12-9-2021

Artifact

Durotimi A. Akinkugbe
da6873@rit.edu

Artifact

by
Durotimi A. Akinkugbe

A Thesis Submitted in Partial Fulfillment of the
Requirements for the
Degree of Master of Fine Arts in Film and Animation

School of Film and Animation
College of Art and Design
Rochester Institute of Technology
Rochester, NY
Approval Date (December 09, 2021)

Committee Approval:

Thomas Gasek — Date
Committee Chair,
Professor,
School of Film and Animation

Kevin Bauer — Date
Committee Member,
MFA Director,
Lecturer,
School of Film and Animation

Mark Reisch — Date
Committee Member,
Assistant Professor,
School of Film and Animation

Table of Contents

Abstract **2**

Introduction **3**

Review of Research **5**

Process **7**

Self-Teaching Additional Software 9

Development Screenshots 11

Audio 15

Evaluation **17**

Conclusion **19**

Appendix **20**

Screenshots 21

Thesis Proposal 26

Bibliography 31

Abstract

Artifact is a 3D animated short film following the journey of a mysterious metal, altered by time and human interaction across several millennia. The titular artifact first arrives on a barren prehistoric Earth as the remains of a meteorite impact, a rock glistening with metallic ore.

The epoch passes as the natural world comes to life, vegetation growing at the site of the crater. The ore-rock, having remained untouched all these years, is finally found by an early human. It is attached to a stick, forming a primitive hammer. After some use, the hammer breaks, and the ore is smelted, then cast into the form of a religious worship effigy. Over time, the religion wanes, the now-aged effigy being used as a bludgeoning weapon during a conflict. The bloody effigy is lost to history as grass grows around its forgotten location. Eventually rediscovered by imperialists, the effigy is used as scrap metal to form a cannonball.

The cannonball is fired, crashing through the walls of a far off kingdom, kicking up dust. As the dust clears, the cannonball is now a tool of subjugation, a prison ball and chain. The ball is shattered, and as the pieces fall, they reassemble on a piece of wood as the teeth of an afro comb. The comb relocates to the back of a bare room, landing atop a dresser. The room fills with household items as time passes and a life is lived, then in an instant, the comb is now a museum exhibit. A powerful explosion occurs, and the comb is thrown from its stand. The wood breaks away and the metal melts together to form a small misshapen lump. The metal ball lands in a field, a destroyed cityscape in silhouette, as we see rockets fly up through the atmosphere.

Introduction

In conceptualising the film, I wanted to portray the passage of time and I believed it would be compelling to try conveying thoughts of our impermanence, how brief our lives are in comparison to the world around us. We're born, we live, we die, and (presumably) the world goes on. I often find it scary to think not just of the great unknown of death, but of how everything will carry on once I am gone, as it did before I was born. We live on a short timescale, relatively speaking, but the things we create and the actions we take can be significantly longer lasting. In this way we can be seen to extend our presence on Earth based on what we interact with and leave behind when we die.

The way I settled on conveying these feelings is through the idea of an 'artifact', in this case being the loose collection of metal that takes different forms over the course of the film, as it moves through time across human history. The artifact is influenced, altered, and used by people but outlives them all a hundred times over; the things that were important to those people are lost to the distant past, with an artifact being the only tangible thing remaining from that time. This is intended to be replicated at a larger scale in the ending of the film, with the artifact being left behind on Earth as humanity heads off into space.

The film also brings into question the meaning and utility we give to objects. I aimed to present the notion of how an object's perceived value changes depending on its context. The intrinsic value arguably remains unchanged, it remains this mysterious metal, but it has value ascribed to it by the people of a given era, as a worship effigy then as scrap metal for a cannonball, for example. An artifact that meant one thing to people in one time and place, can be given an entirely different meaning when brought into a different context. Does the original usage of an object hold much weight if those who originally valued that use are long since gone? Is there a best or right usage of an object? While I don't aim to answer these questions,

I'm hoping in this film that I can encourage thoughts of larger human society, and of what legacy we as individuals or groups leave when our time has passed.

While I aimed toward realism for the models and textures, the film makes use of a lot of abstraction. It is presented in chronological order, but the speed at which time passes in-world is not uniform; sometimes the time spent viewing the artifact is just a few seconds, others a few years. A lot of the world around the artifact is abstracted out, with environments generally being pared back. This simplification of the environment combined with stylistic actions and transitions is intended to make a surreal sense of non-reality. Examples of this are the way the trees bend and flex as they grow around the meteorite crater, or when the metal shards of the prison ball fall to perfectly form the teeth of the afro comb, which then flies to land on a dresser. The artifact stays mostly centered in the screen; this can be seen as reinforcing the idea that while times change during the film, the artifact is our anchor through it all.

While I wanted to depict historical eras and events, I also wanted to keep them vague enough to be largely recognisable across human history. As such I aimed to not explicitly reference a specific culture or event. A non-specific religion worshipping an idol, and a nondescript kingdom castle being besieged for example. To aid this generalisability, the film has no dialogue, which would have locked it into whatever languages I chose to incorporate

Creating the film proved to be no easy task, as I aimed to create as much of it myself, without purchasing any assets or enlisting outside help with work on the film aside from hiring a composer. Due to this, the film can serve as a snapshot of my skill levels at the point in time it was screened, and I feel more assured in calling it wholly my own, though I would like to take more collaborative approaches in the future. Overall, making this thesis film was an invaluable learning experience, and a crucial exercise in time management.

Review of Research

There were a number of influences I drew from when conceptualizing Artifact. These included the film concept of a ‘long take’, the opening sequence from Lord of War (2005) by Andrew Niccol [1], An Object at Rest (2015) by Seth Boyden [2], and museum dioramas (though implementation of this aspect was largely removed as the film’s concept was further developed).

The Long Take [3] is rather simply defined by the Columbia Film Language Glossary as ‘a shot of some duration’. In the case of my film, over its four and a half minute runtime I aimed to incorporate multiple long takes of up to thirty seconds, to really sell the idea of the passage of time. I also felt that trying to incorporate long takes would aid in the film’s intended exploration of continuously following an artifact through different environments. Part of the power of 3D animation is that reality can be abstracted in such a way that cannot easily be done in live-action film, and this enabled me to create long takes such as when the worship effigy artifact visibly ages in the shrine as the camera pulls in closer for example. It is important to note that long takes do not necessarily have to be made in one unbroken initial recording, with many modern filmmakers often opting to disguise cuts in order to achieve a long take. A prime example of a long take, I was inspired by, is in the opening sequence of Lord of War. Here we follow the journey of a bullet, from raw materials to being fired on an urban battlefield.

In conceptualising this film, I was immediately made aware of the already existing great 2D animated short film, An Object at Rest. An Object at Rest is similar in concept to Artifact, showing a rock as it is changed over time and put through different uses. The rock in this film however, is anthropomorphic. It often appears tired, bothered by humans and their interactions with it, wanting the peace to be able to continue its rest. I was fearful of creating work that could immediately be compared against such a successful film, as both follow an object over time as it is changed by events around it. While my initial film idea was more grounded in reality, with the titular artifact being specifically not anthropomorphised (instead, indifferent to the world around

it), my internal conflict here led me to be conscientious of not retreading the same ground as the existing film, which in turn, further influenced the way I developed my idea. While my premise may not be unique, I am hopeful that the implementation of the idea was distinct enough to let my film stand on its own as a separate work.

Another film with which Artifact may draw some parallels, is The Red Violin (1998), directed by François Girard [4]. The Red Violin weaves a story following a violin created by a master craftsman, and painted red with the blood of his deceased wife. The violin's journey takes it through multiple centuries, to then present-day New York. Again, we have a case of an object being the main character in a film and a story spanning far longer than a single human lifetime. Being a live-action film created in the late 90s, this film inherently has certain restrictions imposed upon it that do not exist in animation such as the wild on-screen environment transformations seen in An Object at Rest for example. Though parallels can again be drawn between the concept of this film and mine, they are less closely related, as The Red Violin is about this singular form of the wood, metal, and blood, it's life as the violin, rather than the many forms its parts take before and after this time. This is a film I had not seen prior to completing my thesis film, and so I did not have an opportunity to draw any direct influence from it.

As I figured out how I wanted to present a story of a mysterious artifact, a concept I felt drawn to, was that of dioramas. Specifically, museum dioramas, as they illustrate a moment from the near or distant past, frozen in time. I believed it would be an appealing visual aesthetic if some of the environments and setpieces of my film were staged to look like an educational miniature model that one might find in a museum. The idea I had was to have the film show two different realities, one in which we are looking at the diorama as this staged miniature model, and one in which we delve into the depicted scene and are experiencing that past moment. I explored this concept for some time, but as the film developed, however, I found that I could not lock in on a way to incorporate the diorama aspect without the presentation of the film becoming

too muddled. To streamline the creation process, and make effective use of the time I had available, I decided to remove this aspect from the film.

Process

As mentioned in the introduction, a primary goal I had for this film was to create as much of it by myself. This meant that creating *Artifact* was a lengthy process of learning, exploration, and experimentation. While the story flow of the film is largely unchanged from my first animatic, creating assets, environments, rigs and visual effects were all processes of trial and error. However, the film's inception came long before reaching that first animatic.

The initial idea for the film was one I had some years ago, toward the end of my undergraduate program. This first concept was simple, a short film following an object over a long period of time; there would be an abstract crumpled ball serving as the artifact, centred in the screen for the entire runtime, with the world changing and events occurring around it. At the time I had only recently decided to pivot into pursuing animation as a career, and was brainstorming ideas for work that would grant me entrance to a graduate program. The film was to be traditional pencil on paper animation, shot on a downshooter with Dragonframe, as that was all I had experience with at the time. I eventually deemed it to be too ambitious of a project for the two months or so I had to work on it, but knew I would want to attempt the concept in the future. Incidentally, it is this film concept I would return to and further develop for my thesis film at the end of that same animation program I had been attempting to gain entry to. In this time, I had focused on becoming a 3D artist, and so now the film would be a digital 3D animation, rather than pencil on paper.

Making this film was very much a learning experience, not just in terms of technical 3D skills, but in terms of transcribing story ideas from the abstract ideal in one's own mind. This

began with making simple bullet point notes as I explored the story in my mind. From these notes I was able to put together a rough timeline of how the film would go. With the help of this draft timeline, I was able to begin storyboarding. The act of storyboarding enabled me to begin planning camera angles and shot lengths, which were further solidified as I converted the initial boards into an extremely rough animatic. In creating the film itself, software used included Maya, Blender, Substance Painter, Mixamo (for motion capture movements in the bludgeoning shadows shot), MakeHuman (as a starting point for the arm rigs, and for the humans seen in cave shadows), and TreeIt (to create background foliage). There was still yet more software I would have hoped to utilise, Unreal for its incredible high fidelity realtime rendering capability, and Houdini for being the industry standard in visual effects. Ultimately I did not explore these software during the creation of my film in order to budget my learning and working time effectively.

Once I felt I had largely settled the story and required camerawork, I assembled a prop list. Though I would adjust and add to it over time, this invaluable resource enabled me to budget my time, and spend the first four months of the project primarily creating the various assets I would need. The asset creation process generally would require anywhere from a few hours on one day to several hours across multiple days. I would first collect reference images, then make a rough block of the model in Maya. I would then use the rough block as a template while I built a low poly version of the asset with good topology. From this low poly version, I would add smoothing iterations as needed until I felt the asset was suitably pseudo-realistic. I would then use Substance Painter to create texture maps for the given asset, making sure to bake details from the high poly map onto the low poly asset in order to optimize the file size for each final asset. Once texturing was completed, I would then render a few images to showcase each asset on my thesis blog. This worked well both as personal reference, and to keep my thesis advisor, Professor Gasek, up to date on my progress. At the same time, I would allot days for self teaching other techniques and software, such as EmberGen, which I used to create the

visual effects for the meteor, smelting bowl fire, and nuclear explosion. These too were showcased on the blog as I learned.

Self-Teaching Additional Software

I will briefly touch on some of the self-teaching in additional software that I did for the creation of Artifact, namely my usage of TreeIt, EmberGen and MakeHuman. As this was my most ambitious film project yet, there were aspects I wanted to include that I unfortunately either had no real experience in (such as VFX simulations) or was not at a level I felt confident in (such as character modelling). For these reasons, I embarked on learning some alternative software as part of the creation process for my film.

Creating a lot of varied vegetation via conventional modelling methods can be extremely time consuming, and so I knew that my approach to creating the forest shots in the film would be benefited by seeking out either specialised alternative software or plugins. Before doing any research, I was already aware of SpeedTree, a collection of vegetation modelling software often used by game studios. However due to the cost, I opted to search further afield for my vegetation creation solution. After some research, the free alternatives I found were WebPlant (a web service), Modular Tree (a plug-in for Blender), and TreeIt (a standalone program). In testing out WebPlant, I found the visual style of vegetation I was able to create there to be unsatisfactory, or at least not in keeping with my desired style for my film. I then opted to try TreeIt, in which I was able to produce vegetation with much more control and that fit within the stylistic goals of the film. As I was largely satisfied with TreeIt after testing, and because I was conscious of time management, I did not take the time to explore Modular Plant. While I was indeed largely satisfied with the results from TreeIt, importing my created trees into Maya proved to be a cumbersome task, in part due to Maya's file importer not accepting certain FBX files and also due to the difficulty of setting up the leaf textures to ensure the image planes had

the correct transparency and transmission. Due to increased image noise and render times, I ended up foregoing light transmission on the leaves entirely.

The well-known big player in visual effects for 3D animation is Houdini, however it is also known for having a notoriously steep learning curve. As I was anxious not to spend too much time attempting to learn such a complex software, one which would necessitate me spending time on campus during the height of the coronavirus pandemic, I opted to delve into a software still in development that I had only come across a few months before starting my thesis, EmberGen. EmberGen, in development by JangaFX, is a VFX program that allows for real-time simulation and playback of fire, smoke, explosions, and related effects. Thankfully, JangaFX allowed students to apply for a free license, and so my only real investment here would be time. EmberGen proved to be quite an intuitive software, and my laptop had a sufficiently powerful GPU that the real-time playback of even rather complex simulations was possible. This realtime playback is, of course, different from the render times it would take when the simulation data was imported into Maya or Blender, but it was impressive to see nonetheless. The simulations I created in EmberGen were of the meteor in the film's opening, the fire beneath the smelting bowl, and the mushroom cloud explosion outside the museum window. Maya seemed to be quite finicky when it came to importing the VDB files of my simulations such that I could not accurately place them in the scene, and so all my EmberGen simulations and their corresponding scenes were imported into Blender, and rendered either with Eevee (the meteor), or with Cycles (the smelting fire and the mushroom cloud explosion). The Eevee render of the meteor was decidedly less visually impressive than EmberGen's real-time render, or a Cycles render I tested of a few frames, but issues with the RIT renderfarm and my Blender files meant that using Eevee for that shot was the optimal method to ensure all my scenes were rendered ontime.

While my film was not character-focused, there would be some human body parts and moving full-body shadows making appearances in it. My confidence in being able to model a

character effectively was low, and my confidence in being able to rig it effectively was even lower. When first ideating on the film's concept, I had considered having at least one full body appear in the film, but ultimately went with the stylistic choice of only having arms and legs appear on-screen. Regardless, this is where MakeHuman came in as a vital tool to help create my film. MakeHuman is an open source free software that allows users to prototype and create realistic human models. The interface is fairly simple so it did not take long to create a basic character model that I was happy with, there were also options to adjust the topology and number of bones assigned to the character depending on your goals for the character model. For the arm rigs, I used the character I created in MakeHuman as a base and modified it in Maya, deleting the rest of the body, modifying topology, re-binding the joints, weight painting the skin and adding controllers. It was perhaps my least enjoyed part of the project, but after a lot of trial and error, I created a workable arms rig that I was effectively able to animate in the film. I then modified this rig to create a second set of arms with a redcoat sleeve, which served as the soldier/explorer arms briefly seen in the film. For the moving human shadows in the bludgeoning scene, I created an additional female character in MakeHuman, and used the online service Mixamo to assign motion capture data to the models. Mixamo has its own integrated rigging tool to ensure the motion capture data is correctly configured to the uploaded character; as a software it was thankfully easy to use and even allowed for tweaks to resultant animation from the selected motion data set. In all, Makehuman and Mixamo were crucial resources that helped cover for my weaknesses as a character artist and rigger, and ensured I was able to stay on track with time constraints on the project.

Development Screenshots

As this film was made during the 2020-21 coronavirus pandemic, I was fortunate enough to be able to work from home all year round on the film, with a fairly powerful laptop. Constantly dragging around and flipping through software windows did make me miss the advantages of

dual screen setup, yet I was grateful to be able to continue my work largely unhindered by the global circumstances. Below please see some images showcasing the development of shots from storyboard, to 3D animatic, to screened film.

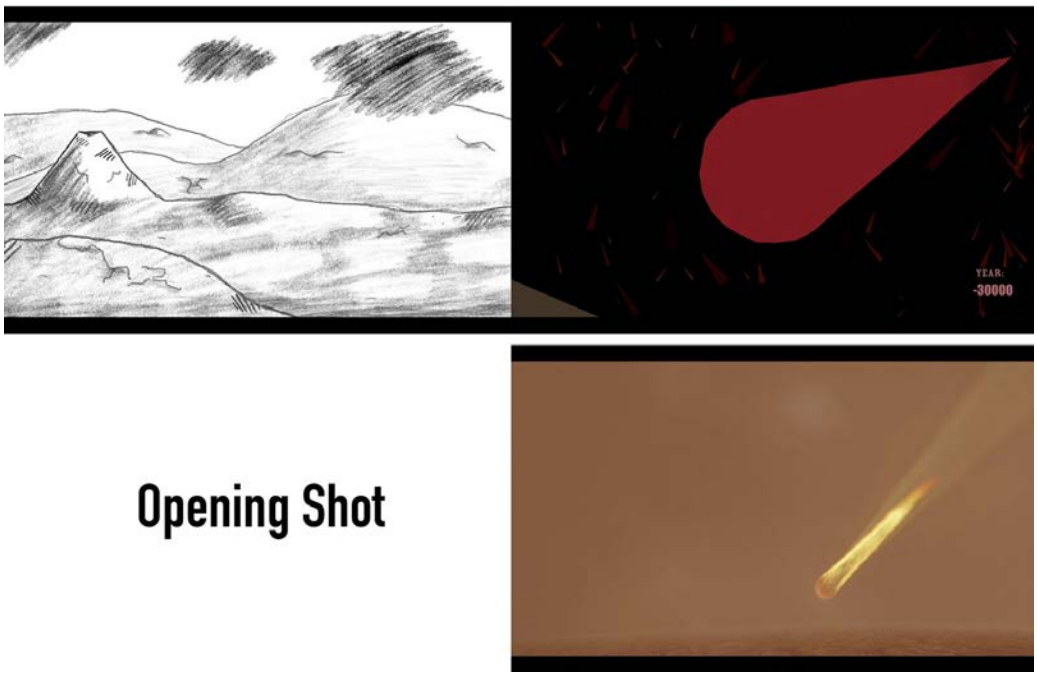


Figure 1. The opening shot, the origin of the artifact was changed from a volcanic eruption to a meteorite

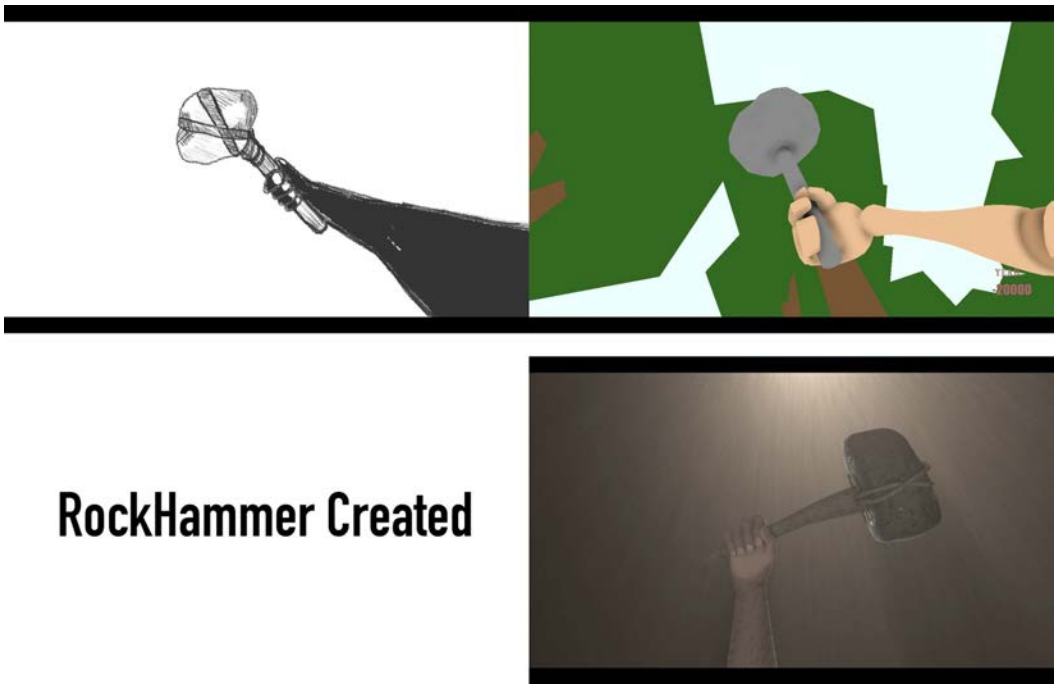


Figure 2. The OreRockHammer is held aloft

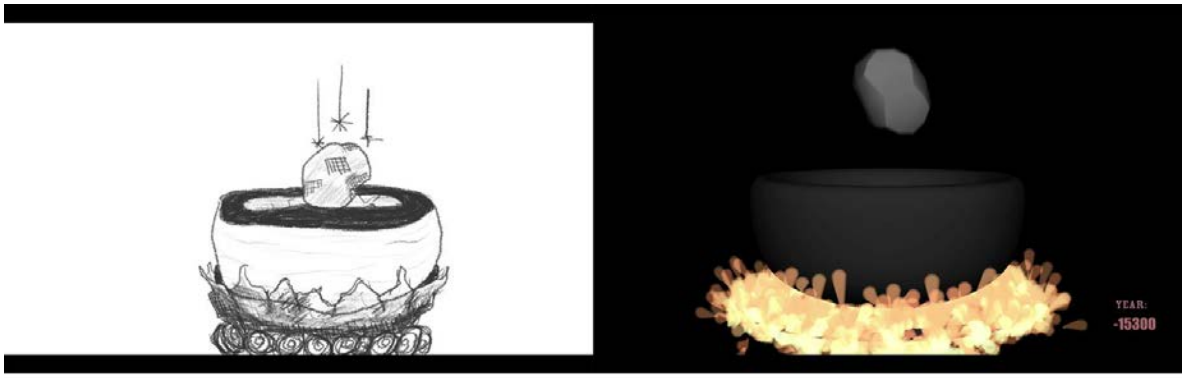


Figure 3. The OreRock falls into a smelting pot

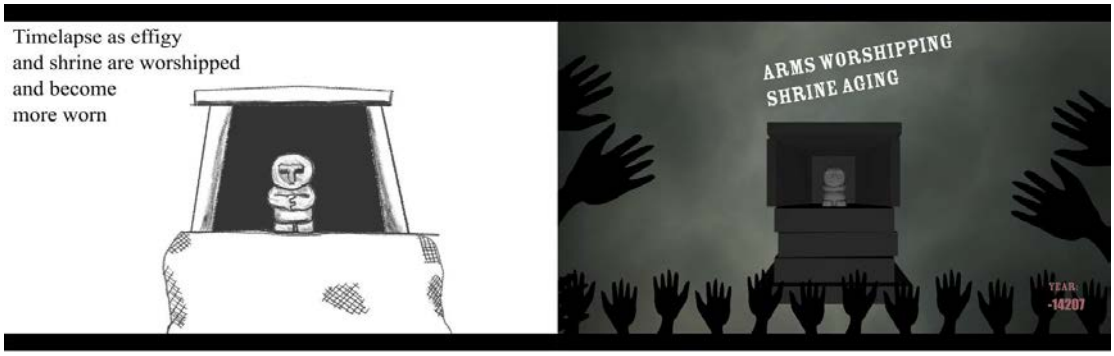


Figure 4. The Effigy being worshipped in a shrine

Figure 5. An explosion at the museum

Figure 6. Rockets leaving the artifact and a destroyed cityscape on the ground below

Audio

The creation of the audio for Artifact was a collaborative effort, as I worked with an extremely skilled musician, Ruiqi Zhao, who composed the score for the film. I came into contact with her (at the time a Master's student at the Eastman School of Music at the University of Rochester) through the recommendation of another composer at the SOFA department's Artist Call Meeting in the Fall semester of my thesis year. After listening to samples of Ruiqi's work, I was eager to see what direction she would take the score for the film. We arranged a meeting via Zoom, in which we discussed my general ideas for the film and it's music direction; at the time, I only had the hand drawn animatic completed, which I provided to her as a general reference to help generate ideas.

I presented her with a few general directions that I thought the music could go in (namely: Cinematic, Jazz, or some sort of experimental evolution to match the developing eras of human society in the film), but it was important to me that the composer of the film have creative freedom to help shape the final film. After setting expectations with Ruiqi, I worked to complete the first 3D animatic of the film, taking care to keep the timings as accurate to my vision as possible. I was then able to present Ruiqi with this 3D animatic to work from when composing the first draft of the film score, it included rough sound effects in key places where I felt diegetic audio would be most important. By early December of 2020, the 3D animatic complete with a rough score was ready. I was extremely impressed with the work Ruiqi was able to produce in a short amount of time, such that the score is largely unchanged from its first iteration. She had decided to go with a cinematic approach to the music, creating an atmosphere of grandeur to punctuate the events of the film.

I was perhaps not as diligent as I should have been in keeping my composer updated on the progress of my film, as we went for the first couple of months of 2021 with no discourse on the progress of the film/score. Though, we had already signed a contract (which I modified from the Artist Call SOFA-provided Music Release) and I had already paid half of our agreed upon sum total of $300 upfront. On the subject of payment, while it was not ideal to be spending so much money on a project for which I would gain no income,my reasoning for agreeing to pay for her services was twofold. Firstly, the quality of her work I had observed prior was of a high enough level to justify sufficient payment. Secondly, I am of the belief that if I too would like to be paid for my time and effort on a project, I should respect that desire for financial compensation that any of my collaborators would have. After our hiatus of communication, I initially struggled to reach Ruiqi via her provided email address. I worried that perhaps I had offended her with the radio silence while I worked away on the seemingly endless tasks of filmmaking. Thankfully I was able to establish communication after reaching out to her via her Instagram account, it seemed there was some error in emails not going through. With communications effectively re-established I was able to update her as I created newer drafts of the film, and as the story remained largely unchanged from its inception, the changes to the score only necessitated slight timing adjustments. We were able to work and communicate effectively on the film for the remainder of its production. I feel I've learned from my misstep, to provide regular updates to collaborators, or at least maintain communication channels, even if there aren't specific pertinent updates to report.

I have already mentioned the reciprocal process that informed the overall audio of the film, now I will speak a bit on the sound design I created. I knew from the beginning that I wanted to tackle the sound design for the project myself, as sound design is something I have a passing interest in and this was a golden opportunity to explore that interest. That said, I feel my approach to the sound of Artifact was grounded in a simplified realism. This is to say, I aimed to utilise sounds that would be true to life for most parts of the film, if only a basic in getting the

action of the scene across. There were points where I would deviate from realism and add in stylised sound to help emphasise an action, such as the ghostly wail as the effigy is used to bludgeon a person, or the impact of the hammer shattering the prison ball. The sound files I used were sourced from SoundSnap with a license provided by Dave Sluberski and SOFA. Audio editing for the animatics was done in after effects, while audio editing and mixing for the final film was done using Adobe Audition.

Evaluation

The primary process for evaluation as I worked on the film was weekly check-ins with my thesis chair, Tom Gasek, and semesterly check-ins with my committee members, Mark Reisch, and Kevin Bauer. The method by which I would update professor Gasek on my progress was through a thesis blog I maintained on the website *Tumblr*. I would upload works in progress throughout a given week, and we would have meetings via Zoom to discuss my progress and provide constructive feedback. This proved to be an effective method of regular check-ins during the height of the 2020 Coronavirus pandemic. The weekly advice and feedback I sought from professor Gasek was largely related to the visuals and story flow of the film, rather than technical aspects of working in 3D software. These sessions were particularly helpful in providing additional motivation, and both in terms of positive reinforcement and deadlines to meet. It was through these sessions of feedback that I was able to ascertain that the diorama aspect of the film was not working, and eventually cut it out. Additionally, professor Gasek's feedback helped me to refine the story's beginning, with the artifact's origin being a meteor strike rather than a volcanic eruption, and the story's ending, with a crumpled ball rather than a rocket model. This worked well to set up a parallel between the beginning of the film, the artifact falling to earth as a ball of rock studded with metallic ore, and the end of the film, the artifact

again being a ball, and humans having developed the technology to break free of Earth's gravity.

To present my work in progress to my committee members at the end of the first semester, I sent them links to the blog I had maintained, and constructed a small presentation condense down the work I had done, and was planning to do. This worked well as I was able to get each of their perspectives, and raise technical concerns I had of my 3D work. As both professors Bauer and Reisch are 3D artists, I was able to seek their advice on software concerns particularly related to rigging and to rendering. At the end of the second semester I sought their feedback on the nearly finished film, which was invaluable in providing alternate perspectives on what I should prioritise as the final deadline approached.

Presenting a project one holds dearly to an audience that only sees the 'finished' result is a nerve-wracking experience. I was thankful that the 2021 SOFA film screenings took place in a hybrid virtual/in-person format, as it meant I could hide my anxiety behind a computer screen. Thankfully, the audience reaction was generally positive, with no major complaints being presented. However, I feel that may have in part been due to my screening being late in the day, in the midst of an entire week of screenings, perhaps the audience members were tired and filled with less gusto to give feedback or generally criticise work. As the creator, one understands how close or far the produced work is from the original vision, and can see the flaws in their work through a personal lens, at times magnifying and warping issues that a general audience glosses over. Conversely, audiences can find issues in aspects the filmmaker had not even considered to be an issue; I am thankful that my film was not judged to be terrible, even if it was far from standing out.

As there were no major complaints at screenings, I will mention some of the issues I had with the final film. There are multiple aspects that I would have wanted to improve, had I more time; a feeling that I assume is common among most filmmakers. My use of particles in the film was rather basic, as seen in those emitted as the ore-rock hammer struck the environment

rocks, or the dust that appears as the cannonball hits the ground. The environments throughout the film could have used more set dressing. As it was, the world I created was rather pared back with few superfluous objects appearing. While this was a creative choice (as I had decided to not rely on pre-existing assets I did not create), it would have been nice to have more foliage and miscellaneous items appear in the film in order to make the world more alive. The beginning and end shots are the ones I believe would have most benefited from extra time, as these are what often leave a lasting impression on an audience. As already mentioned, the meteor scene would have benefited from the higher graphical fidelity of using ray tracing renderer such as Arnold or Cycles for rendering the simulation. The ending shot needed a better solution for the trails left behind by the rockets, as to render their light properly interacting with and scattering through the atmosphere would have taken too much time. This is somewhere I may have been able to work out a better solution, or even just render it out with the desired atmospheric interaction, with more time. However, no project has unlimited time, and there will always be areas that can be improved or further refined. I felt I was able to effectively prioritise what I needed to in order to have a finished film ready for screenings.

Conclusion

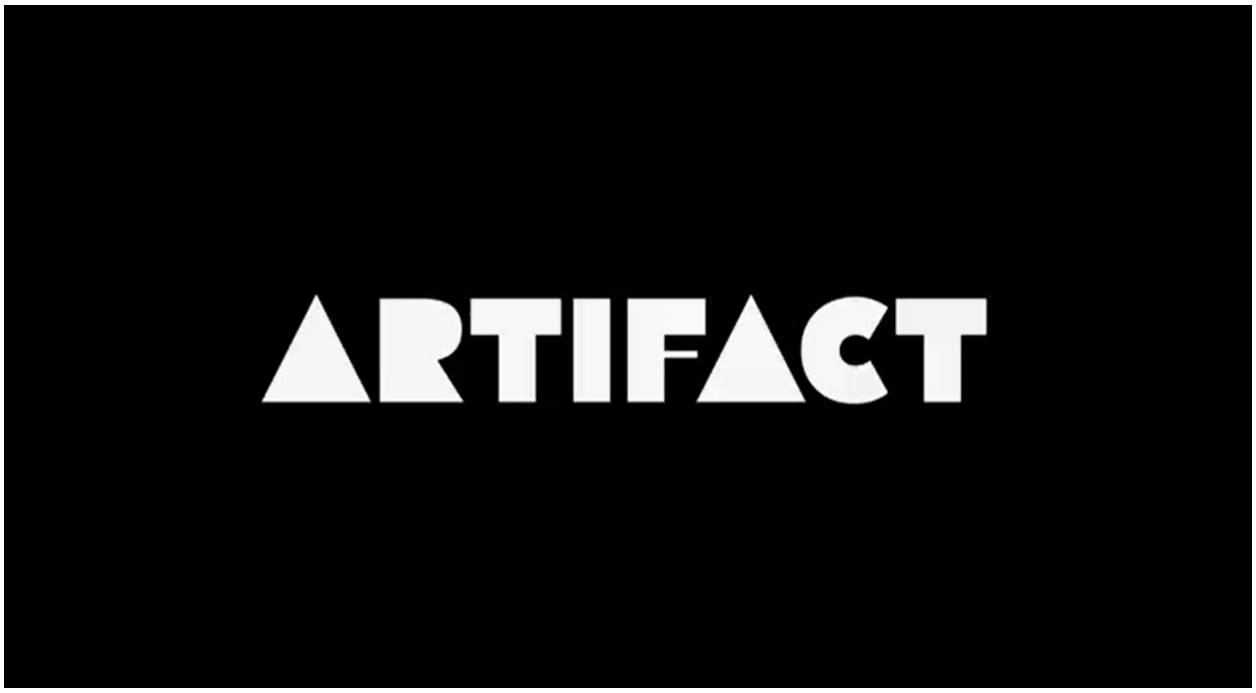
For all of its flaws, Artifact is a film that will continue to hold large significance for me for a number of reasons; chief among these is that it is the result of two years of animation education, and a further two semesters worth of working in isolation during a global pandemic. It was an exercise in persistence, and the largest filmmaking undertaking I have yet attempted. A major point of pride that I have with the film is that, as of the time of this writing, it has earned me my first seven film festival acceptances; this includes a win for Best Animation in the Eastern Nigeria International Film Festival (ENIFF), and a finalist position in the Lagos International Festival of Animation, in my hometown of Lagos, Nigeria. I am both honoured and grateful to

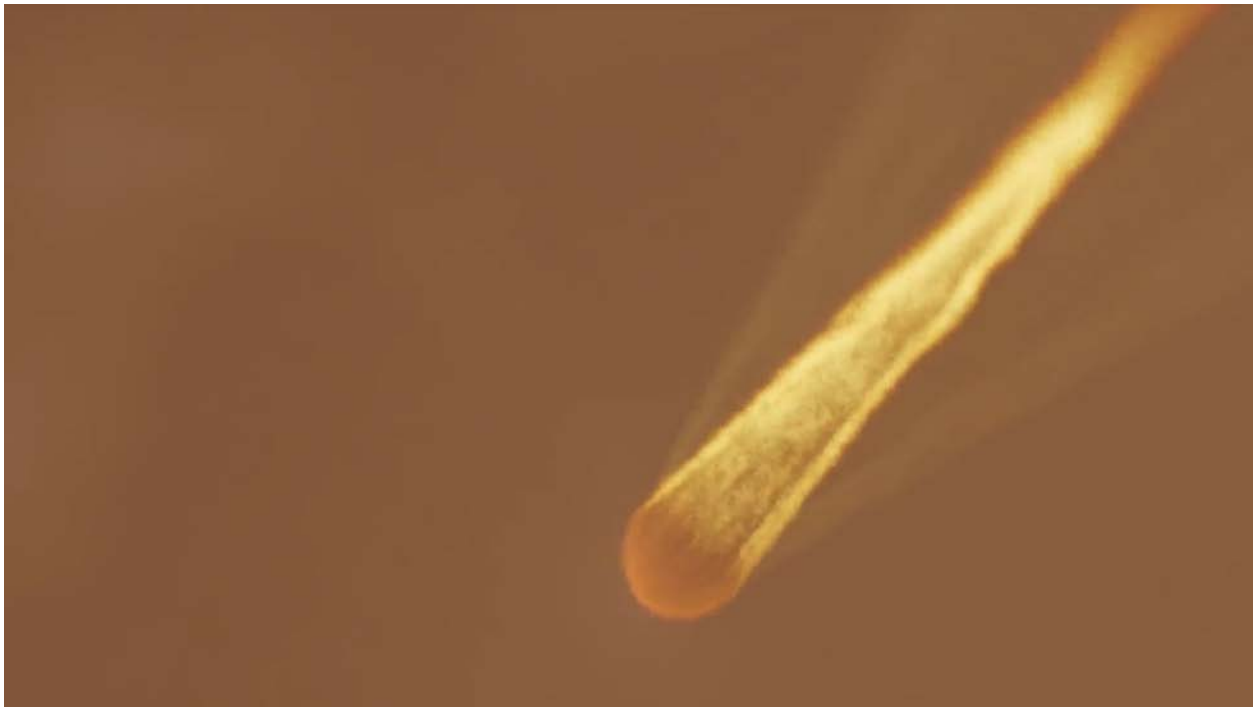
have made it to this point, and excited at the idea that my film may then go on to be seen by hundreds of people. Such an achievement is not to be taken in isolation however, it is the result of those who taught, guided and supported me along the way. As such, I am extremely grateful to my thesis advisor, professor Gasek, and to my thesis committee members, professor Reisch and professor Bauer. For better or worse, Artifact is a result of my experience obtaining an MFA in 3D animation at RIT.

As the Artifact continues its festival run over the next few months, I hope for greater festival recognition, but am content if this is the extent of its journey. When all is said and done, it is a student film that leaves much to be improved upon. I hope to continually build my skill and experience going forward, towards the end of making more technically proficient and expressive films in the future. I am unsure of the direction my desired career as a 3D artist will take, but I am keen on making more animated short films in the future.

Appendix

Screenshots






[Religious Chanting]

Composer:

Ruiqi Zhao

created by:

Durotimi Akinkugbe

Sound effects sourced from soundsnap.com

Thesis Proposal

Artifact

3D Animation

Durotimi Akinkugbe

Thesis Proposal
For MFA in Film and Animation
School of Film and Animation
Rochester Institute of Technology, Rochester, New York
April 2020

Approved for Submission by:

_____

Logline

The journey of a metallic ore, as it is altered by time and human influence over many years.

Treatment

Note: *Several vignettes match cut together of the artifact in different places in time.The world around it changes, but the artifact remains mostly centered in the screen.* We open with a rock lying on the ground in a forest, it is speckled with metallic ore. A hand reaches down and picks up the rock. The rock is attached to a stick, together becoming a hammer.
The hammer is shown in use, colliding with different surfaces and breaking down various materials. The stick snaps, the rock falls. The rock lands in a bowl with a lit fire underneath, it is smelted and the molten iron poured out into the form of a small effigy. The effigy is put into a shrine.
The effigy is worshipped and sits in the shrine for many years, as it and the shrine become more weathered. The effigy is grabbed and then swung, bludgeoning a person in the head. It is left blood stained in the dirt. The grass grows and ages around the effigy, days and nights begin to fly by; centuries pass.
The effigy is picked up, inspected, then thrown upward. It drifts up into the middle of the frame and 2 large metal frames slam together, enclosing it. The frames part and a small cannonball is left in its place. The ball is snatched, loaded into a cannon, and fired. The ball flies through the air and crashes through a wooden structure and lands on the ground, a chain now attached to it. We see that this ball and chain is attached to a person's leg as they hammer away in hard labour.
The ball is hit by a hammer, breaking apart into an afro comb (the handle made of wood, but the teeth made of metal).The comb lands on a dresser in a bedroom, and time passes akin to a timelapse, with the comb and its surroundings looking more aged. A match cut and the comb is now sitting thoroughly rusted in a museum.
A faint rumbling builds up, culminating in an explosion that throws the comb from its pedestal, the background transitioning to white as the comb tumbles. The comb continues to tumble, the wooden portion breaks off and the metal is crunched down into a small metal rocket ship model. It flies onward briefly in the white void before landing in a barren field, dilapidated buildings off in the distance.
The artifact remains in the field as the sky fills with rocket ships flying up out of the atmosphere.

Rationale

I believe it may be compelling to try conveying thoughts of our impermanence, how brief our lives are in comparison to the world around us. We're born, we live, we die, and (presumably) the world goes on. I often find it scary to think not just of the great unknown of death, but of how everything will carry on once I am gone, as it did before I was born. We live on a short timescale, relatively speaking, but the things we create and the actions we take can be significantly longer lasting. In this way we can be seen to extend our presence on Earth based

on what we interact with and leave behind when we die.

The way I settled on conveying these feelings is by focusing on an object as it moves through time across human history. The artifact is influenced, altered, and used by people but outlives them all a hundred times over; the things that were important to those people are lost to the distant past, with an artifact being the only tangible thing remaining from that time. This is intended to be replicated at a larger scale in the ending of the film, with the artifact being left behind on Earth as humanity heads off into space. The film could also bring into question the meaning and utility given to objects. An artifact that meant one thing to people in one time and place, can be given an entirely different meaning when brought into a different context. Does the original usage of an object hold much weight if those who originally valued that use are long since gone? Is there a best or right usage of an object? While I don't aim to answer these questions, I'm hoping in this film that I can encourage thoughts of larger human society, and of what legacy we as individuals or groups leave.

Vision

Though the film will be in chronological order, the speed at which time passes in-world will not be uniform. Sometimes the time spent viewing the artifact will be just a few seconds, others will be a few years. A lot of the world around the artifact will be abstracted out, in order to save on modeling requirements but allow me to include all the vignettes I want. The abstraction would mean omitting large parts of the environment around the artifact, with a lot of the film likely having a foggy ambiguous sort of background. Another option would be heavy use of synecdoche, allowing for the viewers to infer the environment of a scene from only a few carefully chosen details. I intend to have stylistic transitions between scenes of the film, be it match cuts, morphing, or wipes using on screen objects. The film will focus on this singular object as it is altered by its surroundings (mainly people) and goes from form to form through the years. In keeping with this theme, the object will stay mostly centered in the screen; this can be seen as reinforcing the idea that while times change during the film, the artifact is our anchor through it all.

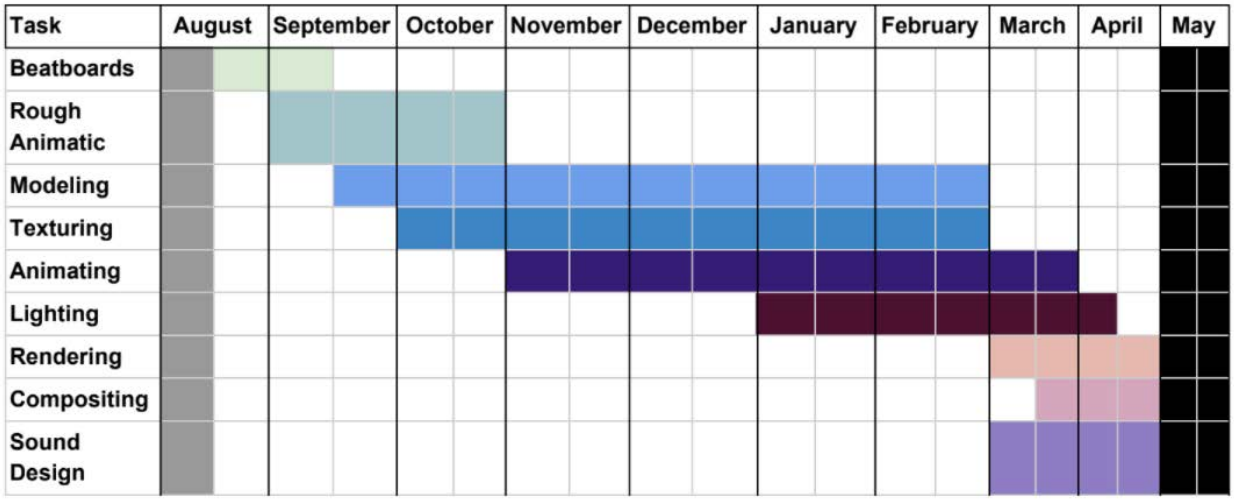
The camera will not be completely locked in position however, it will react to events in the world with dynamic movement, pulling out, panning to the side, or rotating position for example. Limiting camera movement in this way will necessitate careful planning of action in each scene to keep things visually fresh and easy to follow. It will be an important challenge to keep the motions on-screen from getting repetitive.

I would like to incorporate some 2D elements, maybe hand drawn special effects, like wind, explosions or perhaps annotations that could temporarily popup on-screen for example.

Budget

Item	Cost
PRODUCTION	
Computer	IK
Autodesk Maya	IK
Substance Painter	IK
Adobe Suite	IK
Wacom Intuos/Cintiq	IK
ZBrush	IK
Misc. Assets	$80
OTHER	
Composer/Music	$200
Rendering Services	IK
Festival Fees	$400
Software/Technique Tutorials	$50
TOTAL	**$730**

Timeline



Inspiration Images

Lord of War - Andrew Niccol

An Object at Rest - Seth Boyden

Bibliography

Boyden, Seth. *Object At Rest*. CalArts. 2015. https://vimeo.com/126177413

Columbia University. “Columbia Film Language Glossary: Long Take.” *Columbia Film Language Glossary: Long Take*, https://filmglossary.ccnmtl.columbia.edu/term/long-take/. Accessed Oct 2021

Girard François. *The Red Violin*. Rhombus Media in Association with New Line International. 1998. https://youtu.be/CUCjCn9HDyc

Niccol, Andrew. *Lord of War*. Entertainment Manufacturing Company. 2005. “*The Life of a Bullet*” https://youtu.be/RVDyoCWz0vM