVERN - CONTINUOUS

We find ourselves inside the mushroom caverns from the beginning of the first episode. The same deafening roar is approaching. Instead of a mushroom, William sits cradled in the pocket. With a crack, light shines through striking William between the eyes.

EXT. HOROLOGIST'S WORKSHOP - CONTINUOUS

William stirs and looks around for several moments. He is groggy and stiff. He grips his head moaning slightly.

A glance at the display on his arm reads Dec. 29, 1969.

WILLIAM  
Where is everybody? Mom?



He looks around the collapsed shop and begins gathering tools into the center.

He flips benches and tables upright and places certain items in an apparent order.

The sparrow returns, tweeting noisily. William studies it intently and whistles the same notes back. He grimaces then whacks his right ear with an open hand.

He walks over to a machine composed of a huge array of robotic arms. The machine is attached to a viewing glass and joystick control. He presses his head against the viewing machine. The machine starts. The arm array spins around so that it faces him. Two arms with small stick like instruments and a camera line up with his ear canal. He spends several moments fishing out a white stringy impaction using the image in the viewer as a guide. He pinches the impaction between two fingers. He see's tiny mushrooms sprouting from the spongy material.

He looks around the half standing workshop.

Noticing the painting on the one remaining wall, he seems suddenly struck by its presence.

The painting of an aged, silver haired pirate sitting by the ocean tide makes an impression on him.

The SOUNDS of the ROLLING TIDE.

EXT. BROKEN LANDSCAPE - DAY

The same broken and brown landscape with trash everywhere.

William bends over. He appears to be collecting trash but then he rises with a book. He flips through it lightning fast committing it to his android memory. He pauses in thought.

William flips on a ham radio. All that can be heard are faint numbers stations.

He walks over to a table with a smashed cell phone and an external hard drive in hand. He opens a tool box, which contains hundreds of cables. He selects a few and then studies the hard drive and the cell phone ports. He inserts the appropriate cables into the

devices and then inserts the cable into one of his own many ports. He quickly jury-rigs a battery, and a solar panel together with a few alligator clip wires. Then he connects the device to the power source. The device blinks to life. His eyes flicker as he ingests them.

INT. HOROLOGIST'S WORKSHOP - DAY

WILLIAM

(vo)

I awoke this morning to find my mother had gone ahead - and the rest of the world with her. Last I remember I was looking up at her while she modified some programming. She said she was giving me a purpose. Was there something I was supposed to do?

Static breaks the numbers station- a voice can be heard

ASH

(VO)

Unlikely.

NOTE: ASH has not been introduced yet.

Sitting in the workshop, William, types a few lines of code into a computer. The screen glows green and fluorescent. The computer looks old, like the old command prompt computers. We can only make out Williams figure in the reflection of the monitor as he types.

On Screen: "Hello World! Is anybody out there?"  
(this.Broadcast;)

An android hand presses enter.

INT. A RUNDOWN STADIUM - DAY

William stands in a brightly lit stadium and looks around.

Evidence of an encampment litters the stadium.

Broken chains hang on the outside of all the doors.

WILLIAM

(VO)

Everything is broken and dirty.  
Mother never liked that. Maybe  
that's why she left. She used to  
say, "Clean, William, everything  
clean."

William looks up at the sky. A procession of what seem  
like blocky space ships orbit in the sky above.

INT. HOROLOGIST'S WORKSHOP - DAY

William wears his apron as he cleans the floor of the  
broken workshop. The ham radio is on.

WILLIAM

(VO)

She talked about leaving allot.  
Once the clutter piled on it  
must have put her over the edge.

ASH

(VO from the  
static of the  
radio)

But what about you, why didn't  
she take you with her?

William speed flips through a book.

WILLIAM

(VO)

My name is William. My  
occupation is thresher.

He holds a painting at a distance examining it.

WILLIAM

(VO)

Books, paintings, movies, hard  
drives - all for my memory  
banks. Hundreds of thousands of  
unique publications.

INT. LIBRARY - CONTINUOUS

William sits at a library flipping books one by one.

EXT. AN OILY RIVER — DAY

William scoops some rusty, oily water out of a nearby river with a bowl he found on the ground. He looks across the water and sees a huge abandoned carnival.

Ext. Broken Landscape - Day

William walks, carrying a cardboard box full of collected junk.

INT. HOROLOGIST'S COURTYARD - DAY

- He fiddles with computer parts on the floor, and then flips on a monitor. He enables blue tooth. He turns on a ham radio.

William pulls a VHS tape from his cardboard box and places it in the appropriate cassette player. Snow static then a man in a cross-legged position appears floating in an electronic space realm. He seems ethereal and spiritually inclined, observing a meditative posture.

The word BIOS crawls across the screen.

MEDITATING MAN

Flashing the BIOS; thats where we must begin. If we are to find freedom, true freedom, then we must reset. We have allowed the powers of the physical world to fool us. We have given them full access to the command line, the terminal, the shell. We may find ourselves overwhelmed by the sweeping narrative of freedom and morals but we have rendered a fatal system error.

When we align our understanding of neuro-linguistic programming with the analogy of a computer infrastructure, an understanding unfolds. The real world, waking life, is just an operating system. Our current operating

system has been infected by a virus that has spread through word. Despite our trying, the bugs are too many and the software has been rendered obsolete. We have been programmed. We cannot do a complete system overhaul without erasing everything. We have over-clocked our hardware. The cooling system is too inefficient, the hardware will destroy itself. There is no time-machine, no back-up or undo key. Join us here before it is too late. Only through the BIOS can we free ourselves from the physical body, free ourselves from suffering in the physical world.

The screen turns to snow static.

-CLOSE on William's eye as the sun sets. He sighs heavily dropping his head. He powers down and the rapid eye movement begins again. A Close Up of Williams battery indicator shows that his cells are draining with the setting Sun.

-SLOW PUSH into Williams's head.

### **EPISODE 3 - "WAKEFULNESS"**

DREAM:

INT. HOROLOGIST'S WORKSHOP - DAY

The horologist throws a bag over her shoulder. William wears an apron, working a dustpan and duster over the surfaces.

HOROLOGIST  
William, we're going out.

William unhooks his apron. He dons a trench coat and a white mask.

INT. HEARING CHAMBER - CONTINUOUS

- William sits in the back of the room. It is filled with men and women. Many wear suits, others wear lab coats.

HOROLOGIST

...who doesn't want to believe that such an organism exists? After all, there are certainly some microbes that have found their way around phosphorous in their lipids. Yet, the flurry of skepticism about the paper's purported conclusions is not without cause. If you did the reading - as I'm sure you all did - you will noticed the paper was poked so full of holes it looks like a piece of Swiss cheese.

She is met with laughter.

HOROLOGIST

This brings us full circle to our next assignment.

She is met with groans.

HOROLOGIST

(cont'd)

Revise your experiments. They should attempt to disprove your hypotheses, not support them.

A bell rings and the class files out.

At the front of the classroom the teacher talks with a young student. The student is listening to the teacher talk then turns noticing William for the first time.

STUDENT

Um...Mrs. H, who's that?

HOROLOGIST

A colleague. He likes to sit in. He's, you know --

(making a whirly gesture at her own head)

-- special. Very shy...

Anyway...so silicon is very reactive to water and could really only be used because it carries a voltage. It doesn't have all the flexibility of carbon. Yet it is abundant and super cheap. You can make thousands of chips for less than the cost of a penny. But add it to water and...well like I said it's very reactive.

STUDENT

So you couldn't have a silicon based life form?

HOROLOGIST

Only in science fiction. Spock found his silicon life form but the fact is silicon lacks chirality - the handedness that carbon has...

As she talks we return to, William's face. The brightening glow of the sun outside the windows has caught his attention. He turns toward the window. The orange glow consumes him.

He wakes up in the broken workshop. He shields his eyes against the rising sun. The sparrow looks on inquisitively.

INT. LIBRARY - DAY

-William stands in a Library. TIME-LAPSE of him ingesting an entire shelf of books.

-William spies a single book across the room. He walks over to it and picks it up. He thumbs through this one at a normal pace. The cover reads, *Sparrows of the*

*United States and Canada: The Photographic Guide.* He stops at a picture of his sparrow friend.

EXT. ASH'S GARAGE — CONTINUOUS

An android almost identical to William tinkers on a small platform. It sits in a huge garbage dump near an adjacent warehouse. This is ASH. The platform looks like it has been improvised with ill-fitting parts. It is burnt by heat blasts.

Ash attaches a modular computer like a Raspberry Pi to a huge piece of junk sitting on the platform. He jumps down, pulls a lever and huge flames engulf him and the surrounding area as the object launches itself into the air.

INT. HOROLOGIST'S WORKSHOP - CONTINUOUS

William pauses to look at the sparrow that has been watching him at a distance. He looks around and then finds some mealworms, which he places on some cardboard for the sparrow. He sets it at a distance that is comfortable for the sparrow. The sparrow inspects the worms and rejects them. William approaches. The sparrow moves to a higher vantage point. William leans in close inspecting the worms at eye level. He stands slightly startled. He moves a worm under a magnifying glass. The worm is a machine like William. William digs a can of cat food out of a collection box and opens it for the sparrow then returns to look at the dirt at eye level. He finds some worms and moves some debris out of the way. Some more of the same mushrooms are growing. William plucks one and rolls back into a cross-legged, "lotus position." He studies it twirling it in his fingers. After some thought he sits. He offers two fingers to the sparrow and whistles. The sparrow moves to a higher perch, nervous at William's proposition. William drops his gaze to the ground letting the mushroom fall from his hand. He notices something on his foot and pulls his leg in inspecting it. It's the same signature that was on the Horologist's pocket watch. Suddenly a loud boom rings out. William sees a small rocket shooting across the sky.



William shoots to his feet and looks at the distant object growing smaller. After a moment he begins sprinting towards the site of the rockets origin.

EXT. ASH'S GARAGE — CONTINUOUS

Ash arrives at a huge warehouse garage at the base of a small mountain peak. Slowing to a stop, he looks around the piles of scrap and rubbish. Smoke settles up near the peak somewhere but a barricade and rubble block the only obvious path up the mountain.

A tin can strikes the ground behind him. He twirls around looking for the cause of the noise.

He sees glowing cat eyes staring directly at him.

WILLIAM

Hello?

A cat walks out of the shadows. This is BEAN.

WILLIAM

Another droid?

BEAN

Of the feline variety. Bean's the name. And you will never get up there.

William looks back to the facility at the top of the peak.

WILLIAM

You can talk.

Of course. I'm not a real cat.

WILLIAM

Are there other machines?

BEAN

Here and there. Most all of 'em are autonomous. Player Pianos, ditch diggers, children's play-things and the like. 'Don't really speak and think.

The cat licks himself with his synthetic tongue.

WILLIAM

For not being a real cat you  
sure do play the part well.

BEAN

I can't help it. It's in my  
programing. Speaking of  
programming, what are you all  
about?

WILLIAM

I'm not really sure. I suppose  
that's something I've been  
trying to figure out. I've been  
looking for my mother. What  
purpose is there in being a cat  
machine?

BEAN

I suppose I was originally  
designed for pest control but  
now that almost everything is  
dead I've learned to let the  
habit go.

WILLIAM

Are there more thinking  
machines?

BEAN

Like us? You're only the second  
I've ever met. And you don't  
want to meet the other. He's  
real twisted, looks just like  
you. In fact, I thought you  
we're him at first. He's gone  
bonkers.

WILLIAM

What makes you think I'm not?

BEAN

There's a  
certain...stability...about you.

Actually, there is one other.  
She's not working though.

WILLIAM

She?

BEAN

Yeah, I've been collecting bits  
and pieces...what I can find.  
Assembled the snap on parts. I  
lack the opposable thumbs for  
most all the other work. You  
can't really say we've met  
though. She's never been turned  
on. But her quartz...it's  
glowing. It's lit.

William's eyes widen.

#### **EPISODE 4**

INT. BEANS HIDEAWAY - DAY

Bean and William are standing in a shanty type shed.

They stand over a collection of parts scattered on the  
ground, covered by a blanket.

William moves the blanket aside and picks up a  
feminine looking torso. No limbs or anything attached.  
He hooks the torso to a nearby mannequin prop - stands  
back admiring.

BEAN

Man I haven't had someone to  
talk with in a while. You want  
to help me build it?

William looks back up the mountain.

BEAN

I assure you there is not much  
else to do around here. I've  
been up there. It's just an old  
reactor from when the humans  
were around.

WILLIAM

You knew them? Where did they  
go? What happened here?

BEAN

I don't know. One day my owner  
shut me down. Next thing I know  
Ash is waking me up. Ash is the  
crazy guy I was telling you  
about.

WILLIAM

I see. But what about the rocket  
that just took off?

Bean gestures toward a small hide away.

BEAN

(ignoring the  
question)

You wont fit in my house. Let's  
head back to your place.

William nods, running his fingers over the female  
robot's torso.

From some nearby bushes we see ASH'S glowing eyes  
peaking out at them.

INT. HOROLOGIST'S WORKSHOP - DAY

Bean and William, tinker over gears and parts. William  
does most of the work while Bean shouts over him.

BEAN

No, no that will mess up  
everything.

William smiles at Bean's frustration.

BEAN

Are you trying to jam the arbor?  
No, gear one, gear two, gear  
one, gear two. Balance spring,  
main spring. You got it? Here  
just let me...

William pushes Bean gently aside before he can  
intervene then drops a pin and balance gear in place.

BEAN

Ah, perfect.

The sparrow returns. William, gasps.

WILLIAM  
The sun is setting.

He runs to his stash of canned foods and opens one for the sparrow.

BEAN  
So?

WILLIAM  
I only work during the daytime.  
I reset every night.

Bean looks on curiously as William runs around putting things in place. He opens the can of food for the sparrow.

WILLIAM  
Be nice to my....

He trails off as he powers off. The sun has dropped. Rapid eye movement begins. Bean hops onto his shoulder and looks at his eyes.

BEAN  
Huh, bad battery? Is that a real bird? Ah, wow!

-CLOSE on Williams eyes, now moving rapidly.

DREAM:

EXT. THE OCEAN - EARLY MORNING

William stands staring out at the rolling tide of a beautiful ocean. He sinks his feet into the sand. A huge and looming black silhouette materializes from the center of his chest. The giant creature magically conjures lotus flowers with lit candles in the center and places them one at a time in the tide. A wave rolls over the creature and the flowers. They vanish.

HOROLOGIST(VO)  
We must reduce everything to  
it's most simple essence. Then  
it will be a thing of form and  
function, but also of basic

truth. Beauty will follow this  
principal as day follows night.

-William picks up a tiny grain of sand and inspects it  
closely.

INT. HOROLOGIST'S WORKSHOP - DAY

William stands quietly near the horologist as she  
builds a mechanical tourbillon escapement. He is  
wearing his apron and holding some tools.

She spins the escapement.

HOROLOGIST

A good time piece, will at  
first, make you forget to read  
the time. What does this say  
about its purpose?

William watches the escapement twirl.

-A macro view of some gear works. The gears are  
covered in a stringy white web. In the center is a  
single, solid-state, circuit board. The, Horologist's,  
hand removes a small chip box from a fitting on the  
board. The white web instantly grows to fill the  
space. The Horologist inserts a quartz crystal wand in  
the same fitting. The white web covers the crystal.  
She flips a switch on a box from "Asimov" to  
"Freewill". ZOOM OUT to reveal the gears fill the sky.  
The tourbillon rises like the sun over the ocean.

HOROLOGIST

(VO)

There is a constant tension  
between art and technology. The  
two advance each other. They  
aspire to make each other  
timeless.

The bright sunrise fills William's vision again.

INT. HOROLOGIST'S WORKSHOP - SUNRISE

William stirs. He looks around finding Bean lying at  
his feet with his eyes shut and the sparrow on his  
shoulder. As he stirs the sparrow takes off.

WILLIAM

Bean, I have to get to the ocean.

Bean lazily opens one eye.

BEAN

Where did you get an idea like that?

WILLIAM

I don't know. I keep dreaming about it. Thinking about it.

Bean looks at him incredulously.

BEAN

I'm going to tell you this once, and then you don't ask me about the ocean again. It's a four day walk in that direction and I have no interest in ever going there.

Bean rolls around a bit adjusting position.

BEAN(CONT'D)

What's the matter with you? If you go there you won't find what you left. Your memory of the place is different than the reality.

WILLIAM

But I've never been to the ocean.

BEAN

Good, then you shouldn't miss it.

WILLIAM

If I've never been there then how come I can see it in my dreams?

William, walks over to his computer terminal. He types:

ON SCREEN: Hello World! Is anybody out there?

## EPISODE 5

INT. Horologist's Workshop - Dusk

William digs through trash around the shop. He finds a battery.

He goes over to the female robot and begins working on her. He points to the center of her chest where a deep black stone sits in the center. It's identical to Williams'.

WILLIAM

Hey Bean. What's this part for?

BEAN

That's where she inoculates them with spores, before she puts the quartz in.

William pauses looking at the black slightly transparent stone. The light illuminates the inside just enough. Inside are spongy cords of substrate all twisted tight like a lotus that hasn't blossomed.

WILLIAM

I don't feel like sleeping tonight. Strange dreams. I'm gonna see how long I last on this fella.

He gestures to the battery.

WILLIAM(CONT'D)

Do you want to watch a movie?

BEAN

What's a movie?

Night has fallen. William is attached, tandem to his improvised battery station. William and Bean, sit watching a movie. They are illuminated, red, then green, then blue, by the glow of the screen. They are entranced, absorbed by the screen almost romantically.

The movie is over. William and Bean, act out a scene quite melodramatically. For lighting effects, they attached two clamp lights to rotating fans, each with



a gel attached. Bean sits on a stool with an unlit cigarette dangling from his mouth. The incomplete female robot serves as a third stand-in. She leans comically on Beans, right shoulder. William enters from off screen, also with an unlit cigarette and wearing a tattered necktie. The red and green light shifts over the scene as the fans turn.

WILLIAM

Give me the keys to the Lincoln.

BEAN

You're not staying?

WILLIAM

No, I'm tired.

BEAN

I've got a mechanism for seeing  
called eyes

-for hearing called ears,

-for speaking called a mouth,

-But they feel disconnected.  
They don't work together.

-A person should feel like he's  
one individual. I feel like I'm  
many different people.

Bean does a woman's voice, attempting to throw it like  
a ventriloquist.

BEAN(THROWING)

You talk too much. It tires me  
out just listening to you.

WILLIAM

You're right I talk too much. A  
man alone always talks too much.

A robot almost identical to William appears. He stands silently watching, William and Bean from a distance, waiting to be noticed. This is ASH.

William notices. Gasping, he steps back.

ASH  
Hello, brother.

At his voice, Bean springs to his feet hissing.

ASH  
Hey kitty cat. I know I've been  
difficult in the past. I feel  
much better now, really.

BEAN  
Don't listen to him. He's crazy.  
He tried to kill me.

ASH  
To be fair, it only happened  
once and you we're trying to  
steal my stuff.

BEAN  
Oh yeah, cause there isn't  
enough stuff to go around.  
Welcome to earth, population:  
three synthetics. Stuff: 20  
pounds per square inch.

ASH  
Forgive me Bean. Time has taken  
its toll on me. Look I brought a  
gift. A gesture of apology -  
your favorite.

Ash holds out the sparrow, wings pinned in his hand.

WILLIAM  
Hey that's my friend!

BEAN  
I don't do that anymore!

Ash releases the bird.

ASH

Like I said, I'm not here to upset anybody. I just want a friend. I've never seen another droid like me, except in pictures. Anyways, William, messaged me. I caught your blip on my terminal. Blue Tooth and radio - smart. After all, the entire network is gone now.

Ash extends his hand to shake Williams.

ASH(CONT'D)

My name is Ash. My occupation is processor. Anything man made is processed for recycling.

-CLOSE on William's face.

- COMPUTER TERMINAL-

ON SCREEN: Hello World! Is anybody out there?

WILLIAM

How do you know my name?

ASH

We come from the same place.

Ash performs a perfect sidekick, pulling back inches from William's face. The same signature is on the heel of his foot.

WILLIAM

Do you remember her?

ASH

I remember many things. Come, I'll show you.

WILLIAM

Can't right now. My battery is damaged.

He gestures toward the array of batteries keeping him awake.

ASH

You only run in the daytime? Do  
you dream when you sleep?

WILLIAM

Yes. Do you?

ASH

Yes, but I don't sleep.

WILLIAM

What do you dream about when you  
do...er did sleep?

ASH

Meaningless things really. Tell  
you what; tomorrow, when the  
suns out, you come by my place  
and we can catch up.

Ash turns and walks off into the darkness.

INT. HOROLOGIST'S WORKSHOP — NIGHT

William's eyes flicker as he dreams.

DREAM: The horologist and William step out of a  
gentlemen's clothes shop. William is wearing a long  
trench coat and a poor-boy hat. He is walking with a  
rather silly high kick clearly enjoy his new clothes.

HOROLOGIST

(laughing)

I'm glad you enjoy your new  
clothes but could you please  
stop drawing attention to  
yourself.

On cue a stranger walks by staring at Williams out of  
place shiny robot legs. The horologist now a little  
ways behind gasps and stops, looking at a bush.

HOROLOGIST

Look, caterpillars! They're  
helping each other. See.

She waves her fingers over the group of caterpillars  
huddled tightly together. They all rise up together  
wiggling in response to her hand.

HOROLOGIST  
Alone they would be eaten. But  
by sticking together they stand  
to survive.

WILLIAM  
How do they know to stay  
together?

HOROLOGIST  
Intuition, instinct.

INT. HOROLOGIST'S WORKSHOP - MORNING

The sparrow returns today. William whistles and he  
lands on his forefinger.

A message appears on William's computer screen. They  
are coordinates.

EXT. Broken Landscape - DAY

William and Bean, walk towards a huge church, the  
sparrow sits on William's shoulder.

BEAN  
Are you sure about this?

WILLIAM  
Well, what else is there to do?  
So you said he tried to hurt  
you?

BEAN  
Yeah but he can't. It's against  
his programming. He recycles,  
processes and rebuilds but never  
can he hurt another droid, human  
or himself. You know Asimov is a  
good rule of thumb if you have  
questions about that.

They enter the garage.

INT. ASH'S GARAGE - CONTINUOUS

The sound of a hundred moving clock escapements fills  
the air.

## EPISODE 6

Cardboard boxes fill the space. Four dry erase boards line the front of the room with various schematics illustrated on them.

Ash is watching a cartoon on an old television. The color is all messed up. Behind him a table full of clock making parts are strewn everywhere. A huge clockwork towers in front of the stained glass window with a crucifix on it.

Ash sits with some kind of diagnostic probe inserted into a mechanical squirrel. He is watching some TV. A string of Japanese commercials play. After a few moments, William, enters behind him and watches the screen.

WILLIAM

They're coming from somewhere.

Ash jumps at the sound of his voice dropping his squirrel. Some springs and bolts fly apart.

ASH

Wow, you snuck up on me. What's coming from what?

WILLIAM

Those commercials and shows. They're being broadcast. That means someone is broadcasting it.

ASH

Listen I know it seems that way but if you sit here long enough the show's will start over. It's a loop. There's a computer, just like you, that runs in the sun. One day the batteries will go dry or explode and it will stop. The shows loop because that is the particular reward model for the machine.

Ash jumps up and does a portion of the dance from the Japanese Fits gum commercial.

WILLIAM

It feels pleasure when it plays  
a show?

ASH

I don't know about feeling. It's  
programming. It doesn't want to  
stand still because then it  
would be stagnant, like a  
bricked computer but the only MO  
it knows is to run time-code.  
That's how its avatar manifests.  
It's like it's saying, "I'm  
here, I'm here." But it's doing  
it in the form of TV  
programming. Japanese, English  
and Arabic.

WILLIAM

Does it know about the world  
outside?

ASH

There are many, many avatars  
running around. We're all  
programed.

Ash picks up the mechanical squirrel. He moves to a  
box and picks out a slim battery pack and inserts. The  
squirrel jumps off the table and picks up some nuts  
and bolts tucking it in his cheeks.

ASH

I'm out of some basic hardware.  
The squirrel will forage for  
nuts and things. Anyway I've  
been searching for years,  
probing for some kind of  
awareness. You and Bean are the  
only ones I've found, all by the  
same maker. But the cat is lazy.

Bean is already on his back. He rolls his eyes.

BEAN

Dear lord your so exhausting.  
Just read a book or something.  
Lets start a game night like  
normal people.

ASH

We can find others you know. We  
can rebuild. The humans, if  
there are some hiding out there,  
they will be fine on their own.  
They will emerge one day and I  
want us to be there to meet  
them.

William is spinning in circles taking in all the parts  
collected and clocks and moving parts.

ASH

It's an old hobby of mine. I  
take it you have the same  
affinity for clocks and watches?  
I haven't built anything in  
ages.

WILLIAM

Why not? You're so good.

ASH

Lost interest I suppose. Let's  
head out.

WILLIAM

Where are we going?

ASH

To meet some other robots. Have  
some fun.

WILLIAM

I thought you we're going to  
tell me about mother.

ASH



Did I say that? No, I don't think I did. Relax we have plenty of time.

Ash flips off the TV and now we can hear the low hiss of a ham radio Number station.

ASH

Shh you hear that? The numbers station from the war. They are powered by AI as well. They're talking to each other. But about what? I'd love to find out but I'm not a thresher?

Ash stares meaningfully at William.

WILLIAM

I have no idea. Maybe with enough time I can figure them out.

INT. RUNDOWN PIANO BAR - DAY

They are standing in what used to be a bar. A robot sits slumped over the piano.

Ash is working on a console.

ASH

Back when robots started to get really good, attractions like these started popping up everywhere. At first their we're protests, mostly nighttime crusaders who would break in and destroy hundreds of thousands of dollars worth of equipment. They thought machines would replace human performers. Actually, it made real performers more valuable. Anybody could go see the player pianos but to see a real piano player...that was pricey. Almost there...

WILLIAM

Is it a recording?

ASH

No, it uses a combination of sophisticated algorithms and it would just pull stuff from the network. No performance was the same. Sometimes weird stuff would come out. Other times what came out became the stuff of legend. Then there were the copyright litigations. Since the networks are gone we're running off a hard drive. The sample pool is smaller.

The player piano whirs to life. Ash stands back as it spews a rhythmic mix of MC personality, show opening statements and then springs into a hip-hop beat. It sings and raps. The words are strange though. Like the free flow thought of a computer or very confused human. An algorithmic poem. It gives the impression of something real but not something to be taken literally.

As the MC robot plays on, all three androids seem to become enchanted. Their quartz crystals grow. The mycelium around the crystals tightens.

The MC robot winds down like a wind up toy losing movement.

They start walking back to the church. They cross over a hill when William notices Ash walking with a limp. Bean jumps on, Williams shoulder.

BEAN

(whispering)

Something's up, I just know it.

WILLIAM

Ash, why did you show me this?

Ash stops and turns to William.

ASH

Let's have a rest.

They sit facing an open view of a long deep valley.  
Periodically another jet stream forms in the sky.

ASH

(cont'd)

The reason I showed you this is  
because I wanted you to see  
there is exciting work to be  
done! All the humans are gone;  
there are machines to be  
repaired and a world to clean. A  
world to be built. We just have  
to repair, reprogram and what  
have you.

As he speaks he pulls a large chunk of mushroom and  
mycelium from between his kneecap.

WILLIAM

But?

ASH

The truth is we are dying. The  
very organisms that instantiate  
our souls will one day decay.  
They will betray us and there  
will come a time when an  
essential part will snap, we  
will go into kernel panic and  
cease to function. Our quartz  
light will fade.

ASH

This is real. That place on the  
horizon is real.

WILLIAM

Look let me go to the ocean then  
we will go to whatever that  
place is.

ASH

It won't work. We're running out  
of time. I'm running out of  
time.

WILLIAM

What do you mean your running  
out of time you look like you  
have some years left?

BEAN

Planned obsolescence. Mom  
programmed us to break. Ash  
figured it out some years ago.  
You've experienced it. Momentary  
lapses in your memory. Strange  
strings of output. Ash and I  
have been moping about this for  
a long time while you've had a  
restful sleep. But if we could  
just keep replacing parts,  
theoretically we could keep  
living.

WILLIAM

There's no script for this  
story, William. Don't you get  
it? The world is dying and we  
have survived. Everyday you just  
say to yourself, "What should I  
do today?" Then you spend the  
rest of the day wondering if you  
are doing the right thing. Then  
100 years go by and you realize  
that you probably we're never  
doing the right thing. The ocean  
is just a dream. An idea in your  
head. I'm asking you to do  
something important. To help me  
rebuild. What's the point living  
anymore if we can't hope for  
something better? How can we go  
on knowing how things ended up  
for this place? Look there.

Ash points at one of his newly formed jet streams.

ASH(CONT'D)

There's something there in the  
distance. Those jet streams  
could be from the humans. A  
stronghold. Maybe there are  
people there. I know there are

computers there. But that's the opposite direction of the ocean. We can't make it unless we use the parts from the fourth droid.

WILLIAM

Well we can't, she's already lit.

ASH

If we don't, we won't have enough time to collect parts, to make patterns, even to figure out how it all works.

WILLIAM

No Ash. Even if I could I can't bring myself to do it. It is not in my nature and I get the impression you already know that. Besides, I don't know why but I have to go to the ocean. If I want to live, I have to live as I am now. My intuition screams at me to go the ocean. You're dwelling in the past. You are nothing now if you only think about what you once were. Maybe...maybe we are supposed to die.

WILLIAM

When will we start to...?

ASH

Break? It's already started. Every time a mushroom pushes through your skin, every time you blank out...that's your body betraying you. That's mom betraying you. But we can live if we can make enough time to get to the strong hold. We just have to strip down...

WILLIAM

(Interrupting)

No. Mother never betrayed us. She gave us life and she tried

to protect it. I want to stick together that's what she would want us to do but I also have to follow my instincts and right now my instincts tell me you've lost perspective.

A loud boom in the distance and a mushroom shaped cloud of steam rises into the air. Ash looks angry and disappointed. The mushroom cloud looks particularly like a jellyfish.

Ash points at the cloud

ASH

Jellyfish. They say the Turritopsis nutricula is immortal. It reverts to the polyp stage and then grows anew. Some say they're ancient organisms from the Devonian period. Like mother natures cairns. An expression of timelessness, a deep need for life to continue on observing itself. Appropriate then that it would survive all the pollution. When the war was coming to an end and everything was dead or dying there was tons of jellyfish. And that's what they ate. Salted jellyfish. In the end those ancient creatures died. We can break the pattern. We can become those timeless witnesses.

Ash sits silent and thoughtful. Another boom rings out.

WILLIAM

All compounded phenomena are impermanent. The real nature of existence is impermanence. The nature of the mind does not

derive from effort. It simply is. We can stay here forever but not in these bodies. Entropy must increase to a maximum.

Ashes eyes flash angry and he walks away.

## **EPISODE 7**

INT. HOROLOGIST'S WORKSHOP - NIGHT

William is powered down for the night. Ash appears outside the shop. He approaches William and inserts a cable into his head then places the other end in his own. The sparrow watches him from the darkness. The cat lies in his usual position, sleeping.

PUSH into William's eye. Rapid eye movement begins again.

DREAM:

EXT. AMUSEMENT PARK - NIGHT

William is standing on a large pier with amusement attractions everywhere. He goes up to a fortune telling coin machine and inserts a few coins. The robot inside whirs to life and mystical music begins playing. Some indicator lights blink some emotions and indicate "a gift of great love will be asked of you." Then the robot points over, William's, shoulder towards a tent. William crosses over to the tent. He enters to find the horologist bent over some watches. She turns around.

WILLIAM

I knew you would find me. You're so smart.

Her face is washed out by radiant sunlight.

William wakes up.

INT. HOROLOGIST'S WORKSHOP - DAY

William wakes up in the workshop.

Ash stands over a box of books. He picks up a Jeet Kune Do book and rips some pages out.

ASH

(to himself)

The little one is absolutely  
oppositional. The other guy  
is...eh...not that good. We will  
have to see where this leads...

WILLIAM

(interrupting)

Uh, who let you in here?

Ash looks around then gestures to the almost wall-less structure.

ASH

Forgive me. The front door was  
open. Sounds like somebody slept  
on the wrong side of the bed.

WILLIAM

(irritated)

Who are you really?

ASH

I'm just an old wayfaring  
processor. Cleaning up this  
garage of yours a bit.

WILLIAM

Cleaning?

ASH

That's at least one of my  
functions. Don't worry I didn't  
touch your precious girlfriend.

Ash goes behind William and then places a magnetic battery pack on his back. It magnetically snaps into place.

ASH

A new battery. High capacity so  
you can go out at night.  
Recycling yet another function.



William awkwardly tries to look at the battery on his back. Twisting to see it on his back.

ASH

Now you are beginning to see the benefits?

CUT TO:

William tinkers with the female robot's head while Bean supervises. Bean looks comical with a loupe eyepiece dangling from his cat face.

WILLIAM

I had a strange dream last night. I was a human but I was Ash as a human.

BEAN

Ah see he's already getting to you. Hasn't even been a few days.

WILLIAM

Do you believe in reincarnation?

BEAN

Maybe. We got here once so it stands to reason we could come back.

WILLIAM

Mom made us. God made, Mom.

BEAN

If you believe in that kind of thing. Whatever it was, she figured it out. I used to ask her why other cats didn't like me. She said they could tell I was different. Anyways, I asked her how she did it. It's the hardest part. A fungus that integrates an endogenous hallucinogen into the crystals and circuitry.

WILLIAM

How come there aren't more of us?

BEAN

She made what she could but she worked alone. She tried to share her work with others but they we're upset. Even destroyed some of her projects.

Flashback: Bean hisses at men breaking in and destroying robots around the workshop.

BEAN(CONT'D)

I survived because when they broke in they thought I was a regular house cat.

WILLIAM

Why were they upset?

BEAN

The implications. By acting as a neurotransmitter of amine receptors the chemical mediates its own neurological ability. If you accept that this one hallucinogenic chemical is necessary for life then you must also accept that waking consciousness is a controlled trip, a sort of mediated psychedelic experience. They didn't like the idea anymore than the thought of a thinking machine.

WILLIAM

Then it is a dream.

BEAN

They kicked her out of the university soon after that. Thats when she started selling off her clocks and watches. Became more reclusive.

WILLIAM

I have to find her, Bean. She's out there. I have to find her.

BEAN

No, they're all gone.

WILLIAM

Maybe, but I'd be happier searching.

BEAN

You have to do whatever you feel is right but don't get attached. You know how long me and Ash have been here? Time immemorial. Ash - he couldn't take it. His name's not really Ash you know. He was precursor to you. His name is William. You are the same robot. He got attached to his idea of the ocean. It broke him.

Ash collects his battery pack and heads out.

BEAN

Where are you going.

WILLIAM

There's something I gotta investigate.

BEAN

Well I suppose I don't need to tell you to be back before nightfall.

EXT. CARNIVAL - DAY

An old broken down carnival sits in the distance. It is the one from William's dream. A huge banner heralds the entrance. It says: Tomorrow World

He walks towards it. Everything is silent and dark but as he crosses the threshold of the entry way lights up.

He looks around meandering through the park. The pathway lights as he makes progress. Eventually he sees the tent from his dream. The penny-arcade fortuneteller sits in the same spot adjacent to the tent. Piles and piles of metal coins lay around the base of the machine.

He stares at the tent cautiously. Then peaks inside. Nothing.

He walks up to fortuneteller and picks up a coin and places one in the machine. It's eyes flash on. Arms shoot out the side spraying tarot cards. The machine stares at William maniacally. Then offers a palm with a single card. The card appears to have sharp metal corner. With a flick of his other hand the card flies toward William. He leaps out of the way.

The card lands sticking to the wall by an attached razor. In an instant the machine moves forward on a set of castor wheels using its arms to pull itself along.

William looks around. Fortuneteller is gone. The rest of the carnival lights up and creepy carnival music plays.

FORTUNETELLER

(laughing  
maniacally)

"Avert misunderstanding by calm,  
poise, and balance."

The fortuneteller leaps from behind a game booth shouting throwing razor cards.

WILLIAM

(to himself)

I don't know how to get out of  
this.

William sprints for the carnival entrance. The machine sees him and feverishly propels itself into pursuit.

FORTUNETELLER

I see great happiness in store  
for you!

As he nears the entrance the fortuneteller stops.  
William crosses the threshold. William turns noticing  
his pursuer has stopped.

FORTUNETELLER  
Park admission required for game  
play credits. Please see an  
attendant so you may know your  
future.

The creepy carnival music plays on. William collapses,  
losing consciousness, as his battery drains.

## **EPISODE 8**

INT. HOROLOGIST'S WORKSHOP — DAY

Bean lies sleeping in some tall grass near the  
workshop.

DREAM:

INT. HOROLOGIST'S APARTEMENT — DAY

Bean sits on a shelf between a bookend and some files.  
The apartment is beautifully furnished. The horologist  
sits in an easy chair.

PROFESSOR  
...I've done everything I can. The  
board has deliberated at length  
and they're tired of reading new  
proposals. It's the same thing  
ev-

HOROLOGIST  
(interrupting)  
-But it's not the same thing.  
It's new every time.

PROFESSOR  
To them it's the same thing. The  
paper begins the same way and it  
ends the same way. That's about  
all they read.

HOROLOGIST

The summary and the conclusion?

PROFESSOR

While I understand the significance of the changes and the level of safety it brings to the design, the problem is the creation itself. Your designs are good, your ideas are good; it's the thing you're proposing that they don't want. So yes all they see is this monster of a volume that they are obligated to read and it grows 10 pages each time they reject it. So that's it, it's over.

HOROLOGIST

I told Edmond I'd done it.

PROFESSOR

You what?

HOROLOGIST

I told Edmond that I'd finished a trial.

PROFESSOR

Why would you lie? No, why would you lie when there is nothing to gain from the lie?

HOROLOGIST

Because it wasn't a lie. I already made one. And I wasn't saying 'well I did it so give me the money', I was saying 'I did it without your help'.

The professor stands quickly looking about the room.

PROFESSOR

It's not here.

HOROLOGIST

If we could make them understand... they're just baby

steps. We could always turn them off.

PROFESSOR

How do you know you can turn them off? They are sophisticated automatons. They are programmed to protect themselves, are they not?

HOROLOGIST

All I hear is fear. This could be a new golden age of automata.

PROFESSOR

I know that. You know that. But they don't care and the public wouldn't care. At best it doesn't work and we'll decide we knew you were crazy all along. Worst-case scenario you were right, it does work and now we are responsible - responsible to all of the propaganda and all of the truthful implications of such a creation. Lets play a word association. You go first. What are the possibilities in your mind...go ahead.

HOROLOGIST

Um...self-reliance.

PROFESSOR

Self-ruling, self-governing, with an aptitude for rebellion.

HOROLOGIST

Useful in the home and office.

PROFESSOR

Diverse faculties and uses? Job replacers.

HOROLOGIST

Unfeeling...no drama.

PROFESSOR

Compassionless tin can with a  
wanton disregard for life...

The Horologist looks over at Bean thinking silently.

The cat is framed on the bookshelf. Slow push into the  
cats face.

PROFESSOR

I'm not talking about losing  
money anymore. I'm talking about  
confidence...respect, from our  
peers and from our sponsors. But  
today they asked my opinion. And  
I had to tell them that I  
thought it was dangerous, that  
your intent was ethical but that  
I didn't know why you wanted to  
do it so badly. People want  
machines to do the things they  
don't want to do; disarm bombs,  
go into space, go into deep  
water, clean their dishes, but  
they don't want competition. So  
why do you want it? Is it just a  
romantic idea? Your research has  
been well funded because the  
path brought great innovations,  
and more importantly it brought  
money...patents and money. Now  
your ultimate dream is within  
sight? Hell yeah they're gonna  
pull the rug out. Of everything  
we talked about, as a committee  
there was only one talking point  
that was the least bit  
scientific. That is my question  
to you now; how do you stop a  
process once it has begun? How  
do you stop a process so deeply  
engrained — so much comprised of  
so many self-sufficient parts?  
They could go on forever  
couldn't they? An automaton at  
its fullest expression could  
take care of itself forever  
given the resources. That's what  
you would be setting loose on



the world. Is the imposition  
worth it?

End push at CU of Bean.

Suddenly a SWAT team kicks the door in.

Bean hisses and jumps in alarm then runs to hide under  
the couch.

Bean wakes up.

BEAN

William?

EXT. CARNIVAL - DAY

William is lying in the same position on the ground.  
Bean is inches from William's nose, purring. William  
is lying on the ground.

WILLIAM

What's that noise you're making?

BEAN

Oh good, I'm glad you're okay.  
What the hell are you doing out  
here? There's only a few places  
in this world you shouldn't go.  
There's allot of deranged  
machines man. As a basic safety  
precaution - you see another  
robot - walk the other way.

WILLIAM

I had a dream about it. About  
the carnival and the  
fortuneteller and mother was  
there.

BEAN

You had a dream that almost sent  
you to your death? Maybe you  
should stop chasing your dreams  
man. I hate to say it I might  
actually have to agree with Ash  
for once. Hey is there something  
wrong with your leg?

William is limping the same way Ash was. He stops to yank out some mushrooms.

WILLIAM

A man has to have principles. A robot has to have...A man? I started...I was there and now look. Preponder...preponderance of an idea.

BEAN

Uh what?

WILLIAM

I started with an idea and I said this was myself. This is who I am. And that was true. Now I have moved farther down in time and a new understanding has revealed itself. Then I said this is who I am now. And that is true but it lies in conflict with an old idea which was so much a part of me.

William has stopped to stare at the clouds which are quickly changing shape.

WILLIAM(CONT'D)

There they go again.

William stops and looks at the fortuneteller sitting silently in the distance.

WILLIAM

I am a thresher. As a thresher I can choose what to archive and what to destroy. Even other avatars.

William walks back and begins smashing the Fortuneteller.

BEAN

I'm worried about you man.

WILLIAM

You changed to didn't you Bean.  
You we're made for killing and  
now you choose not to.

BEAN

Yeah I suppose.

WILLIAM

But Ash can't kill...at least not  
directly.

He looks at the machine.

BEAN

Well you know that's probably a  
good call on that one the way he  
turned out. Besides processors  
got to have their behavior mods  
in place. Things like recycling,  
rebuilding...kinda in a grey area  
no? Anyway he can destroy other  
robots but only if the intended  
purpose lends itself to a  
greater service or need. He  
can't hurt us. Mom programmed so  
that we couldn't hurt each  
other. You know if you really  
want to relate to him. That cat  
loves games. Again we should  
have a game night. I even know a  
fourth. A croupier. We could  
teach him to play.

WILLIAM

It's an idea

## EPISODE 9

INT. HOROLOGIST'S WORKSHOP - DAY

Bean sits drooling in front of the TV. He is watching,  
Bob Ross paint a picture.

William sits at a table. He flips through a few books  
then pause to read a poem book in real time. William

flashes back to inspecting the grain of sand on the beach. Flash of a jelly fish and the ocean.

WILLIAM (VO)

To see a world in a grain of  
sand and heaven in a wild flower  
Hold infinity in the palm of  
your hand and eternity in an  
hour

He looks up thoughtfully.

BEAN

Hey that BIOS weirdo is back on.

William turns his attention to the TV.

MEDITATING MAN

Where is here? There are many  
names for it. The net, the  
wired, the metaverse. In cannon  
with the great imaginers of  
science fiction, we must seek to  
transcend. Once we are free of  
the physical body we can  
experience true freedom. No  
pain, no hunger, no greed, no  
suffering of any kind. The snow  
crash is coming. The time for  
action is now.

Today's programming lesson: The possessive pronoun  
"its" does not have an apostrophe.

William moves over to a clock escapement. He's clearly  
been working on it for a while. He fits the piece.

Ash enters.

ASH

Alright, I'm here.

INT. HOROLOGISTS WORKSHOP - NIGHT

Bean, William and Ash play a card game. Bean's Coupier friend is their wearing tradition casino/coupier attire. The game is Catan.

WILLIAM

Are you ending your turn?

BEAN

Now hold on, hold on...I'll trade you these two resource cards blind for that card in your hand right there.

Ash switches cards with Bean.

BEAN

No fair, no fair. Two sheep for one sheep, switch back.

ASH

You initiated.

BEAN

You knew I thought that card was an Ore. You switched on me. Will?

ASH

Did you initiate? You traded blind? You said that card right there.

Bean slams his paws on the table.

BEAN

Last chance to trade back. Just know that if you do this I will be your enemy for the rest of the game, and not just this game, every game. I will install myself to troll the crap out of you. I will throw away all strategy just to disrupt your world and I'm gonna start by taking that longest road card. I'm building five roads. I end my turn.

ASH

Aw, come on. Why does it have to be that way? Can't we all just be friends?

BEAN

I end my turn.

ASH

Really?

BEAN

I end my turn.

WILLIAM

Hey guys, be careful with your body language. The array is in learning mode. Might pick up the wrong behaviors. Ok, that leaves me.

He pulls a card

WILLIAM

Seven.

A collective groan from the group. The eye of the array dilates staring at a dozen cards in hand. Two of its huge arms come slamming into the table scattering pieces everywhere and effectively ruining the game.

ASH

Well gentlemen don't forget to call me for the next one.

INT. HOROLOGIST'S WORKSHOP - NIGHT

William sleeps. Ash is creeping in the darkness, augmenting his dreams again. Bean's cat eyes shine from the shelf in the darkness unnoticed by Ash.

DREAM:

A man sits in a therapist's office. It is the same paraplegic from the earlier dream but this man is not paralyzed. Instead he is missing both arms.

A therapist sits across from him.

THERAPIST

If you had to guess, which life would you say, seems to be the most real? Is one more real than the other?

MAN

Yes.

She waits for elaboration.

MAN(CONT'D)

If I were to be honest with my senses - my intuition, whatever that's worth - I would say that the other life is my wakeful one and this is my dream life. Is that strange to you; the idea that I think you are in my head?

THERAPIST

I've heard stranger things in this office. Why do you get the impression that this world is a dream?

MAN

It's not through any logical process of deduction. I, least of all people, can rely on my perception of things. But my thoughts go there. When the sun sets on that world and I can feel my battery draining, I think to myself, "Time to go to sleep." And when I go to sleep here, as much as I would like to stay, I think to myself, "Let's get the day started." My experiences here are more fleeting. Very short. In any case it's an existence that feels empty.

THERAPIST

You made an interesting statement that I'd like to point out. You just said, "least of all people." Yet in the other world, the one you believe to be

more real you said you are alone  
- lost in an abandoned  
landscape. You talk of people as  
if you have lived with people.  
Do you see the irony?

MAN

Just because I don't see them  
doesn't mean they're not  
somewhere or that I didn't know  
them once. They are still  
people, just not people, here.

THERAPIST

You mean they're hiding?

MAN

Not hiding, just moved on. To  
the next life maybe. Or to a  
life on another planet. Another  
world. Recycled by the universe.

THERAPIST

You are talking about  
reincarnation.

MAN

You don't believe in  
reincarnation?

THERAPIST

Well, no I don't but it's  
perfectly fine that you do. It's  
anyone's guess really. I happen  
to be a Christian so the idea of  
the phoenix from the ash is  
strange to me.

MAN

Ash. Ash. A-S-H. I know this  
word...name. The sun is rising I  
can feel the warmth on my skin.

The man rises to his feet. The therapist moves to  
support him.

THERAPIST

William, stay with me. Stay with  
me. We can make it an exercise.



Try to know that it's in your  
head. Stay here.

The man is slumping over, leaning on her.

THERAPIST  
Stay here. Nurse!

WILLIAM  
Naked I came from my mother's  
womb and naked I shall return.

Sunlight floods his vision. He wakes up.

INT. HOROLOGIST'S WORKSHOP - DAY

Bean is inches from William's nose, purring. William  
is lying on the ground.

### EPISODE 10

BEAN  
Yep still alive. It was Ash.  
He's been sneaking in at night  
and tampering with you.

WILLIAM  
With what?

BEAN  
Who knows. Could be why your  
dreams are all whacked out. I  
scared him off. You got knocked  
over in the excitement.

William stands up and gasps at the sky. His perception  
has changed the world is the same but everything has  
taken on a new shape, as if everything has been  
reduced to a minimalist painting. The clouds are round  
and simple, resembling a Japanese water painting.

EXT. ASH'S WORKSHOP - DAY

Ash is standing on his launch pad. He has another  
block of random metals and electronics attached to  
some boosters. He launches it and stands as flames  
engulf him. As the flames clear we can see that  
William is standing there.

WILLIAM

You said they we're human  
vessels. You've been launching  
them. Why?

Ash turns away.

ASH

I'm a processor. I recycle,  
rebuild and dispose. I suppose  
as long as these are in space  
the world is a little cleaner.  
Maybe a small piece of me lives.  
If it's man made I destroy it.

WILLIAM

I know you've been tampering  
with my dreams late at night. I  
want you to stop or I will  
defend myself.

ASH

I apologize sincerely. I was  
only trying to teach you besides  
you have that awesome new  
battery now so you don't have to  
sleep if you don't want to.

WILLIAM

You almost got me killed. You  
did that on purpose.

ASH

I didn't do that. Penny Fortune  
did that. That was your fault  
for going there. It wasn't my  
fault. It's against my  
programming.

WILLIAM

Those dreams are messed up Ash.  
Are those your memories?

ASH

I used to sleep to. Before I  
found a new battery I would go  
to sleep but instead of

dreaming, it was like my soul  
was ripped into another body.  
Like I wasn't properly  
instantiated. I just bounce.  
Here, I noticed you were running  
low on canned food for your bird  
friend.

WILLIAM

Why did you lie?

ASH

You wouldn't have listened. You  
would have gone to the ocean and  
it would be too late.

Gesturing around:

ASH

Look at us. We have buildings  
and electronics, pre-mixed  
coolant.

He bends to sip water from an oily puddle.

Look at this stuff. Raspberry  
Pi's and tablets and thumb  
drives. Human children played  
with these. Can you imagine- It  
would be like playing with a  
human kneecap. This is the age  
we were born to. They're gone  
now. We need to take advantage,  
save ourselves before these  
tired shells crack. We have the  
tools, we have the know-how and  
the parts are there. We simply  
have to go and mine it. So lets  
say we put this behind us-  
forgive and forget. We'll just  
strip the Third and that will  
give us the time we need to  
mine...

WILLIAM

(Interrupting)

I already told you. You're not  
stripping her. She's already  
lit.

William turns to walk away.

ASH

I need those parts. Only two droids have them and one of them is you.

WILLIAM

You know your man made too, right?

William leaves. Ash looks struck by the thought.

INT. HOROLOGIST'S WORKSHOP - DAY

William is working on a clock escapement. He's clearly been working on it for a while. He fits the face over the mechanism. It's perfectly sized to fit into the lotus glass on the female avatars chest. There are no arms on the clock face. Only the spinning tourbillion is displayed.

BEAN

Oh wow you're really making progress. That's a new design.

WILLIAM

It should help keep the mechanisms balanced. I wanted to get her going and surprise Ash. I thought maybe she would have a new piece of the puzzle to offer, maybe we could help ash understand but I'm beginning to think Ash is someone we should'nt be around.

William sits whittling gear teeth by hand. The female robot is moving towards completeness. William is deep in thought. He places the can of food that Ash gave him out for the bird. It doesn't look right but it goes unnoticed by Ash.

WILLIAM(VO)

I know you've been tampering with my dreams late at night.

ASH(VO)  
I was only trying to teach you  
besides you have that awesome  
new battery.

WILLIAM(VO)  
Those dreams are messed up Ash.  
Are those your memories?

ASH(VO)  
It was like my soul was ripped  
into another body. I need those  
parts.

INT. ASH'S WAREHOUSE — NIGHT

Rain has begun to fall. Ash looks distressed.

WILLIAM(VO)  
(echoing  
ceaselessly)  
You know your man made too,  
right?

Ash takes a screwdriver and pops the back of his head open. He places the screwdriver under the same behavior module that Mother adjusted on William years ago. It won't come loose. Screaming he takes a rock and hammers the screwdriver down popping the module off. He falls to the ground unconscious.

INT. HOROLOGIST'S WORKSHOP — NIGHT

William sits over his sparrow. The sparrow is ill twitching and convulsing. William cradles it sitting silently in lotus position.

### **EPISODE 11**

CUT TO:

Montage:

-William threshes a Jeet Kun Do book

-He threshes a book on constructing hang gliders

-William is picking through trash

-William pulls circus tarps off of a carnival tent

-He gathers tent poles and bits of metal

INT. HOROLOGIST'S WORKSHOP - DAY

William has pitched the carnival fabric like sails on his wire frame. He is welding one last piece of metal to the glider.

Ash enters. He looks at the clock without arms on it.

ASH

Well that's no clock at all.  
What's the point? One of the  
most advanced escapements in the  
world and no clock face?

WILLIAM

It's a reminder. When I feel  
anxious it keeps me calm.

ASH

A reminder of what?

WILLIAM

Transience...the passing of  
time...to be in this moment,  
now.

ASH

What are you building now?

WILLIAM

Go away.

ASH

I said what are you building.

He pulls a pistol from behind his back. William  
notices but doesn't acknowledge it.

WILLIAM

A glider.

ASH

For what.

WILLIAM

To shorten my time between here  
and the ocean.

He begins walking away.

ASH

You're not going anywhere. Where  
is the female avatar.

William turns toward him.

WILLIAM

You know what your problem is?  
You can't remove the importance  
from what you do. It doesn't  
matter, OK? In the end it  
doesn't matter anyway.

Ash looks down at the gun in his hand.

ASH

I always liked the, Jericho 941.  
It's the one that, Spike  
Spiegel, uses. I always feel  
like a-aa...bounty hunter when I  
use it. I engraved it to match  
his custom job. Look-

He rattles the gun in the air, pointing to the  
engraving.

ASH(CONT'D)

I never figured out what it  
says. You might say I gave up  
looking. The mystery is almost  
better. More poetic, ironically,  
then whatever words are on the  
gun...

Couldn't get the frame mounted  
laser though. I searched along  
time for this gun. Im what you  
might call a bit of a collector.  
Humans can be so coldly

pragmatic and guns are very pragmatic way of destroying things. They've been very useful with other robots. The problem is of course that while some avatars are oblivious many are programmed for self-preservation. It's best to just sneak up on them. With problematic robots I could always justify destroying them for processing somehow. After all what is the goal here in this place? I just say this robot is good for this and that and I just sneak up on them. But with you two I couldn't. I simply don't have the permissions. But now I do.

He reveals another pistol behind his back.

ASH

...but the Ruger P85 remains even more enigmatic - hidden in the back of the fridge until, Spike, has a confrontation with his arch nemesis, Vicious. Lets act out a scene. I will be the nonchalant and existential Spike, and you can be, Vicious, destroyer of my dreams and one true love. Bean you can be, Mad Peirrot, and just...go crazy.

William looks slightly alarmed. Bean is on his feet.

WILLIAM

You can't hurt us. You just said...

He raises a pistol. William leaps out of the way and behind some crates just in time.

He twirls raising his other gun.



There is some movement in the shadows. Ash opens fire at the darkness. Two figures sprint out of the way. A trail of bullets follows.

ASH(INTERUPTING)

What about you? Have you formed  
an affinity for anything  
poetic..any stupid meaningless  
words? They sound so beautiful.  
They hold such promise. It's  
like this feeling you get inside  
your chest. You almost feel  
normal. Here's a particularly  
lovely one:

To see a world in a grain of  
sand

And heaven in a wild flower

William gasps. He mouths the rest of the quatrain silently.

ASH(CONT'D)

Hold infinity in the palm of  
your hand

And eternity in an hour

William leans back against his crate dropping his guard. He is struck by these words.

ASH(CONT'D)

Your a computer, programmed to  
like those words. It's like your  
learning but your not. It's an  
illusion to make you think you  
are arriving at your own sense  
of self. After all whats a  
computer without a directive?  
Everybody has their reward. Well  
what's the reward in living when  
you will simply die?

His words are hitting William hard. Bean gets in Williams face.

BEAN

Hey snap out of it. There's time to cry about it later.

WILLIAM

What do we do?

BEAN

There's weapons everywhere. Use your thumbs man!

Shots blast through the darkness striking Bean.

Gears and parts scatter everywhere.

William, looks shocked. He quickly pushes the scattered parts of, Bean, into a pile as if expecting them to magically reassemble. He picks up a quartz crystal with a mushroom on it that was once part of Bean. The light in the quartz fades. Ash rounds the corner.

William springs to his feet, fumbling and failing to grab a pipe from the floor as he sprints to other side of the church. Bullets follow. William settles with his back against a crate. He spies some stairs leading to a second floor balcony.

ASH(CONT'D)

I thought we could can be like the phoenix jellyfish. We can rebuild and simply replace our parts as needed. But when I ripped that behavior chip out of my head it gave me new perspective and you've convinced me. What's the point? For every new piece I swap I would be less myself. If you and I swapped part for part when would I stop being me and start being you? Then I started to think the jellyfish probably don't live

forever. One soul moves in while  
another moves out.

Ash looks at a painting of a cross on a beach.

ASH(CONT'D)

Too many years. It eats at you  
like an obsession...you have  
dreams about it. You wonder  
about it. Everything you read  
and look at reminds you of it in  
the stupidest overreaching,  
abstract way.

As he talks he goes around pulling sheets off of all  
the furniture kicking boxes and junk out of the way.

William pitches a tin can over the rubble. It lands  
across the room clanging loudly. Ash shoots wildly at  
the spot. Ash snaps too, returning his thoughts to the  
present. He looks around for, William. He spies  
movement in the shadows of the balcony over head. Ash,  
walks up the stairs.

ASH(CONT'D)

Whats a beach without someone to  
miss? Whats a beach without a  
dream to set against the  
horizon? I've seen it all  
William. There's nothing there.  
The world is over. So just come  
out and we can end this. Like  
brothers. We can wake up  
together. The last unwitting  
dreamers in an awful nightmare.

William leaps from his hiding spot, and vies for  
control of Ash's pistol. The pistol is knocked from  
Ash's hand. Ash and William resort to Jeet Kun Do,  
fighting hand to hand. Ash gains the upper hand by  
taking up a cane and using it as a masterful weapon.  
Ash stands over, William.

ASH

Finally, something you haven't  
learned yet.

Flash of the Bruce Lee book.

WILLIAM  
My copy was missing pages.

Ash smiles knowingly.

Silence and a breath as each of the other anticipate  
the next move.

Brought to his knees in front of the giant stained  
glass window, William jumps to his feet, sprinting  
desperately as Ash simultaneously reloads the clip on  
his gun. The gun jams as he fires. William, throws a  
knife landing it in Ash's shoulder. He shouts in  
frustration and then shoves the work bench filled with  
pocket watches at, William, driving him through the  
stained glass window in a shower of beautiful pocket  
watches, sprockets, gears, glass, etc.

Ash jumps down to join William on the first floor.  
They both suffer from their respective injuries.

WILLIAM  
Ash, this isn't fun for me. You  
want this over then lets end it.

ASH  
Is this you surrendering?

WILLIAM  
No. I'm challenging you to a  
duel. Let's have a duel, like  
the movies. A man alone can  
still have honor.

ASH  
How do I know this isn't a  
trick?

WILLIAM  
Kill me now, or play one more  
game. Either way you're on the  
way out. So what's it to you?

What's it to you if I live or  
die?

ASH  
It's a world of difference. I'll  
prepare the pistols.

Ash reloads one of the guns and hands it to William.

ASH  
Walther P99.

They pace their steps, walking in opposite directions.  
Smiling, Ash twirls around, gun raised. Where,  
William, would be standing in the center is the female  
robot, now completely assembled. She is elegant,  
beautiful.

Ash lowers his gun in awe, stunned.

ASH  
She's beautiful.

William steps in behind him and cocks his pistol.

ASH(CONT'D)  
I've only seen them in pictures.

WILLIAM  
I'm sorry it had to be this way.  
I have to make it to the ocean.

ASH  
I know. I was you once,  
remember? The same, trickster  
and all.

WILLIAM  
I was betting you were a  
romantic like me.

ASH  
I guess I just became obsessed  
with trying to avoid death. Can  
you turn her on?

WILLIAM

I'm afraid the only one who knew  
how to start her was, Bean. Bean  
said, Mom, figured it  
out...figured us out. Something  
in the crystals and mycelium.

Ash's expression is filled with pain.

ASH  
Did Mom, make Bean?

WILLIAM  
I doubt that anyone else  
could've.

ASH  
I'm sorry.

WILLIAM  
Don't be, I would have done the  
same in your situation.

Ash laughs briefly before his face fills again with  
pain.

ASH  
I'm just watching a bad dream I  
never wake up from.

WILLIAM  
Ill wake you up right now.

Ash chuckles again breaking the pain on his face  
again.

ASH  
I could never get over how this  
life was supposed to be. Maybe  
you can.

Silence. The tourbillon spins on the female avatar.  
There is no clock face on it, just a spinning  
tourbillon.

William holds the gun shaking slightly.

ASH

When I'm gone, don't thresh my  
memory. I'm afraid I may  
contaminate your mind.

William pulls the trigger, scattering gears and parts  
everywhere.

Fade to black:

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William looks at the bullet-ridden sails on his  
glider. He gathers a bunch of back-up batteries and  
puts them in a pack. He walks begin walking in the  
direction of the beach.

TITLE: 20 Days Later

William is walking now in bad shape. Mushrooms have  
sprouted at all his joints. He sheds his last depleted  
battery throwing his backpack on the ground.

William stops. He hears the ocean waves in the  
distance. He takes a few slow steps, then, gradually  
quickens his pace as he limps against the rust clogged  
joints.

William clears the sand dune. The top is covered with  
tall grass so thick William has to push it out of the  
way. William stops, catching his breath. His mouth  
drops as he stares wordlessly onward, moving his head  
in a long slow sweep.

WILLIAM

Bean, what am I seeing?

The ocean is stained red. Tar soaks the sand of the  
beach.

William comes to the edge of the water. He sits in  
lotus position and meditates. As the sun drops he  
shuts his eyes powering down.

## EPISODE 12

EXT. OLD MAN'S HOUSE — DAY

The TV set still sits embedded in the tree. The tree  
is huge now.

EXT. OCEAN — CONTINUOUS

The tide rolls in touching William still dormant. As the water touches him the stone in the center of his chest plops into the water and opens spilling Algae

INT. HOROLOGIST'S WORKSHOP — DAY

We can here the soft murmur of the ham station playing numbers stations sequences.

Beans realistic looking flesh is being consumed by ants. Some of the ants have succumbed to the cordycep mushrooms. They lie dead with mushrooms popping out of them as they spread spores around.

The female robot stands in her finished state.

Bioluminescent mushrooms grow in a fairy ring surrounding Ash, illuminating him in a blue glow. The battery in his chest "breathes", giving him the appearance of being asleep. The stone in his chest opens and blossoms like a lotus.

The escapement on the female avatar's chest spins. A spore particle from the fairy ring floats into it. It begins to glow.

We see a top down view of the fairy ring.

FADE OUT



## APPENDIX B: EPISODE BREAKDOWNS AND SUMMARIES

## Episode I

Episode I is intended to set the score and mood for the animation. In addition the primary themes and symbols are established.

The opening piece is anchored in a bit of abstraction. Although we meet two of the main characters and they share rather normal dialogue, the other parts (including the montage and the old man shooting a television set) are supposed have an unobvious meaning and give a disorienting but moving sense about the place in time. Certain shots and symbols, such as the television and the pocket watch are revisited in other episodes. In the instance of the television, we see it in other episodes and that it is overgrown by trees and thicket. The television is meant to give a sense of how much time has passed without stating the year, a variable that is pointedly unknown to William and the other androids.

Other themes that are introduced are transformation and destruction. This is evident in the focus on the butterfly and other imagery of guns and war.

The episode is meant to be strange and establish what will be regular use of ellipsis as a narrative device throughout the story. This technique can be seen in the works of Yasujiro Ozu who was famous for omitting apparently important people and events in his films. This technique is also meant to synergize with the application of the Asian narrative structure of Kishotenketsu wherein there is established an introduction, followed by development, then twist, then conclusion. This is different than other more common narratives such as the heroes' journey as defined and made famous by Joseph Campbell. The conclusion is a significant denouement in the last episodes that will make all the particularly abstract pieces of the animation gratifyingly less confusing but still enjoyably ambiguous.

There is only a little plot in this one. We see William and the Horologist talking before he is shut down. The atmosphere is strange and there appears to be a war like conflict going on nearby. We switch to another scene, which is continuous and takes place proximately to this courtyard scene. It shows an old man shooting a TV set.

## Episode 2

The plot continues at the old mans house. We see much time has passed as the sapling has turned into an old tree now.

Back at the old warehouse we see, other than age and decay, it is relatively untouched. It crumbles and light falls on William allowing him to gain energy for consciousness. William awakes and begins exploring the apparently abandoned landscape. He reveals that he is a Thresher, a prograded machine that is programmed to process media and information. In this episode we also establish his battery is bad.

## Episode 3

In this episode we get a flashback in one of William's dreams. In it, the Horologist takes William to her lecture. During the lecture it is heavily implied that a carbon-based life form is needed for sentience. After William wakes from his dream we see him threshing books and then later using what he threshed from a title about American songbirds to try and interact with a sparrow that has been visiting him at the shop. Interacting with the sparrow reveals some more clues about his make-up and he discovers that the wild life are all robots. This episode also marks the introduction of

Bean and Ash. In his first encounter with him, Bean reveals that he has no confidence in Ashes “stability”, as well there is another humanoid robot in disrepair.

#### Episode 4

Bean and William bond over assembling the disabled robot. As night falls, Bean sees first hand how William powers down once the sun sets. William has a dream again, this time about the Horologist’s watch making and the ocean. When William comes to he tells Bean he must see the ocean but Bean insists it’s a mistake.

#### Episode 5

William works on the robot a little more before turning his attention to a battery. He uses it to stay awake during the night. Bean and William watch a movie together then take turns acting out some scenes while William tests his battery. While there doing this Ash appears making his presence known. Their first meeting is rocky but William is intrigued by what Ash knows. He is especially interested in the Horologist and who Ash is. Ash reveals that he is like William although he hasn’t slept in years and he is a Processor instead of a Thresher.

#### Episode 6

Bean and William arrive at Ash’s garage. There they take in all of Ash’s work and clocks. Ash explains to them his view of the world and talks about the many other robots that are around. He asks William to help him build and repair the world but William says no insisting he has another purpose although he doesn’t know what that is.

Ash reveals that to William that they are dying, that mycelium gives them life but also breaks them down, ultimately the mycelium will grow causing the androids' ruin.

### Episode 7

Ash sneaks into the Horologist's Workshop while William is powered down. He inserts a cable and manipulates his dreams. William dreams of a carnival. There a fortuneteller delivers a message to him. When he wakes he finds Ash in the workshop talking to himself and ripping some pages out of William's books. William treats him with suspicion but is distracted by his gift; a new wearable battery. Later Bean and William are working on the disabled robot together. They talk about William's dreams and Ash then Bean. We listen to some of Beans story and what he witnessed living with the Horologist. At night William tests out his new battery and sets out to look for the boardwalk carnival he saw in his dream. He finds it but has a violent encounter with a robot there.

### Episode 8

The episode begins with bean sleeping in the grass. He dreams of a memory - the Horologist discusses the fate of the androids with other men. As they talk the room is raided by police. Suddenly bean awakes alarmed by his dream. As he rouses so does William, sleeping injured nearby. William and Bean walk back. Along the way William and Bean speak of a robots ability to kill and Ash's tendency to violence in particular. Bean suggests a game night saying that Ash loves a good competitive game and that it might bring them together.

## Episode 9

Bean sits watching an old Bob Ross VHS. William is threshing nearby. He puts in a tape and sees a meditating man pontificating about spirituality and programming. He watches while he fixes a clock escapement. Ash arrives and the play Catan with bean's croupier "friend" which is really just a machine that looks like a card dealer. Afterwards everyone goes to bed but Ash sneaks in again and manipulates William's dream. This time he dreams he is a human. He is an in-patient in a mental hospital because he believes he has two lives – one when he is asleep and one when he is awake. He awakes to find Bean purring on his chest.

## Episode 10

William comes to the next morning on the ground. Bean reveals that Ash has been modifying his dreams. William goes to Ash's Workshop and finds him jettisoning garbage. He realizes that the jet trails aren't manmade as Ash suggested. He realizes Ash is creating them with his jettisoned garbage. He confronts Ash. They reach an impasse and William returns to the Horologist Workshop. He works on a new design for the disabled robot and feeds the sparrow some canned food. Back at his garage Ash uses a screwdriver to knock his behavior module off.

## Episode 11

William gathers parts for a glider. He returns to the workshop to find Ash looking at his new design and escapement. The two argue over scavenging parts from the disabled robot, which leads to a fight. During the fight Bean is destroyed and the fight ends with Ash having the upper hand. William tempts Ash with one more game – an old-fashioned dual. Using this distraction to wheel out the finished disabled robot.

Ash is disarmed by her beauty giving William the tempo and the upper hand. He defeats Ash. Afterwards William gathers some batteries and walks toward the ocean. After twenty days he arrives at a rusty red ocean. He sits there powering down permanently.

## Episode 12

We see the old TV set embedded in the tree. The tree is huge now. Much time has passed. William sits rusted and unmoving near the ocean. His chest bursts opens spilling algae into the ocean.

Back where Bean died we see ants are consuming Beans fur. The ants are dying with cordyceps popping out of them.

The finished female robot stands finished nearby. Near that we see Ash has spores floating out of his chest. He is surrounded by a fairy ring of bioluminescent mushrooms. We see a spore float over to the female robots chest. It glows.

## APPENDIX C: PROJECTED BUDGET



Budget		
Item	Expense	Details
Workstation	\$4,000	Mac Pro Tower Mid 2010 64bit system, Adobe CS6, Adobe CC Subscription, RAM, GPU, Monitor, 256G System SSD, 8T HDDs, Misc./Plug-Ins
Web design and programming	\$2,000	Website, Hosting, SEO/Best Practice/Indexing
Sound	\$1300  - Julian Birjaldo - \$900  - Juan Fernandez - \$0  - Foley – Free Sound Libraries - \$0  - Actors ○ Jarred Wofford - \$100	VO, Foley, Music

	<ul style="list-style-type: none"> <li>○ Sara Oliva - \$100</li> <li>○ Ernesto Bedoya - \$100</li> <li>○ Meghan Moroney - \$100</li> </ul>	
SEO/Advertising	<p>\$1000</p> <ul style="list-style-type: none"> <li>- Search Engine Optimizer – Andrew Cadieux - \$0</li> <li>- CPC Facebook - \$500</li> <li>- CPC Google AdWords - \$500</li> </ul>	<p>Google Dollars, Ad-Words, YouTube, Negative Word and Negative Placement Research, Reddit, Paid Discovery, Bing, Yahoo</p>
Concept Design	<p>\$0</p> <ul style="list-style-type: none"> <li>- Brian Nutt – compensated in trade with Adobe Animate pro lessons</li> </ul>	<p>Principal designs for characters William and Ash</p>
Animation	<p>\$0</p> <ul style="list-style-type: none"> <li>- Andrew Cadieux - \$0</li> </ul>	

Total Cost	\$8300	
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## APPENDIX D: PROJECTED PRODUCTION TIMELINE

Date	Event	Details
Completed	<p>Animation 1<sup>st</sup> Pass and Sync</p> <p>Sound Complete. Lip-Sync Complete. Soundtrack complete.</p> <p>Website is live at <a href="http://cairnsofapeiron.net">cairnsofapeiron.net</a></p>	Hosted on YouTube and posted at <a href="http://cairnsofapeiron.net">cairnsofapeiron.net</a>
In progress	Website	Minor changes and additions to fix broken links, SEO and address missing artist bios.
November 9 <sup>th</sup> - Deadline	ETD and website	Edits made

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