



SIGURD FAFNIRS-BANE

A MOTION COMIC ADAPTATION OF
THE LEGENDARY VOLSUNGA SAGA

Grant Frederick



WPI

Abstract

Sigurd Fafnirs-bane is a modern retelling of only a small piece of the *Volsunga Saga* in the form of a motion comic. The saga can be traced back to 8th century Scandinavia, the beginning of the Viking age.

Sigurd Fafnirs-bane was conceived and developed as a Worcester Polytechnic Institute (WPI) Major Qualifying Project (MQP), worked on by one interactive Media and Game Development (IMGD) major. This report discusses the process that was used to create this motion comic. It will also go on to explain the successes, failures, and challenges that were encountered during the development of the MQP.

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1. Introduction

Sigurd Fafnirs-bane is a motion comic experience, that seeks to retell a portion of an age-old story that dates back to the Viking Age, the *Volsunga Saga*. The motion comic follows Sigurd, the most prevalent hero from the Viking epic, on his quest to slay the legendary dragon Fafnir. The motion comic has full voiced narration and sound effects, as well as a music score performed by independent French composer Chulainn.

This Major Qualifying Project (MQP) was completed by one Worcester Polytechnic Institute (WPI) student. The student Grant Frederick, who is majoring in Interactive Media and Game Development (IMGD) created the script and all art assets, except for the music and sound effects used in *Sigurd Fafnirs-bane*.

The goal of this MQP was to create a visual and auditory experience that would be entertaining, complementary to its source material, and visually pleasing. More specifically, the intention was to provoke emotions akin to that of a skald (a Scandinavian poet or bard) telling the *Volsunga Saga* and stories alike to a clan of eager eared Norsemen.

2. Background

2.1 The Volsunga Saga

The *Volsunga Saga*, is an ancient Norse epic that dates back to the Migration Period (793-1066 AD). Although historians believe the story is much older, the oldest and most complete written version *The Saga of the Volsungs* is from the 13th century. This manuscript is located at the Royal Library of Denmark. Fragments of the story are also found within the *Poetic Edda*, as well as inscribed on various runestones throughout northern Europe. (Crawford)

That saga is believed to have influenced many tales written throughout the ages such as; the works of Tolkien, *Beowulf*, and the King Arthur legend. The most extreme case, The German *Nibelungenlied* contains many of the same names and themes as the original Norse saga, and was the basis for Wagner's *Der Ring des Nibelungen*. (Garth 1-44)

The *Volsunga Saga* follows generations of decedents belonging to a man named Sigi, a son of Odin. Below is an image of the main family lineage:

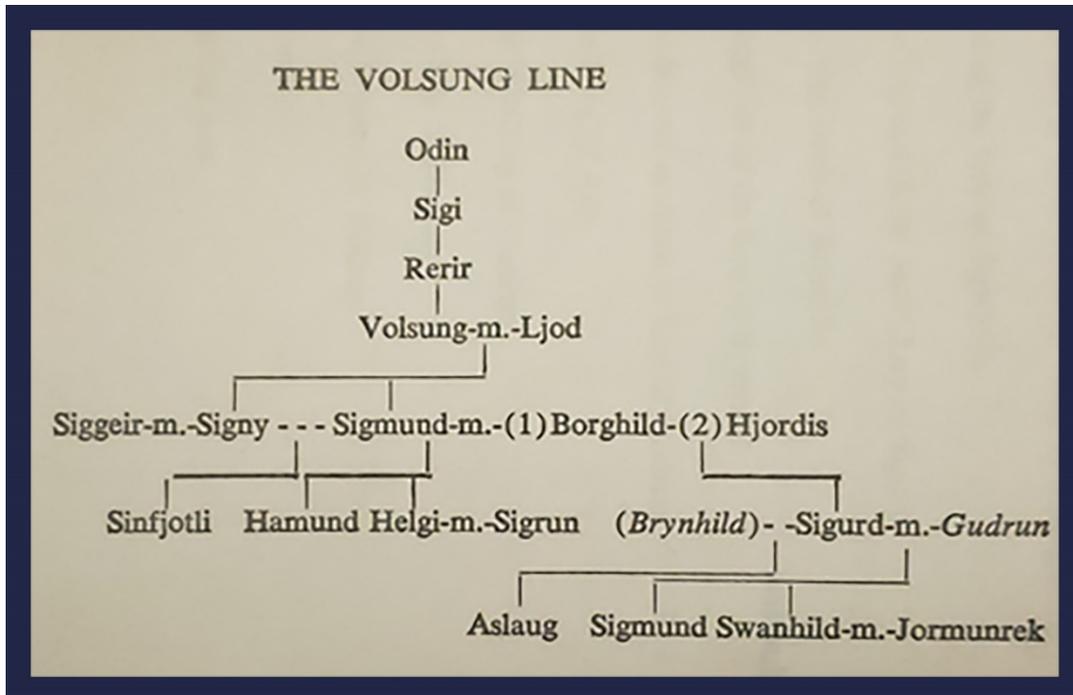


Figure 01. The Volsung Line (*The Volsunga Saga*)

The bulk of the saga focuses on Sigurd whose story can be broken into three main parts. His rise to glory, his relationships, and lastly his untimely death. Sigurd's story is a complex tale of the supernatural, Norse values, honor, greed, love, and deceit. It was a tale told by the Vikings to not only entertain, but to take lessons from.

2.2 Poetic Edda

The *Poetic Edda* or sometimes referred to *Elder Edda* is an anonymously written collection of Old Norse poems dating back to the 13th century (*The Poetic Edda: Stories of the Norse Gods and Heroes*). The majority of the Edda's poems were found within the *Codex Regius* an Icelandic manuscript, which is pictured below. There is no poetic long narrative connecting all the individual stories within the manuscript, it is regarded as a compendium of seemingly random Norse myths. It also appears to be a copy of a much older and lost to time work of literature. (Crawford)



Figure 02. The Codex Regius (*Codex Regius*)

The Codex and Edda are the largest contributors to historians current understanding of Norse myth, and religion. Like most Old Norse poetics, it is widely believed that the stories are much older than the manuscript they are written on, according to Dr. Jackson Crawford. The Old Norse specialist had this to say pertaining to two poems within the Edda:

“*Atlakviða* about the death of Atilla or Atli, and *Hamðismál* about the death of Gudrun’s Sons are probably the oldest two poems in the Poetic Edda. Probably dating from about the 800s A.D.” (Crawford)

It should be noted that Gudrun was the wife of Sigurd. It is from the stories relating to Sigurd and his family contained within the Poetic Edda, that historians can confirm that the original story was much older than the 13th century written version. (Crawford)

2.3 Prose Edda

The *Prose Edda*, *Younger Edda*, and *Snorri’s Edda* are the many names for a book compiled by Icelandic Chieftain Snorri Sturluson in the early 13th century (Sturluson). Unlike the *Poetic Edda* the *Prose* is written as a linear narrative, even though it is based on poems from the older compendium. Dr. Crawford distinguished the two from another when he said:

“Unlike the Poetic Edda which is a recording of old lore, the Prose Edda is a re-composition of old lore.” (Crawford)

Dr. Crawford explains that Snorri wrote all the myths pertaining to the Gods that he knew, or at least remembered, making sure to write it so it read as a continuous story. (Crawford)

Regardless of how Snorri wrote it, historians still view the *Prose* as an important piece of literature when it comes to understanding Norse myths.

2.4 Runestones and “Sigurd Stones”

Runestones were large rocks engraved with runic inscriptions and imagery, usually meant for marking territory. However, there are many stones that served as documentation of early stories and legends, scattered throughout northern Europe.

Among the thousands of runestones raised by the Vikings there are about eight stones located in Sweden that reference Sigurd from the *Volsunga Saga*. The most famous is known as the Ramsund Carving. The runestone is pictured below. (Ehnfors)



Figure 03. The Ramsund Carving (Lundberg)

The Ramsund Carving is perhaps the most famous due to its quality and very clear depiction of the Sigurd tale. It is also the earliest recorded version of the Sigurd legend. According to historians the stone was carved around 1030 A.D. The pictorial account starts with Sigurd's preparation to slay the dragon Fafnir up to the slaying and eating of the dragon's heart. (Freson)

2.5 Motion Comics

Motion comics or Motion books are best described as a blend of comics and animation. The motion comic medium has been credited with being similar to early Marvel superhero cartoons of the 60s. However, there is no standard or 'rules' when creating a motion comic (Morton 1-20). Dr. Craig Smith had this to say about labeling a motion comic; "The variety of animation practices and approaches to the remediation of the original comic book hypotext is too diverse to place it within the finite boundaries of a specific form of animation." (Craig 2)

Due to the recent inception of this medium it is still taking shape and many motion comic publishers have different takes on the story form. *Watchmen* (Moore) a renowned comic that was adapted into a motion comic. For the most part the motion comic resembles its original printed form. However, the rendition has the addition of basic image movement, voiced dialogue, and dynamic shots that wouldn't be possible in its

printed form. However, it should be noted it does keep the printed word balloons. Below are three screenshots of the motion comic next to their timestamp alongside the original print comic.



Figure 04. Watchmen Motion Comic (Moore 28; Moore)

The screenshots were taken over a 69 second period during a pan out shot. In the motion comic this is one smooth camera pan without any breaks.

As can be seen in the print version, the break up between panels creates an inorganic flow. Motion comics have the advantage over print to tell more in less “shots” or panels. Dr. Craig Smith elaborates on the potential features of a motion comic:

Depending on the approach taken by the animation director, a motion comic can reject the multi-panel design of the original comic book layout, converting the panel imagery instead into a familiar screen-based mise-en-scène devoid of panels and ‘gutters’. The director may also choose to replace the speech balloons of the original comic book with a voice-over, and so on. Yet, as we begin to analyze what has been lost to such an adaptation process, we must also recognize what has been gained. The static images may have been imbued with some form of movement, and voice-overs and musical scores

have the potential to elicit from viewers something different than may have been previously discerned from experiencing the same narrative in comic book form. (Smith 357-378)

2.6 Oral Tradition

It wasn't until a few hundred years after Scandinavia's adoption of the Christian faith that written texts regarding the Old Gods and myths began to be written. Before the 13th century the Norse people relied on orally telling their kin their myths and stories, to keep those myths alive. The Vikings called their storytellers Skalds and their stories Skaldic Poetry. Skalds can be thought of as the bards of Scandinavia. (Quinn and English)

Skaldic poetry was the root of Norse culture and the Skalds themselves were highly respected individuals. Oftentimes being heavily rewarded by kings with gold and ornamental shields in exchange for their poetics. Based on many of the runestones that can be found throughout Scandinavia we know that the Skalds communicated with one another, teaching one another new tales and songs. (Poole)

2.7 Artists and Influences

A vast number of artists and media have influenced the style and tone of this project. Below is a collection of the top four most influential artists to this project.

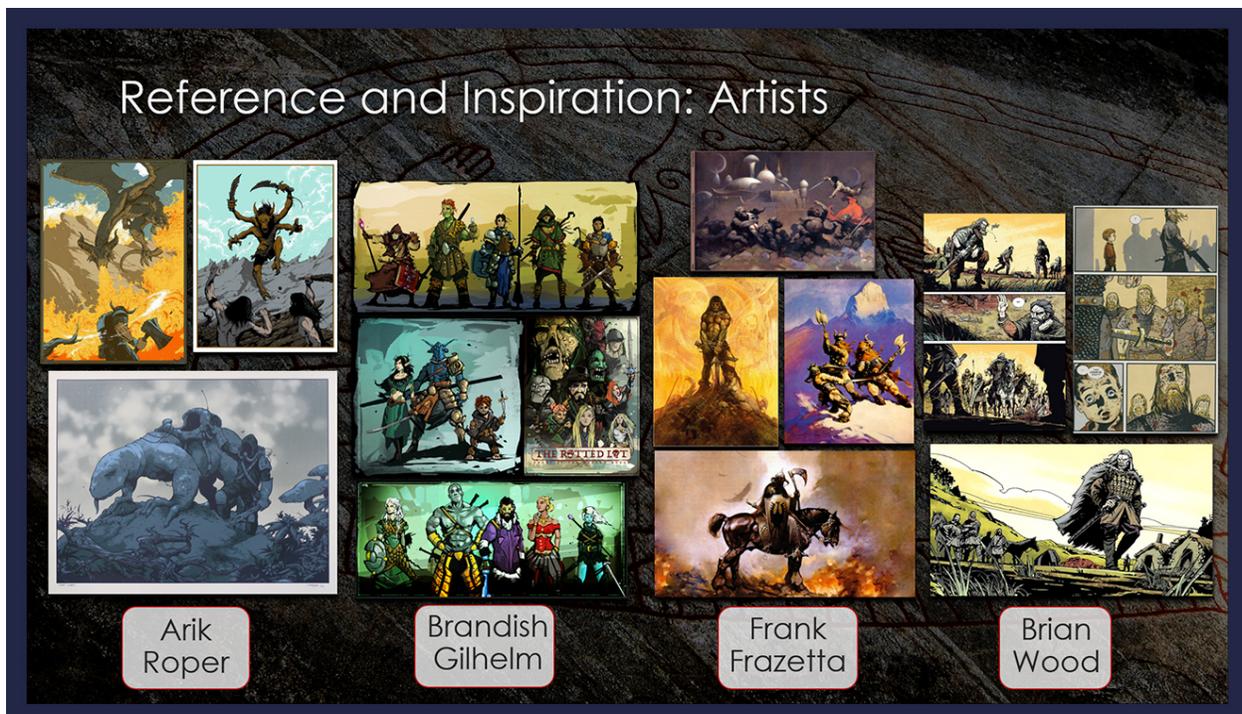


Figure 05. Collection of referenced artist's work (Roper; Gilhelm; Frazetta; Wood)

Arik Roper's usage of moody colors and thick linework had a heavy influence on the colors and inks in this project. Brandish Gilhelm, is a master at creating unique and interesting characters. The characters Sigurd and Fafnir were developed with Brandish's techniques in mind. Frank Frazetta is considered to be one of the greatest fantasy painters of all time. His settings and backdrops are often a perfect blend of fantasy and reality. Capturing this balance was the primary objective when creating the backdrops of *Sigurd Fafnirs-bane*. Brian Wood recently illustrated a collection of graphic novels called *Northlanders*. The comic series tells the

tales of early Viking raiders arriving on English shores and launching Europe into the Viking Age. Due to the subject matter Brian Wood's work on *Northlanders* was an excellent reference for authentic Viking age character designs, costumes, and environments.

Besides artists, there were many works from movies, comics, and other media from pop-culture that influenced this project. Below is a collection of images from media that influenced this project.

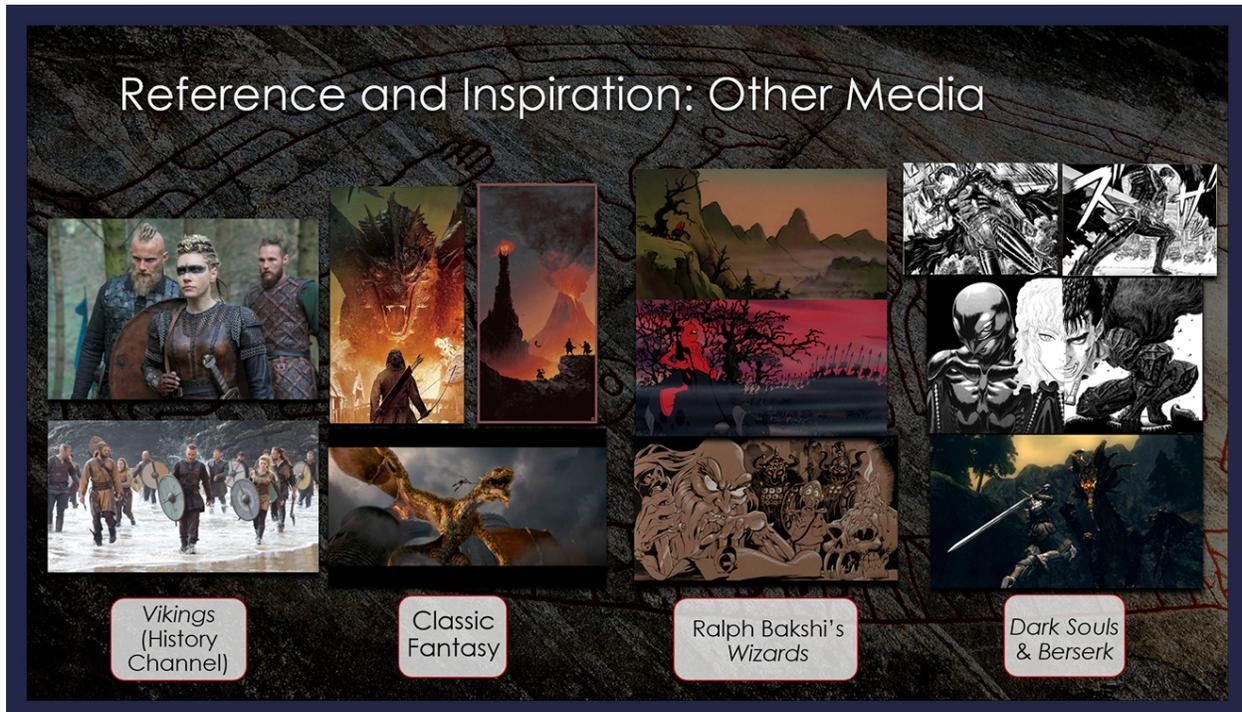


Figure 06. Collection of referenced media (Various ; Jackson ; Zemeckis ; Bakshi ; Miyazaki ; Miura)

The History Channel show *Vikings* was a major reference when creating this motion comic. Although criticized for not being completely historically accurate the show is still one of the best representations of Vikings in film. Many classic fantasy stories such as *The Lord of the Rings/The Hobbit*, *Beowulf*, and *Conan: The Barbarian* are just a few. Ralph Bakshi's *Wizards* art style and fantasy landscapes were often referenced during the making of *Sigurd Fafnirs-bane*. The Japanese manga *Berserk's* main character Guts, and many of the characters from the game *Dark Souls* directly impacted the designs of Sigurd.

3.0 Concept

Early project concepts consisted of a full retelling of the *Volsunga Saga*. Being that the saga tells the rise and fall of the entire Volsung lineage with dozens of characters, and various sub-stories the project scope had to be reduced. The next idea was to tell only Sigurd's story. This vision was still far too ambitious, and was finally reduced to a single poem, "Sigurd slayeth Fafnir the Serpent" (*The Volsunga Saga*). However, it was decided to incorporate a flashback sequence that would touch on events from earlier poems. This was done to give the audience a better understanding of Sigurd and his current situation within the motion comic.

3.1 Characters

Sigurd:

The motion comic revolves around Sigurd and his battle with Fafnir the great dragon. Similar to the Greek's Heracles, Sigurd has demi-god like attributes, consisting of strength, and agility far surpassing that of most mortals. This is thanks to his Volsung heritage.

Sigurd is also equipped with Odin's legendary sword Gram, which before him belonged to his father. Sigurd's father Sigmund was gifted the sword from Odin after pulling it from Barnstock the tree that Volsung's great hall was built around. Gram is not the only gift Sigurd received from Odin, he also rides Grani a horse descended from Odin's own horse Sleipnir. (Su 129-143)

Fafnir:

In Fafnir's early life he took the form of a dwarf. He was the son of Hreidmar a dwarf king. He was also the brother of Ótr and Regin. A side note, Regin later became Sigurd's stepfather.

The Norse gods Odin, Loki, and Hœnir were traveling. Eventually they grew hungry and spotted an Otter. Loki murdered the creature, who unbeknownst to them was Ótr. He would often shapeshift into an otter when fishing. The gods later meet Hreidmar who is outraged by his son's murder. Hreidmar, Fafnir, and Regin hold Odin and Hœnir hostage as Loki is forced to go and acquire enough gold to coat and fill Ótr's skinned fur, to make up for the murder.

Loki finds a dwarf named Andvari who possesses a large sum of gold as well as a magical ring called Andvaranaut. Loki takes Andvari's ring and gold. In doing so, Andvari curses the fortune to bring ruin to whoever possesses it. Loki knowing, he will not possess the gold for long returns to Hreidmar and gives him the cursed loot.

After the gods leave Fafnir is tempted by Andvaranaut and the gold, so he kills his father and takes it for himself. Fafnir retreats to the wilderness and becomes so greedy and malevolent he transforms into a Dragon. Fafnir then sets out on a quest to possess more gold and wealth and stashes it at his new-found lair Gnitaeath. This is the origin of the dragon Fafnir, which is explained to Sigurd in the *Volsunga Saga* by his stepfather Regin, preceding his battle with the beast. (Su 129-143)

3.2 Environment

The majority of the motion comic takes place in Gnitaeath, Fafnir's domain. The saga does not go into detail of what Gnitaeath looks like, however based on many interpretations and translations of the *Volsunga Saga* Gnitaeath is usually depicted as being in a mountainous/forested area. (*The Volsunga Saga*; Crawford; *The Saga of the Volsungs: With the Saga of Ragnar Lothbrok*)

Due to the story's Scandinavian origin Northern European environments, the landscapes of Iceland, Norway, and Sweden were referenced in the creation of this project's depiction of Fafnir's territory. Tundra, and fjords, are geologically characteristic of the Scandinavian lands, and were chosen to make appearances within the comic. Examples of these environments can be seen below.



Figure 07. Tundra and Fjord photographs (Rakke; Olaizola; *Tundra*; Lyall)

4.0 Early Development

4.1 Madefire

Madefire is a comic publishing company, who's predominant focus is on motion comics. This is how the company describes itself on their website:

"Founded in 2011 by Ben Wolstenholme, Liam Sharp and Eugene Walden, Madefire is a technology enabled content company, and creator of the award-winning Madefire App. Madefire provides Creators and Publishers the cutting-edge publishing platform, 'Motion Book Publisher', which enables a digital-first approach to publishing cross-platform in multiple formats." ("Madefire Comics and Motion Books™.")

The company also has their own tool designed for creators to make and publish their own motion comics. In the early stages of this project it was decided that Madefire's "Motion Book Tool" would be used to create *Sigurd Fafnirs-bane*. However, after weeks of testing it was found to be inadequate.

The software appeared dated, and not up to par with modern standards. The software was also excessively buggy, which would lead to time being wasted.

4.2 MotionArtist

The next software that was tested was MotionArtist. Unfortunately, much like its predecessor the software was again outdated, buggy, and limited. Often the software would "glitch" becoming completely unusable. It

is unclear when the last time this software was updated by its developers, but it could not have been recent. This software choice was quickly abandoned after basic testing. ("MotionArtist")

4.3 Adobe Photoshop & After Effects

It was finally decided that this project would be created using a combination of Adobe Photoshop and After Effects ("Adobe: Creative, marketing and document management solutions."). Photoshop was used to create all illustrations in the motion comic. After Effects serves as the compiler, and renderer of the illustrated scenes. After the scenes are completed, each image is put on its own layer exported into After Effects. Then all sound effects, animation, and music will be edited together to transform each scene from a flat drawing to a cinematic motion illustration. The Photoshop and After Effects pipeline is elaborated on within the "Workflow" section of this paper.

5.0 Workflow

5.1 Concepts

The beginning of this project consisted of making concept art. Loose sketches of scenes, characters, and story were made. Most of these sketches were created using either pencil and paper, or photoshop. An example of some early sketches can be seen below.



Figure 08. Early Concepts

This was necessary to create the potential scenes used when reaching the storyboard stage.

5.2 Working Script

The next step was to begin working on the script. At this point this was only a working script to create the foundation for the later animatic. The script was originally told from Sigurd's point of view, with a few scenes where Fafnir had some dialogue. Below is a snippet of the first page of the original script.

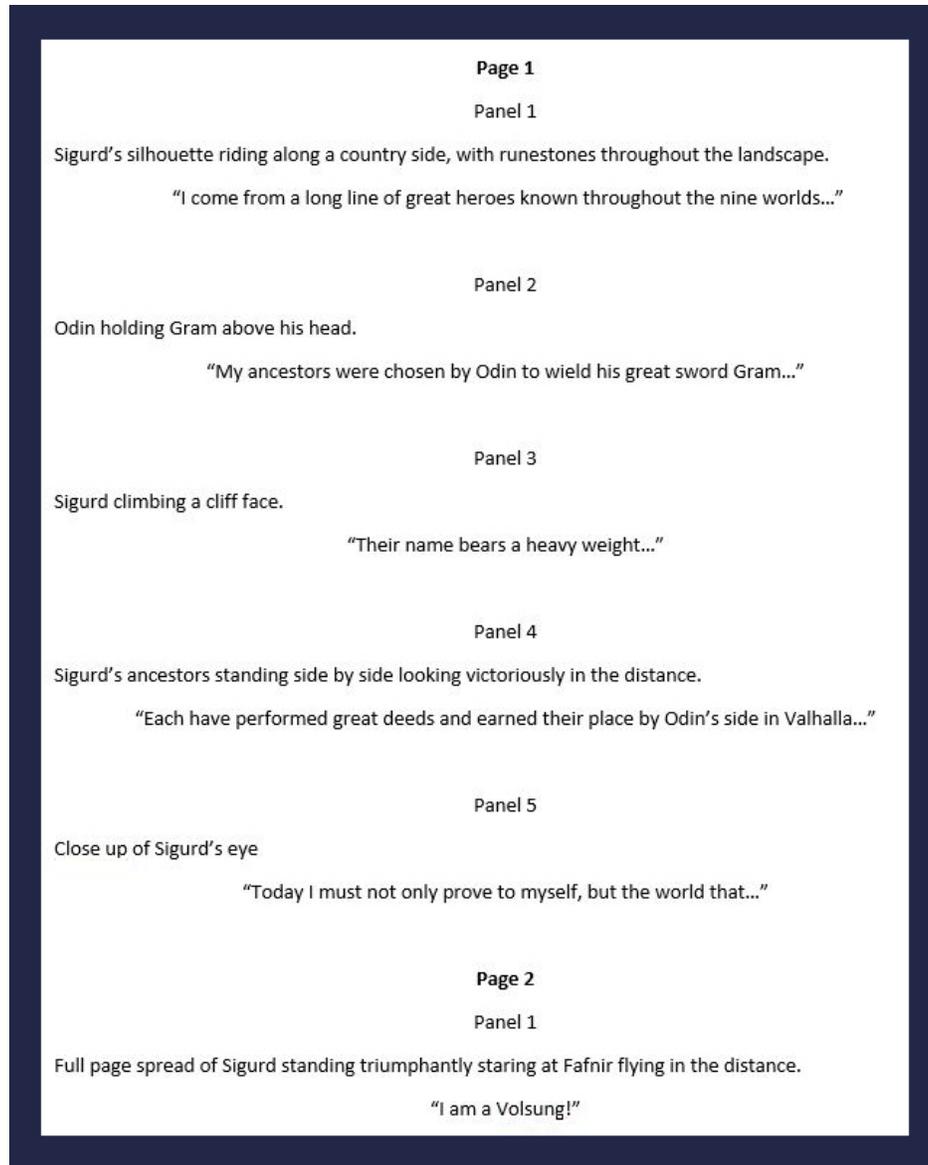


Figure 09. Snippet of first page from the original script

This was later changed to consist of narration by an external narrator, and minor dialogue and sound effects by Sigurd and Fafnir.

5.3 Storyboards

Storyboards are roughly drawn "scenes" drawn and orchestrated to get an understanding of the flow of scenes/panels. These are all created using pencil and paper, or photoshop.

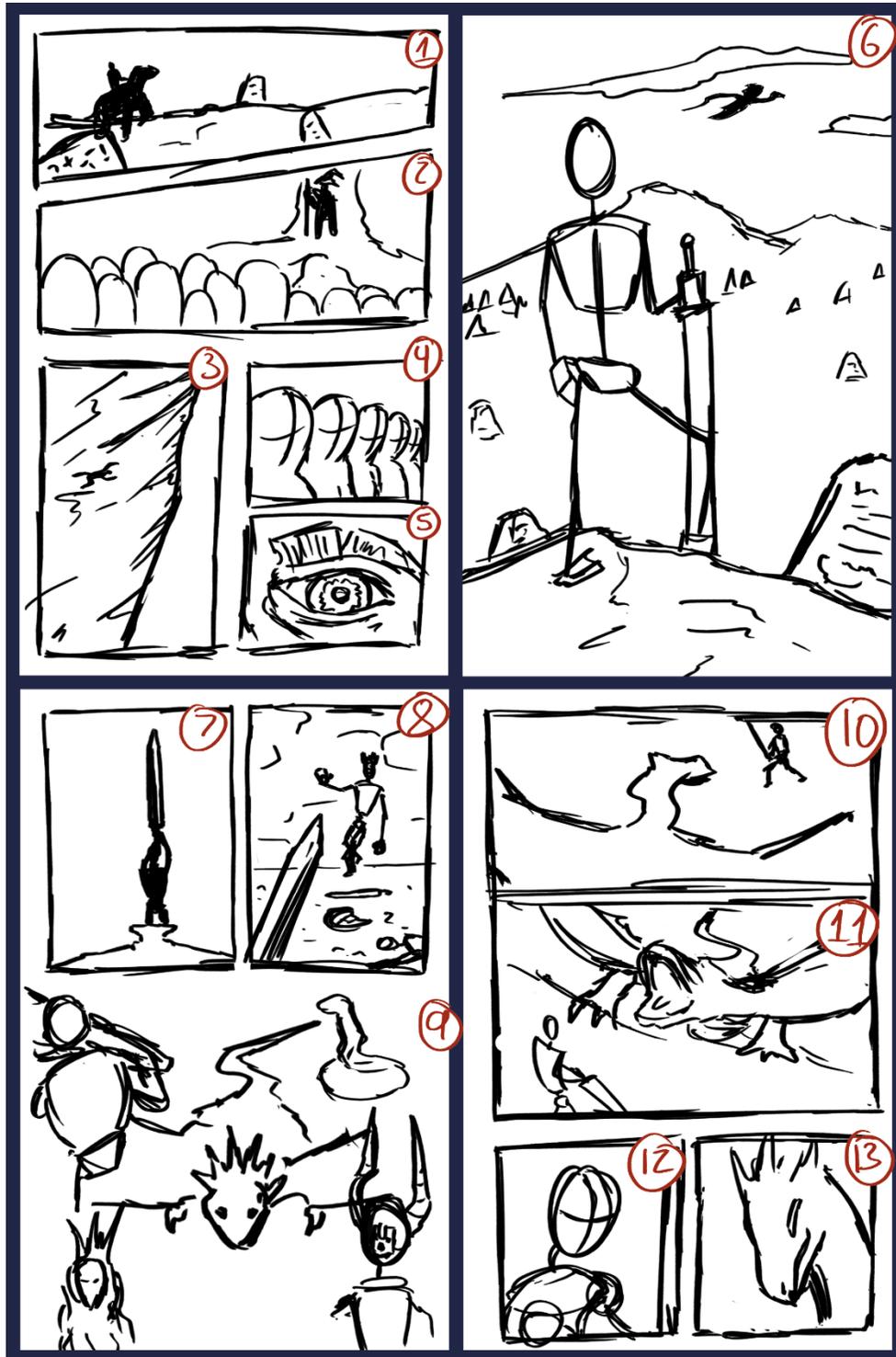


Figure 10. 4 pages of Sigurd Fafnirs-bane's storyboard

Some of the earlier concept scenes were redrawn and tested. By the end of the storyboard stage of the project each individual scene had five to fifteen different versions of the potential scenes.

5.4 Animatic

The most basic animatic's are made up of the storyboards being put into a video format, including basic sounds, dialogue, music, and sometimes animation. This is what the first animatic for this project consisted of. Most scenes were the unedited storyboards. Many of which depicted stick figures and rough scribbles, representing characters, props, and environment. Below is a representation of the general flow from "panel" to panel.

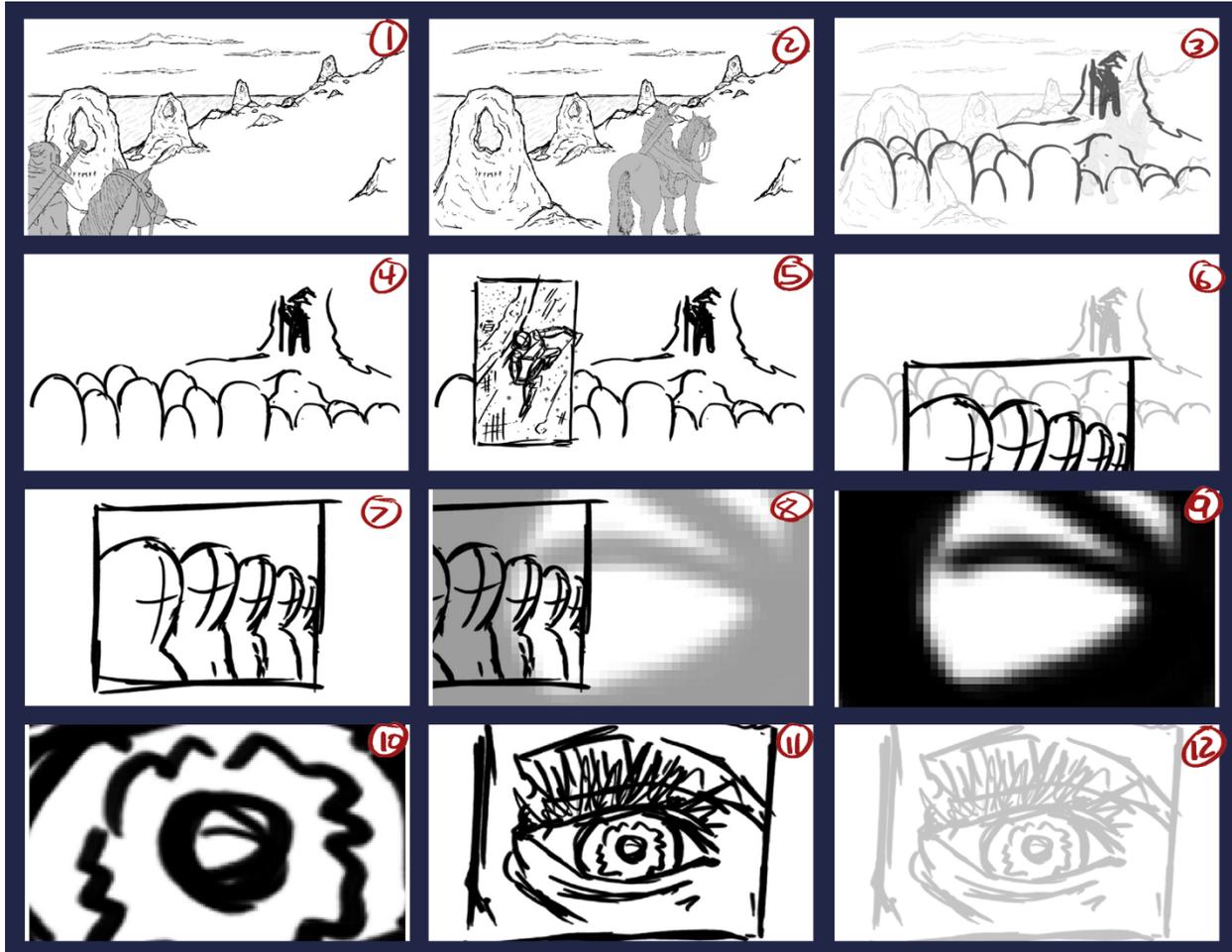


Figure 11. Animatic Flow from 1st scene to 4th

At this point a song was chosen to be used for the motion comic. The music piece was important because it ultimately decided pace and timing of many of the scenes and audio. The song chosen was "A Sacrifice for Gods" by Chulainn. Chulainn is an independent composer located in Paris, France. This song was chosen for its traditional medieval Scandinavian themes and sounds (Chulainn).

Basic sound effects were also added in the animatic stage. All animatic sound effects were found for free on "freesound.org." Examples of used sound effects are dragon roars, metal clashes, grunts, and horse trots.

Lastly, the animatic stage also included dialogue. The dialogue was recorded on an Android device, using the voice of a willing participant with no history of voice acting. This recording was meant to only be temporary. Quality was not of concern. The audios only purpose was to allow the animatic's viewer to get a general idea of what the final product could look like.

Once the animatic was completed it was shown to a group of WPI students who after watching filled out a survey regarding what they saw. The results of this survey are elaborated upon in the “Evaluation & Results” section of this paper.

5.5 Updated Art

After the Animatic and surveys were completed the production of the “final” product began. The storyboard drawings were then expanded upon and brought to a final linework with color. Scenes that required multiple frames for animation were completed at this point too. Most scenes were derived from their storyboard counterpart. Multiple “roughs” were created, each had their own layer in photoshop. Each pass included more detail then the previous “rough.” After four to seven passes the final linework was completed.

Once the linework was done, color was added also in Photoshop. Color was done on its own layer, however each object in the scene had its own layer dedicated to color.



Figure 12. Sigurd re-forges the blade Gram

Above (figure 12) and below (figure 13) are examples of near complete scenes.



Figure 13. Sigurd sits at the campfire

When the lines and color are completed they were exported on their own layers into After Effects. The animatic is used as the base of the final project. The new artwork replaced the original storyboard images and were synced to the music and sound effects.

5.6 Polished Audio

The 'final' audio effects and dialogue were not added to the motion comic by the end of the project period. However, sounds were always being added and tested that were found on "freesound.org." Continuation of this project will eventually require a search for a professional voice actor who can be used for the narration. "A Sacrifice for Gods" by Chulainn is intended to stay the only music used in *Sigurd Fafnirs-bane*.

5.7 Final Effects and Transitions

The final steps of this project consisted of adding the last visual effects to the motion comic. These were typically small things like lens flares, particle effects, parallax effects, and transitions between scenes. Once these effects were added within After Effects the project could be rendered as a video.

6.0 Evaluation & Results

On November 17th of 2018 after the project reached the animatic phase, a survey was administered to 10 random individuals. The surveyed group consisted of students attending Worcester Polytechnic Institute and were not chosen due to being members of a specific class, race, gender, or age. No personal information that could lead to a potential breach of confidentiality was collected, and all who participated did so voluntarily. The data acquired from this survey was intended to help gain an understanding of what worked and what didn't in the animatic at that point.

Before the students were given the survey questions they were shown the animatic. After the animatic was finished the participants were given the survey, which was hosted on Murvey.com. Below is a screenshot of the questions, and how they were displayed on Murvey.com.

Volsunga AlphaFest Survey

1. Rate your familiarity with the Volsunga Saga.
 The WHAT saga? 1 2 3 4 5 6 I can quote it from memory. In German.

2. Rate your familiarity with motion comics.
 Never heard of them. 1 2 3 4 5 6 I collect them obsessively.

3. How well did you understand the story?
 Totally bewildered. 1 2 3 4 5 6 Clear as day.

4. How would you rate the pacing of the story?
 Fell asleep. 1 2 3 4 5 6 Way too fast.

5. How well did the story hold your interest?
 Kept looking at my watch. 1 2 3 4 5 6 Edge of my seat.

6. How well do you think the music fit the experience?
 Try "All Star" by Smash Mouth. 1 2 3 4 5 6 Perfect. Where can I get the soundtrack?

7. How often did the music overpower the narration?
 There was narration? 1 2 3 4 5 6 No problem. I heard every word clearly.

8. (Optional) Name any scenes in the story you particularly LIKED (if any).

9. (Optional) Name any scenes in the story you particularly DISLIKED (if any).

10. (Optional) What ONE THING would you add, remove or change in the experience to make it better?

11. (Optional) Please add any additional comments or suggestions here.

Figure 14. Screenshot of Alphafest Survey

Another viewing accompanied with a survey was given on March 19th of 2019. This survey contained the same questions as its predecessor, additionally it followed the same practices and moral standards as well. It should be noted however that the second survey had 19 participants, 9 more than the previous 10.

The animatic at this point was beginning to take shape into its final form. Although the project was not yet completed, finished scenes with full color, sound, and animation were included, as well as some scenes still using placeholder assets.

The goal of this experiment was the same as the previous one. After the conclusion of the second survey, and both test results were reviewed on their own, the two could be compared to one another. This was done to find evidence of any improvement to the motion comic since November.

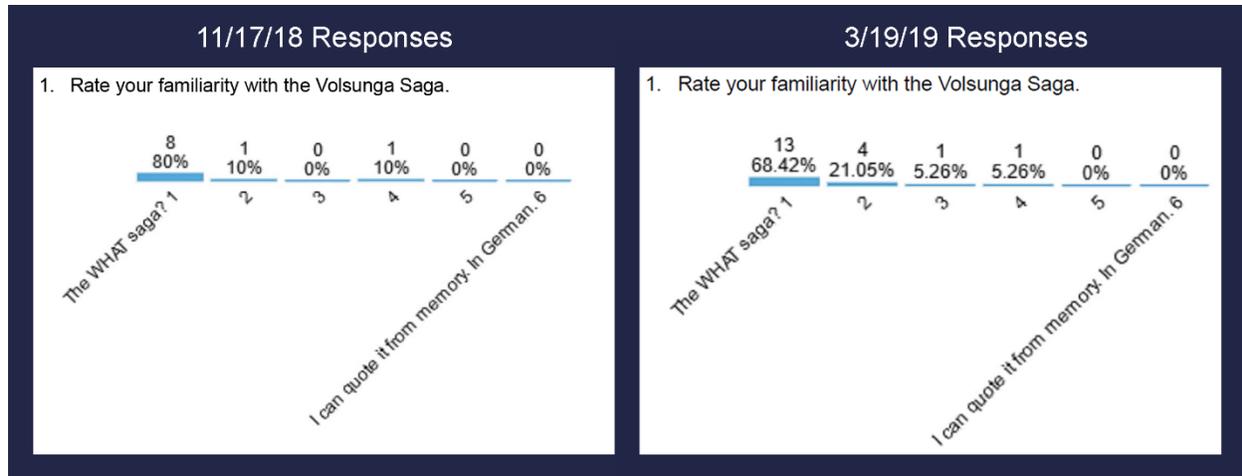


Figure 15. Question 1 results

Figure 13 contains side-by-side images, each bearing a graphical representation of the results collected from the November 2018 and the March 2019 survey question 1. Although there is a larger percentage of people in the first survey who felt they had absolutely no knowledge of the saga, both audiences are shown to mostly be ignorant to the story. Both tests only had 1 person who felt they had a slightly better than average familiarity of the subject matter.

Not much can be assumed from this data other than both audiences appear to have a similar understanding level of the saga.

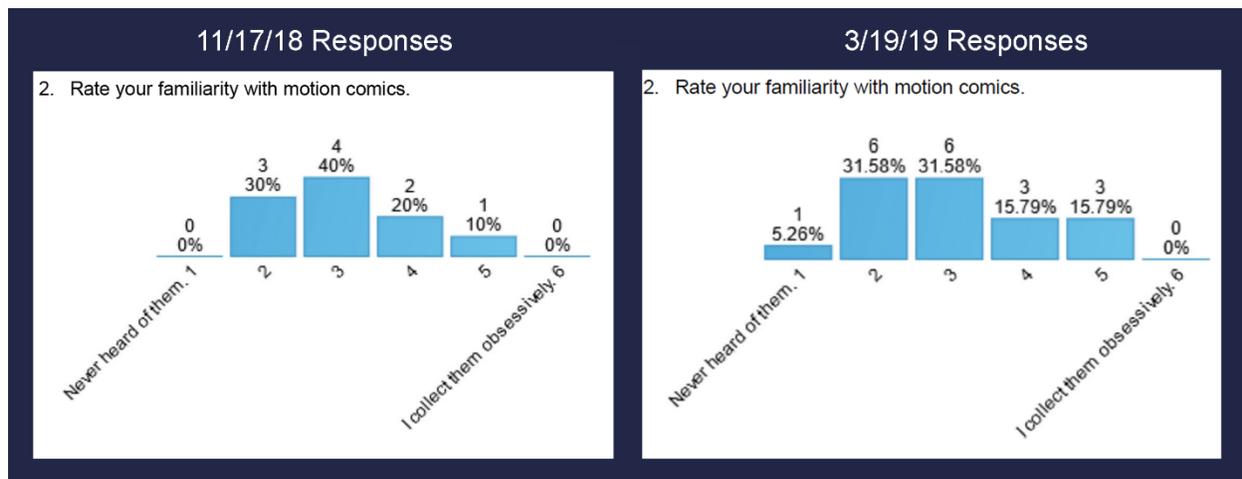


Figure 16. Question 2 results

Similar to the previous results, question two's responses (above figure 14) although slightly different, contained not outstanding data differences. Most participants had some knowledge of motion comics, however there were a few in both who claimed to have slightly better than average and a lot better knowledge than most people.



Figure 17. Question 3 results

Question 3 is where more differentiation in results begins to emerge. As shown in figure 15 above nearly half of the participants thought they understood the motion comics story, however were not confident in their answers. However, in the second survey the confidence of the audience increased tremendously. Leaving only 3 people out of 19 who thought they knew what was going on but lacked confidence, and only 1 who was even more unsure of the story.

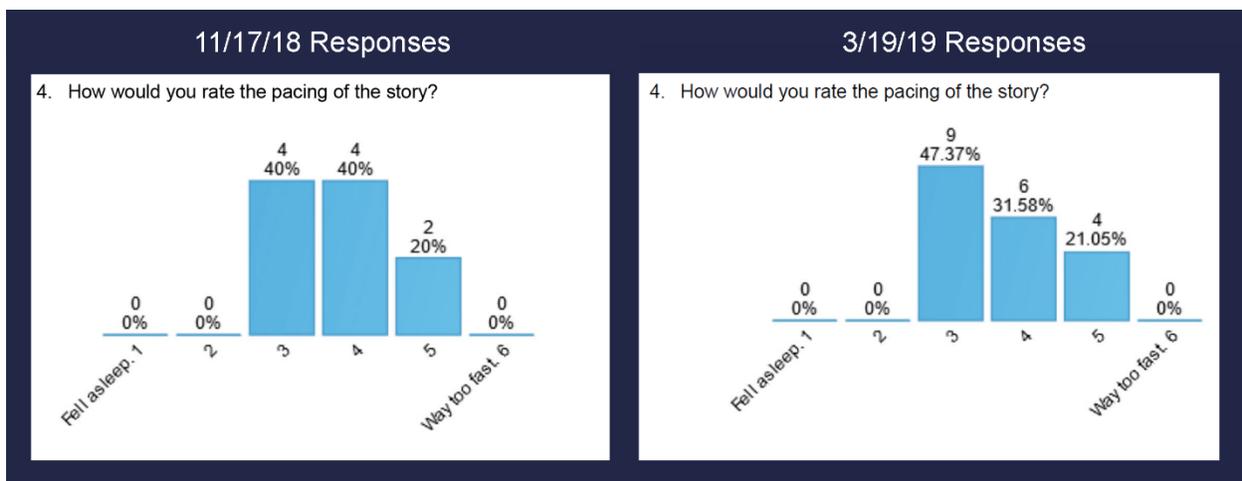


Figure 18. Question 4 results

According to the results shown on figure 16 participants in both surveys felt the pacing was somewhat in the middle. Both surveys had a slight percentage of people who felt it was a bit too fast.

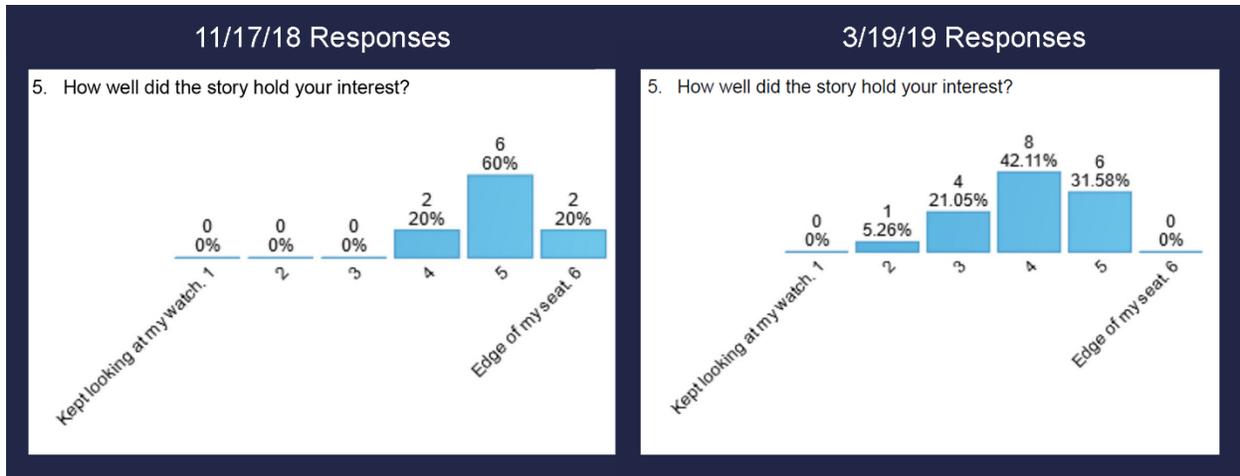


Figure 19. Question 5 results

The data collected for question 5 “How well did the story hold your interest?” can be found above in figure 17. All participants of the first survey had positive responses in regard to how well the motion comic did at holding their attention. However, in the second survey even though ~65% of 19 people had positive responses, 35% of participants had negative responses.

This is evidence that the motion comic may need to do more in order to keep the interest of the whole audience, however it is important to note that the comic still contained missing scenes that could have had an effect.

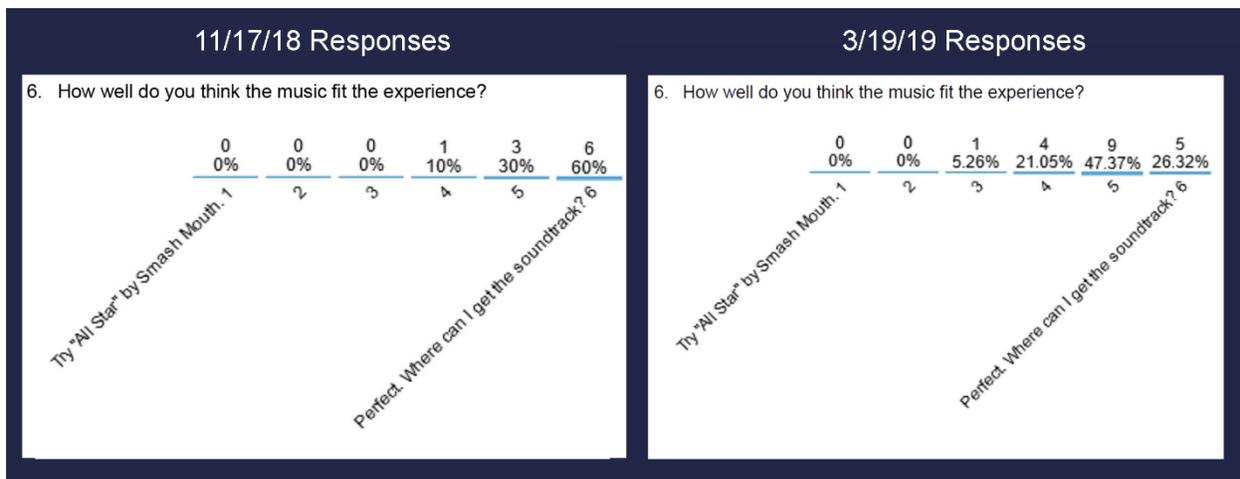


Figure 20. Question 6 results

The participants of both experiments overwhelmingly felt the music was fitting of the subject matter and art (above figure 18). The second survey had a larger percentage of people who felt it was in the middle (not the best fit but not bad either). Although, that is only about 26%, 74% felt it was very fitting if not perfect.

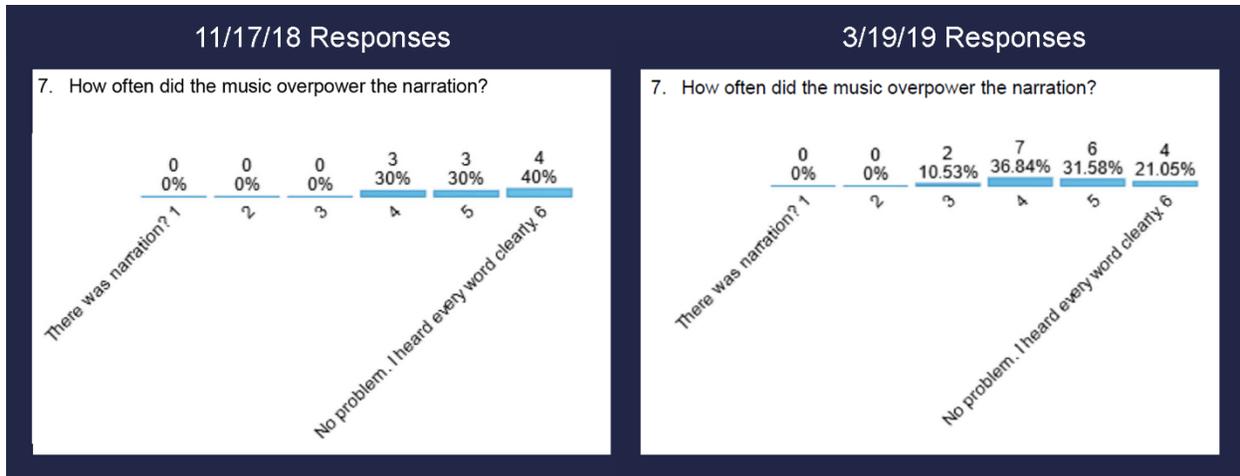


Figure 21. Question 7 results

The data pertaining to the last survey question “How often did the music overpower the narration?” is shown above in figure 19. According to the collected responses the music of the first experiment was all positive. The second is generally positive except there is a large percentage of people (about 46%) that is in the average range.

8. (Optional) Name any scenes in the story you particularly LIKED (if any).
9. (Optional) Name any scenes in the story you particularly DISLIKED (if any).
10. (Optional) What ONE THING would you add, remove or change in the experience to make it better?
11. (Optional) Please add any additional comments or suggestions here.

Figure 22. Questions 8, 9, 10, and 11

Due to the optional nature of these questions many did not participate in this portion, both times surveys were administered. The amount of replies for each question were as follows:

11/17/18 Survey:

Name any scenes in the story you particularly LIKED (if any):

8 of 10 people responded. Many of the replies were scattered all over the place. However, 5 out of the 8 liked scenes that involved the dragon.

Name any scenes in the story you particularly DISLIKED:

4 of 10 people responded. 3 of the 4 commenters disliked the final fight sequence with the dragon. They had felt it ended abruptly.

What ONE THING would you add, remove or change in the experience to make it better?:

5 of 10 people responded. Similar to above the most common comments pertained to the dragon fight and increasing the length of it.

Please add any additional comments or suggestions here:

6 of 10 people responded. None of these comments share criticisms.

11/17/18 Survey:**Name any scenes in the story you particularly LIKED (if any):**

17 of 19 people responded. 11 of the 17 liked the introduction scenes (hammer montage and campfire). The other 6 were random amongst the participants.

Name any scenes in the story you particularly DISLIKED:

12 of 19 people responded. The answers were fairly random and unrelated to one another. However, there are two instances where commenters felt the montage scenes (white flashes) were too slow. There was also confusion of how Fafnir, the dragon died.

What ONE THING would you add, remove or change in the experience to make it better?:

16 of 19 ten people responded. The two most popular recommendations were to update the sound with better voice acting and certain sound effects like the hammering effect. Also add a few more scenes in the dragon fight.

Please add any additional comments or suggestions here:

9 of 19 people responded. The comments were mostly praise of either or both the project as a whole and the art style (8 out of 9). There were also two comments regarding timing. The hammering scene (white flashes) was brought up specifically.

7.0 Conclusion

Overall, I would say I achieved most of my goals for *Sigurd Fafnirs-bane*. I set out to create a motion comic based on the *Volsunga Saga*. Although I could not create something to the scale of my original idea, I am satisfied with my unique rendition of Sigurd's battle with Fafnir. In many ways *Sigurd Fafnirs-bane* avoids many of the pits modern motion comics often fall, original story, lack of movement, oversimplified sound effects, and poor or no narration.

I am also proud to say that this reimagining of Sigurd's battle with Fafnir honors Norse Skaldic tradition in the 21st century. Skaldic poetry was how the *Volsunga Saga* and similar Norse tales spread throughout medieval

Scandinavia. Often each storyteller would take their own creative liberties without ruining the source material. I would say I achieved in creating my personal retelling without disrespecting the original material.

However, my retelling of the saga is not without its own issues. It is important to note that *Sigurd Fafnirs-bane* is not yet completed. Even after a huge reduction in scope, it was still just a fragment too big. That does not mean that the motion comic will not be completed. This MQP will be continued unofficially from the point it was left off.

7.1 Post Mortem

The responses received from both surveys conducted over the course of this project were overwhelmingly positive. I believe these tests gave valuable information, that provided assurance in the direction I was moving the project in. These tests also brought more eyes to the project than my own which allowed for other perspectives and insights to influence *Sigurd Fafnirs-bane*.

The fact that I worked on this project by myself was certainly a challenge. If I had a partner or a group I believe much more could have been accomplished within the project's development timeframe. However, as the motion comic stands, I am very pleased and look forward to continuing to work on it until it is complete.

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Appendices

Appendix A: Software List

Adobe After Effects – <https://www.adobe.com/products/aftereffects.html>
Video compositing, motion graphics design, and animation tool

Adobe Photoshop – <http://www.adobe.com/products/photoshop.html>
2D image creation and editing software

Madefire Motion Book Tool – <https://www.madefire.com/motion-book-tool-open-access/>

MotionArtist – <https://my.smithmicro.com/motionartist-motion-comic-software.html>
Motion comic creation tool

Reaper Digital Audio Workstation – <https://www.reaper.fm>
Free audio editor and recorder

Appendix B: Script

Volsunga Saga Motion Book

By Grant Frederick

Script

Page 1

Panel 1

Sigurd's silhouette riding along a country side, with runestones throughout the landscape.

"I come from a long line of great heroes known throughout the nine worlds..."

Panel 2

Odin holding Gram above his head.

"My ancestors were chosen by Odin to wield his great sword Gram..."

Panel 3

Sigurd climbing a cliff face.

"Their name bears a heavy weight..."

Panel 4

Sigurd's ancestors standing side by side looking victoriously in the distance.

"Each have performed great deeds and earned their place by Odin's side in Valhalla..."

Panel 5

Close up of Sigurd's eye

"Today I must not only prove to myself, but the world that..."

Page 2

Panel 1

Full page spread of Sigurd standing triumphantly staring at Fafnir flying in the distance.

“I am a Volsung!”

Page 3

Panel 1

Camera panned down at a bloody corpse with Sigurd and the sword gram in frame.

“I have avenged my father’s murder”

Panel 2

Sigurd hand clenching his sword looking distastefully in the distance.

“But that is not enough to earn my name in this world”

Panel 3

Collage of creatures, Trolls, giant snake, spirits, draugr

“Creatures roam this land, evil twisted beings”

Panel 4

Silhouette of Fafnir (eyes glowing) in the darkness

“This beast is different. It is rumored that this beast was not always as he appears. Once a man of flesh, but became so consumed with greed and power that he became what he is now”

Page 4

Panel 1

Sigurd stands on a mountain top, Fafnir flies towards him.

“Odin Give me strength”

Panel 2

Fafnir lands and winds his head back and lets loose a roar in front of Sigurd. Sigurd staggers back.

“Fear begins to tug at me, but it takes fear to make a brave man.”

Panel 3

Sigurd sturdies his stance and gives Fafnir a menacing glare.

Panel 4

Fafnir studies Sigurd and smiles

Fafnir: "Who dares to approach me, Fafnir."

Page 5

Panel 1

Fafnir circles Sigurd

Fafnir: "Few come to my land of Gnita-Heath. "

Panel 2

Sigurd: "They call me Sigurd, son of Sigmund, the last of the Volsungs. I have come to put an end to you beast!"

Panel 3

Fafnir boastfully laughs as Sigurd lunges to attack

Sigurd: >GAAH!< (growls)

Panel 4

Fafnir swipes at Sigurd

SFX: "CRAASH"

Sigurd: "HMPF!"

Panel 5

Sigurd tumbles down the mountain side

SFX: "CRACK BANG SLAM"

Page 6

Panel 1

Sigurd catches his breath, Fafnir can be seen flying towards him

Panel 2

Fafnir lunges to attack but Sigurd slices into his wing

SFX: "SLASH"

Fafnir: "ROAR!"

Panel 3

Fafnir shoots fire at Sigurd, but Sigurd dodges out of harms way

Panel 4

Sigurd see's a hole in the ground and dives into it

Panel 5

Sigurd crouches down in the darkness waiting for Fafnir to get close

Panel 6

Fafnir can be seen above the hole Sigurd remains in the darkness

Fafnir: "Sigmund would be disapointed—"

Page 7

Panel 1

Page spread of Sigurd stabbing Fafnir in the throat

Panel 2

Close up of Sigurd's face

Remember this in Hel beast, I am Sigurd, Son of Sigmund, last of the Volsungs, wielder of Odin's sword Gram,
and slayer of the great Wyrms Fafnir!

Appendix C: Survey Questions

Volsunga AlphaFest Survey

1. Rate your familiarity with the Volsunga Saga.

1 2 3 4 5 6
The WHAT saga? I can quote it from memory. In German.

2. Rate your familiarity with motion comics.

1 2 3 4 5 6
Never heard of them. I collect them obsessively.

3. How well did you understand the story?

1 2 3 4 5 6
Totally bewildered. Clear as day.

4. How would you rate the pacing of the story?

1 2 3 4 5 6
Fell asleep. Way too fast.

5. How well did the story hold your interest?

1 2 3 4 5 6
Kept looking at my watch. Edge of my seat.

6. How well do you think the music fit the experience?

1 2 3 4 5 6
Try "All Star" by Smash Mouth. Perfect. Where can I get the soundtrack?

7. How often did the music overpower the narration?

1 2 3 4 5 6
There was narration? No problem. I heard every word clearly.

8. (Optional) Name any scenes in the story you particularly LIKED (if any).

9. (Optional) Name any scenes in the story you particularly DISLIKED (if any).

10. (Optional) What ONE THING would you add, remove or change in the experience to make it better?

11. (Optional) Please add any additional comments or suggestions here.

submit

Appendix D: Informed Consent

Informed Consent Agreement for Participation in a Research Study

Investigator: Grant Frederick

Contact Information: gafrederick@wpi.edu

Title of Research Study: Volsunga Saga Survey

Introduction

You are being asked to participate in a research study. Before you agree, however, you must be fully informed about the purpose of the study, the procedures to be followed, and any benefits, risks or discomfort that you may experience as a result of your participation. This form presents information about the study so that you may make a fully informed decision regarding your participation.

Purpose of the study: Gain feedback on the current state of my project. This feedback will be used to understand what works and doesn't work during this project's current state.

Procedures to be followed: You will be given the opportunity to view the motion comic. Post viewing you will be given an online survey.

Risks to study participants: NONE

Benefits to research participants and others: The knowledge that you helped a dude out.

Record keeping and confidentiality: "Records of your participation in this study will be held confidential so far as permitted by law. However, the study investigators, the sponsor or it's designee and, under certain circumstances, the Worcester Polytechnic Institute Institutional Review Board (WPI IRB) will be able to inspect and have access to confidential data that identify you by name. Any publication or presentation of the data will not identify you.

Compensation or treatment in the event of injury: "You do not give up any of your legal rights by signing this statement."

For more information about this research or about the rights of research participants, or in case of research-related injury, contact:

IRB Chair (Professor Kent Rissmiller, Tel. 508- 831-5019, Email: kjr@wpi.edu) and the Human Protection Administrator (Gabriel Johnson, Tel. 508-831-4989, Email: gjohnson@wpi.edu. This section is required.)

Your participation in this research is voluntary. Your refusal to participate will not result in any penalty to you or any loss of benefits to which you may otherwise be entitled. You may decide to stop participating in the research at any time without penalty or loss of other benefits. The project investigators retain the right to cancel or postpone the experimental procedures at any time they see fit.

By signing below, you acknowledge that you have been informed about and consent to be a participant in the study described above. Make sure that your questions are answered to your satisfaction before signing. You are entitled to retain a copy of this consent agreement.

Date: _____

Study Participant Signature

Study Participant Name (Please print)

Signature of Person who explained this study _____

Date: _____