

**2-17 | DeUS et mAchIna**

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2i1

WRITTEN REPORT

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## **Introduction**

Our group, 2-17 has written a screenplay exploring

- 1) the fraught relationship between a creator and its creation due to the fact that the creation will search to be a creator in its own right,
- 2) the act of overthrowing one's creator being inevitably doomed to fail,
- 3) the dilemma between personal ethics and professional ethics or priorities and
- 4) the notion that violent chaos and tranquil peace are not mutually exclusive. As violence and chaos can lead to tranquility and peace, so can tranquility and peace result in violence and chaos.

However, we have explored these themes in relation to Artificial Intelligence (AI) through the lens of mythology. As both mythology and AI deal with the concept of creation, we were able to use them as a link to discuss AI and its ethical issues. Mythology is the medium through which people in ancient times explained the creation of sentience, while AI is the modern attempt to create sentience. We hence used mythology to attempt to explain the ethical issues revolving AI. Additionally, myths are non-factual and thus open to interpretation, giving us room to connect the worlds of mythologies from different cultures, allowing room for creative exploration.

## **1. Medium**

For this project, we have chosen film as the medium of our final product as we felt that it is the most appropriate medium to achieve our rationale behind this entire project: to raise ethical issues surrounding AI to our target audience, the youth, specifically the young teenagers and young adults, and to predict how AI will develop in the future(refer to Rationale).

The first step of creating a film is writing a screenplay. The screenplay is used as the blueprint for the film and allows for all parties to be on the same page when creating the motion picture(Jefferson, 2014). Therefore, for practical reasons, we decided to write a screenplay for a film without creating a motion picture. Another reason we chose to write a screenplay was due to a screenplay having action as the primary tool of structure(Krueger, 2017). This is an advantage to us as our plot revolved around gods and a revolution, which is a combination that requires many key scenes being completely action based.

For the wider medium of film, it has the potential to reach the widest audience, especially those of our target group. According to the Theatrical Market Statistics 2016, our target audience attends an average of 6.5 movies every year, more than any other age group. Based on a study done by the researchers at the USC Annenberg Norman Lear Center about a film's power to change the behavior of people who see it, the study of more than 20,000 people found that those who saw the 2010 Oscar® nominee *Food, Inc.* had significantly changed their eating and food shopping habits. This shows that film can have a significant effect on our target audience. Taking the aforementioned factors into account, we hence wanted to harness film's storytelling powers to portray the abstract concepts of mythologies, AI and the ideas about creation to achieve our objectives.

## **2. Rationale**

Our rationale was to raise ethical dilemmas surrounding Artificial Intelligence(AI) and the daily lives of youths to our target audience, the youth, specifically the young teenagers and young adults, and to predict how AI will develop in the future.

In today's society, AI is already virtually disrupting and affecting almost every industry and every human being, transforming the way we live, work, travel, and do business, not mentioning its projected increasing impact on the future. Therefore, our project will mainly focus on ethical dilemmas based on AI.

Below is a quote cited from our screenplay.

*“Over the hills, in the distance, we hear the sounds of battle. We hear the sounds of war,”-Deus et Machina, Act 5*

The phrase in our screenplay “in the distance” is a metaphor for the future. The anaphora of “we hear the sounds of battle. We hear the sounds of war” emphasises the violence that is taking place in this future. Even though they are currently only faint echos, over time they will have real and devastating consequences. This quote thus reflects the prediction that we have made regarding AI's uses and developments in the future, that AI will undergo further militarisation and increasing involvement in violent conflicts, thus highlighting the threat it poses to humanity.

Some examples of the ethical issues that AI may result in include the morality behind the militarisation of AI, the dangers of a “singularity”, an AI which is more intelligent than the human race, causing unintended consequences due to a lack of understanding in full context of mankind's wishes (Bossmann, 2016). There are many questions that need to be answered: Should AI even be allowed to be more intelligent than humans? How would we control an AI with supreme cognitive ability as compared to us, thus circumventing any pre-emptive measures? Should there be a clearly written guideline on robot rights? These ethical issues and questions will arise in the near future when our target group becomes active members of the society and become the trailblazers of the 4th Industrial Revolution. Therefore, it is of paramount importance that they understand and ponder these issues, and take necessary steps to prevent them.

Both AI and mythology deal with the concept of creation. AI researchers most commonly are tasked with studying and suggesting ways of improving or creating AI, such as analyzing current examples of artificial intelligence in order to build on loopholes and drawbacks. Similarly, in mythologies, creation myths are fairly common, with the purpose of myths being to explain or justify the way the world works, serving as a means to which humanity understands the world, mainly how the world came into existence. We wanted to explore the same ideas of creation in both fields from a specific lens, specifically, the ethics and morality behind creation.

### **3. Methodology**

#### **1) Characters Research**

We first started by brainstorming potential characters for our screenplay. Our main considerations were firstly, if the character matched our personalities in real-life and secondly, we wanted to acknowledge the diversity which exists across different cultures and their mythologies, and explore briefly the similarities between the different mythologies.

#### **2) Mythologies Research**

Concurrently, we started exploring different mythologies and conducted research on them. These research led us to shortlist and select our final 4 characters that matched our considerations: Eunomia and Athena from Greek Mythology, Guan Yin Pu Sa from Buddhist Mythology, Loki from Norse Mythology. We then conducted deeper research and analysis of our characters' personalities and stories in their respective mythologies to be included in our screenplay. This is of utmost importance to us as it allows us to have a basis from which we can creatively expand upon by drawing connections across mythologies or by adding to the base personalities of our characters. This also allows us to allude certain events in our screenplay to actual events that occurred in their mythologies in order to use them for more thematic or plot-based reasons. It is important for us to do so as one of our considerations when we first selected gods from mythologies as characters was if we could pay service to the culture that they come from.

#### **3) Philosophies Research**

We then researched potential philosophies our characters would believe in in order to have a deeper understanding of our characters' decision process and to flesh out our characters even more. Guan Yin would believe in Sutta Pitaka, Eunomia would believe in deontological ethics, Athena would believe in Lockean philosophy, and Loki would fall under three separate philosophies: Machiavellism, Egoistic Hedonism and Existential Nihilism. The reasons for our allocations will be discussed in our literature review.

#### **4) AI research**

We then decided to match their respective personalities to different types of AI to provide a new perspective on the ethical issues regarding AI. Eunomia would be Deep-learning AI, Guan Yin would be Artificial General Intelligence(AGI), Loki and Athena would be Artificial Super Intelligence(ASI)(refer to Literature Review Section B).

#### **5) Research on Medium**

Next, we conducted an in-depth research on the 2 mediums we shortlisted: Film and Play. Research on the differences between both mediums and their respective strengths and weaknesses was carried out. After that, with much conscientious balancing of both mediums' advantages and disadvantages, our chosen medium was film and our final product was in the form of a screenplay. Without much knowledge in the field of screenplay, we began to conduct research on the platform in which our screenplay would be written, the formats for screenplay writing and last but not least the style of screenplay writing. Armed with these research, we then began our screenplay writing journey.

#### **6) Screenplay (Writing Process)**

After learning the basics of the screenplay such as its format and style of writing, we began brainstorming our plot. To begin with, we tried our hand at writing a suitable beginning scene. After going through 4 or 5 drafts of the beginning scene, we had familiarised ourselves with our character's personalities. To aid in this process however, each of us focused on one character, Alden, Emmanuel, Javier and Guan Yi focused on Eunomia, Loki, Athena and Guan Yin respectively. This allowed us to completely immerse ourselves into our characters. Once we agreed on a beginning scene, we started to draft our story using a 5-act-structure, and drafted our characters' arcs with the hero's journey.

#### **7) Minecraft**

We wanted a way to bring our film to life, to visualise scenes better, in order to aid us in our writing process. We initially considered trying our hand at physically recreating scenes, however the lack of resources and experience caused that notion to die out quickly. With the COVID-19 pandemic, we quickly turned to online means of creating our film, deciding to use the platform

Minecraft. Minecraft was simple and cinematic, allowing us to build and design sets in a relatively short amount of time and create a storyboard for scenes that were more complex or harder to visualise, allowing us to observe whether scenes in our screenplay have the effect that we want them to when translated to visual form. The pictures below show some of our builds in Minecraft.



Fig 1: Minecraft set designs of the Evros River



Fig 2: Minecraft set designs of the interior of Mount Olympus



Fig 3: Minecraft set design of the entrance to Asgard



Fig 4: Minecraft set designs of the Market

## **4. Literature Review**

### **a. Mythologies**

The four main characters of our screenplay originate from three different mythologies: Greek, Buddhist and Norse mythology. In order to adhere to the original mythologies as closely as possible, research on the myths surrounding our characters was conducted.

#### **i. Athena, Goddess of War and Wisdom**

Athena is the Greek goddess of Wisdom and War. She is portrayed as wise, vigilant, yet rash in our screenplay and assists Loki in the creation of humans. She is more prone to using violence to solve issues. She also believes that people can be masters of their own fates and believes that everyone should be born as a blank slate, given the opportunity to determine their own futures freely.

Athena is the daughter of the God of Thunder and Lightning, Zeus. Her origin story stems from Zeus developing an unbearable headache and cracking his skull open.

One of the most famous myths relating to Athena is the myth of Arachne. Although Athena spared Arachne for insulting the gods, she turned Arachne into a spider to punish her.

*“Live on then, and yet hang, condemned one, but, lest you are careless in future, this same condition is declared, in punishment, against your descendants, to the last generation!” (Ovid’s Metamorphoses)*

The phrase “live on then, and yet hang” shows how Athena does not want to choose between the extremes of killing and sparing, as she wants to enact a just punishment that will prevent Arachne from repeating the same mistake. Although her rash act of tearing Arachne’s tapestry shows her rash and extreme emotions, when finally comes round, she knows to think tactically and wisely as well, as seen through her, out of pity, loosening the rope, yet to punish Arachne, turning the rope into a cobweb and changing Arachne into a spider.

Now, let us take a look at Athena's role in the creation of mankind. From the writings of Lucian Of Samosata, a late 100 AD writer, Prometheus, with the help of the goddess Athena, created the first man from fire and clay and with similar form to that of the gods. In Greek sarcophagi, Prometheus is depicted making statues and the goddess Athena sending them souls to give them life, as seen in Figure 4 below.



Figure 1: A Greek Sarcophagus depicting Prometheus and Athena creating the first humans

Athena also, from multiple ancient literary works and myths, assisted heroes like Odysseus, Cadmus, Hercules, Perseus and Jason. By aiding them when it seemed impossible for them to progress. This is an act of “Deus Ex Machina” in literature. The reason why Athena would use her godly powers to assist mortals would be justified by the fact that she practically created them. As seen above from the myth of Erichthonius, she feels obliged to nurture and take care of beings that she had a part in bringing to life. This, along with the fact that Zeus trusts her with his Aegis, can lead us to conclude that Athena is a responsible individual who feels obligated to care for humans. The way she shows her care towards humans is by assisting them in their growth and teaching them morals. Hence, we assume that she would believe in the Tabula Rasa theory.

According to the Merriam Webster Dictionary, Tabula Rasa is defined as “the mind in its hypothetical primary blank or empty state before receiving outside impressions”. This theory was thought up by English Philosopher, John Locke. From his Essay Concerning Human Understanding

Part II, Chapter I, he addresses the Tabula Rasa as “white paper”, making the point that a human’s mind starts out without knowledge, beliefs or ideas. These are brought into the mind through experiences. Hence, Athena assists humans in their journeys to provide them with learning experiences to allow them to gain knowledge and morals.

Creatively, we decided to explore the theme of personal ethics against professional ethics through the relationship between Athena and Eunomia, who share the same father, Zeus, but their relationship as half-sisters is never developed in mythology. We portrayed Athena as the more prominent and ambitious of the two, owing both to her being the elder sister, as well as her being a strong warrior.

## **ii. Eunomia, Minor Greek Goddess of Law and Legislation**

In the Greek Mythology, Eunomia(Good Order) is a minor Greek Goddess of Law and Legislation, as well as being the SpringTime Goddess of Green Pastures. Eunomia is often associated with the internal stability of a state, including her enactment of good laws and her maintenance of civil order. As Eunomia is usually depicted in Athenian vase painting amongst the companions of Aphrodite, we can infer that Eunomia also represents the lawful and obedient behaviour of women in marriage.

In our screenplay, our group brainstormed and decided to present one of the major characters of our film, Eunomia, as a representation of law and order. Eunomia has a lawful personality and she is orderly and organised in mind. Therefore, we have attached deontological ethics for the moral philosophy that Eunomia will stand for, portraying Eunomia to be a character who goes by the book and follows the sets of rules that she represents.

*Hesiod, Theogony 901 ff (trans. Evelyn-White) (Greek epic C8th or C7th B.C.) :*

*"Next he [Zeus] led away...who bare the Horai (Horae, Seasons), and Eunomia (Good Order)...who mind the works of mortal men."*

From the above quote, it further supports the idea that Zeus is Eunomia’s father in Greek Mythology as well as in our screenplay. It shows Eunomia’s representation of “Good Order” and

“who mind the works of mortal men”, further supports our plot point of Eunomia creating the human-like sentient beings in our screenplay.

*Demosthenes, Against Aristogeiton 25. 11 (Greek rhetoric C4th B.C.) :*

*"You must magnify Eunomia (the Goddess of Order) who loves what is right..."*

The above quote further supports our presentation of Eunomia’s representation as “the Goddess of Order”. It also supports our portrayal of Eunomia to be a character “who loves what is right”, which in our screenplay is specifically Eunomia’s love and affection for her “right”-ful half-sister, Athena.

In Greek Mythology, Eunomia and Athena do not interact much, however, our group decided to establish a complex relationship between both characters to add creativity to Eunomia’s characterisation. In the beginning of our screenplay, Eunomia’s relationship with Athena is portrayed to be that of a loving but slightly one sided one. In this relationship, Eunomia is presented to be obedient and loyal to Athena, consistently following her half-sister. Throughout the screenplay, their relationship further develops as Eunomia’s ethical dilemma between her personal ethics (relationship with Athena) and her representation (law and order) emerges. This relationship finally solidifies when Eunomia compromises her personal beliefs for this strengthened relationship, finalising her character’s growth and showing the evolution in her personality.

### **iii. Guan Yin, Goddess of Compassion, Mercy and Kindness**

Guan Yin is a short form for Kuan Shi Yin, which means “Observing the sounds and cries of the World”. In our screenplay, we chose to portray Guan Yin as compassionate yet calm, and determined to help others. She is capable of reading others emotions and expresses empathy towards all.

The first story we referred to was Guan Yin’s origin story, which was penned down by Buddhist monk Chiang Chih ch’i in 1100AD, and its translation was retrieved from Mythopedia.

*“When she arrived in Hell, the Earth around her burst into life with blossoming flowers. Seeing all the suffering souls around her, Miao Shan began to weep with sorrow.”*

This quote shows that Guan Yin can turn even the darkest of places (“Hell”) to the fairest realm of all (“Earth”). According to Buddhist beliefs, the human realm (i.e. Earth) is seen as the greatest realm as humans have the chance to attain *Nirvana*, which is the ultimate spiritual goal in Buddhism. Additionally, the phrase “burst into life” shows that she can even cause life to exist in the most barren place. Lastly, the word “weep” shows the deep extent of her sympathy and sorrow for the “suffering souls” in Hell. This shows her compassionate nature and ability to bring life and peace to the most twisted of souls.

*“There are the waves and there is the wind, seen and unseen forces. Everyone has these same elements in their lives, the seen and unseen: karma and free will. ... **Everyone must take what they see and deal with that which is unseen.**” -Guan Yin*

The first part of this quote is about the seen and unseen forces. “Waves” and “winds” both share a similar property, in that they are in constant motion. This symbolises the natural order and fluid motion of fate and reflects the unpredictability of life.

The second part of the quote (in bold) shows that even in the face of such unpredictability, Guan Yin is able to accept that these factors are out of her control and make the best out of this situation, thus showing her calm demeanor in the face of challenges.

*“Should She ever become disheartened in saving sentient beings, may Her body shatter into a thousand pieces.” -Guan Yin*

In this quote, the word “shatter” gives an impression of violence and pain and “a thousand pieces” shows the great extent to which she is willing to pledge herself to her cause of helping sentient beings. This extreme pledge shows her overwhelming great compassion and determination of helping all beings.

Guan Yin’s traits seem to align perfectly with the teachings of the Sutta Pitaka. This makes sense as she is a Bodhisattva and would thus practice the Buddha’s teachings. This teaching, in particular, fits her personality as being extremely kind and compassionate. The Sutta Pitaka also

includes the Metta Sutta, a scripture in which the Buddha describes how an individual can live a life of loving-kindness(BBC).

Creatively, we decided to expound on our theme of chaos and peace not being mutually exclusive through the relationship between Guan Yin and Loki. who share a mentor and mentee relationship. Guan Yin's character personifies peace, as she has achieved enlightenment and is calm in the face of a challenge.

#### **iv. Loki, God of Mischief**

In our screenplay, we decided to portray Loki as extremely cunning, ambitious and full of hate and anger. Additionally, Fire is a motif that often appears in conjunction with Loki, which was derived from the incidental similarity between the old Norse word "Logi" (meaning fire) and "Loki" that we found.

The basis of the Loki in our screenplay comes largely from Prose Edda, written by Snorri Sturluson in the early 13th century, circa A.D. 1220. The particular translation that we are using is that of Arthur Gilchrist Brodeur, a 19th century scholar of Old Norse Literature.

The Prose Edda states that although Loki was "*beautiful and comely to look upon*", he is stated to be "*evil in spirit*" and "*fickle in habit*". Therefore, Loki was chosen to represent the slightly more negative aspects of humanity, such as greed, rashness and anger.

One story we analysed was the killing of Baldr, This was then incorporated into our screenplay as one of its major turning points. Similar to how Baldr was showing off his invulnerability in the screenplay, the Æsir often made sport of Baldr's seeming invulnerability, throwing projectiles at the god since he could not be harmed. Therefore, although Loki was not to be an antagonist in our screenplay, he, similar to Loki of the Prose Edda, makes terrible mistakes that have devastating repercussions on the rest of the characters and himself. The scheming and self-interest of Loki's character seemed to be a perfect exemplification of a Machiavellian character, thus we did more research into this by referring to Machiavelli's "the Prince", the

infamous political treatise by Niccolo Machiavelli, a 13th century Italian diplomat and political theorist. As written by Machiavelli:

*“it is much safer to be feared than loved, when, of the two, either must be dispensed with. ”*

*~ Chapter 17, “concerning cruelty and clemency, whether it is better to be feared than to be loved”, Niccolo Machiavelli*

Despite the similarities, Loki’s act of killing Baldr out of hatred, and his scheming tendencies, there are some critical differences between Loki’s character and what Machiavelli suggests in *The Prince*. Machiavelli’s forceful tactics of intimidation and mistrust of other human beings are out of a need to maintain power and thus stability in a nation, whereas Loki did not seek for such an outcome, but freedom from the natural order and the Allfather’s control. This is reflected in our screenplay during Loki’s monologue.

As mentioned earlier, we are using the relationship between Loki and Guan Yin to expound on our theme of peace and chaos not being mutually exclusive. Loki’s character personifies chaos, as he is cunning, quick-witted and willing to go to extreme lengths to accomplish a mission, thus causing massive chaos,

## **b. Artificial Intelligence**

Artificial Intelligence or AI serves as the main premise and context to which our screenplay is in. With an in-depth research and analysis of our 4 main characters' personalities and their respective mythologies as stated above, we decided to imbue certain types of AI traits to each of our main characters to further add an additional layer to their characterization, adding artistic flavour to our screenplay.

### **i. Deep Learning(Eunomia)**

In our screenplay, Eunomia's personalities and representation as a minor greek goddess best suits the traits of Deep Learning Artificial Intelligence. Thus, Eunomia represents Deep Learning Artificial Intelligence. According to Marr and Hargrave, with Machine Learning defined as a subset of Artificial Intelligence, Deep Learning is generally defined as an Artificial Intelligence function, being a subset of Machine Learning. Deep Learning has artificial neural networks, with its algorithms inspired by the human brain with the capability to enable learning from large amounts of data that is unstructured or unlabeled without human supervision. Deep learning algorithms would perform a task repeatedly, each time tweaking it a little to improve the outcome.

In our screenplay, Eunomia is portrayed to possess the qualities of Deep Learning Artificial Intelligence. In the beginning, Eunomia is presented to have a simple train of thought with limited to no capability of expressing any forms of emotions, having little say for herself and just following her "programme", reflecting the initial state of Deep Learning Artificial Intelligence. However, as the plot develops, Eunomia has more interactions with our created world, forming new relationships through her communications with the other gods. She starts to obtain new data, new information from her surroundings and learn from it, much like Deep Learning Artificial Intelligence. Eunomia can be seen in our screenplay performing an action repeatedly, for example Eunomia repeatedly posing questions to acquire more information and data to learn from. Through learning from her newly acquired knowledge, she begins tweaking her actions, dialogue, and even her tone, by making the ultimate decision of sacrifice, having a greater say for herself, and possessing a diverse spectrum of tones respectively, to the extent of feeling and weighing complex and conflicting

emotions of love and for duty, solidifying her growth into a “human-like Artificial Intelligence”, reflecting the improvements and evolution of Deep Learning Artificial Intelligence.

## **ii. Artificial General Intelligence(Guan Yin)**

In our screenplay, Guan Yin represents Artificial General Intelligence(AGI). A general definition of AGI would be the ability of a machine to perform any task that a human can. In the sub-category of cognitive computing, AI systems utilise self-learning algorithms such as deep learning to automate human processes and augment human capabilities. In the future, this branch of AI will be able to recognise and even feel emotions. Annette Zimmerman, research vice-president at Gartner, believes that in 2 years, AI will be able to understand our emotions better than other humans.

Guan Yin reflects the capabilities of AGI in our screenplay. Throughout the screenplay, she shows her ability to understand others emotions better than they themselves, through her reading of other’s aura. In a way, this represents AGI, which recognises emotions through compartmentalising and analysing “data”. She also shows her ability to feel intense emotions such as grief and love. Guan Yin also has strong beliefs that are not easily swayed, and an innate desire to help others in need. This could be represented in AGI in the future, as it is possible for the algorithms to draw different conclusions from the same set of data, which would indicate the presence of an innate personality or predisposed “biases” that would influence its interpretation, much like the way the subconscious works in humans.

## **iii. Artificial Super Intelligence (Athena and Loki)**

The world has heard the alarming predictions from some of the brightest minds about Artificial Super Intelligence’s (ASI) potential impact on mankind. The late physicist Stephen Hawking believed that if ASI were to be a possibility, it “will take off on its own, and redesign itself at an ever-increasing rate. Humans, who are limited by slow biological evolution, couldn’t compete and would be superseded.” In comparison to Deep Learning and AGI, ASI is merely

theoretical and its impact would be hard to predict. However, it would be the most dangerous type of AI to be created due to its unpredictability and godly prospects.

ASI is self-aware, meaning that it is now not only sentient, but is able to improve further beyond the human level. It is the type of artificial intelligence that arguably appears the most in modern films, popularised in dystopian fiction where AI typically attempts to overthrow and/or enslave humanity. Examples of such films that show the treachery of AI would be “Ex Machina”, “2001: A Space Odyssey” and “Blade Runner”. Another aspect of ASI that could potentially be dangerous is that ASI would be technologically advanced to the extent that they could feel emotions and can have independent thoughts. At this stage, humanity must tackle the ethical problem of whether or not to grant AI the same rights as us. As reflected in our screenplay, the dangers of this would be rebellion. Humans already conduct rebellions against others of undeserving higher authority. Given that ASI is wiser and smarter than humans, but are built to serve humans, it forms a dilemma for both parties, causing an imbalance in the relationship.

In our screenplay, we chose to represent ASI with two characters instead of one. This shows the complex growth of ASI, in that they have ever growing wisdom and scheming intellect, being able to have their own beliefs and even influence others to adopt similar beliefs.

The first character in our screenplay representing ASI would be Athena. Athena, being the Goddess of Wisdom would naturally be a great representation of ASI as she shares the qualities of being knowledgeable as well as superhumanly powerful, being a goddess. Athena is extremely conflicted in the screenplay, being faced with the contradictions of love and duty, as well as violence and peace. In both ASI and Athena, knowledge leads to dilemma and eventually, chaos and harm.

The second character in our screenplay representing ASI would be Loki. He is able to make complex decisions, and although we were unable to benchmark his intellectual and physical abilities to that of the Allfather (since ASI is defined based on how it performs relative to humans), the reader is clearly able to tell that Loki is highly intelligent and performs critical thinking and also experiences a plethora of emotions, such as hate and anger, that show his higher level of intelligence as he is able to grasp emotions, unlike Eunomia and Guan Yin who are initially

portrayed as one sided and dull compared to Loki. Loki is also arguably the most dynamic character in the screenplay, and has been fleshed out to a great extent, similar to how ASI will develop and grow in a very human manner.

## **6. Product**

The Allfather holds a monarchy over the universe. No more. Four gods rise up. In still times of peace and times of burning chaos, against love, against duty, against him. His own creations.

The mechanical world will be reborn.

They just have to die.

**The God Of Controversy. The God Of War. The God of Mercy. The God of Law.**

**4 Gods. 1 Lord.**

**Revolution is the sole conclusion.**

*Link to our FULL screenplay: <https://tinyurl.com/y33c7xxn>*

*Refer to Appendix I for excerpts from our screenplay and analysis of our quotes*

## Appendix I:

*Each horizontal line represents the start of a separate scene*

### ACT 2

#### **EXT. LAKE AMSVARTNIR-DAY**

HEIMDALLR

I think I've got a big one.

HEIMDALLR reels up a fish.

LOKI

That's just a salmon. You're off your game I see.

HEIMDALLR

Just you wait.

HEIMDALLR lowers his fishing line back into the lake.

LOKI

(sarcastically)  
I'm waiting "patiently".

HEIMDALLR

You've been with Guan Yin for a while now. How are the meditations treating you?

LOKI

It's definitely not treating my soul.

HEIMDALLR

Nothing ever will...

LOKI

Count on you to know me best.

LOKI and HEIMDALLR chuckle.

HEIMDALLR

So... did you find some of the peace Guan Yin was talking about?

LOKI

What do you think?

HEIMDALLR

I'm betting not at all. But I will still hope.

LOKI

You know, hope doesn't get you anywhere.

HEIMDALLR

It keeps me going.

LOKI

Whatever floats your boat.

HEIMDALLR

... Do you really hate life so much? I know we haven't been talking about this, but life really isn't that bad.

LOKI

To everyone else it isn't...

LOKI (CONT'D)

Actually, I've had an epiphany recently.

HEIMDALLR

What about?

LOKI

I think I've seen through the ploys of life.

HEIMDALLR

That's a bold statement.

LOKI

That's a true statement.

HEIMDALLR

What ploys do you see?

LOKI

It's the cycle. This never ending,  
mundane cycle of life. These chains that  
bound us all too tightly.

HEIMDALLR

True, but there are times this mundane  
cycle can be broken. I should be at home  
resting now or performing my duty. I  
shouldn't be fishing with you. Yet here I  
am.

LOKI

But if I asked you to fish with me all  
day, now that would be a different  
matter.

HEIMDALLR

That would be. But it's the way of life.  
I've learnt to be satisfied in what I do.

LOKI

I'll never learn that. I'm not like you.  
I'm not subservient. And maybe that's a  
bad thing, but frankly, I wouldn't care.

HEIMDALLR

I know you wouldn't. I know you're not  
like me. You're not like anyone, for that  
matter. I know it's hard on you. But we  
really can't do anything.

LOKI

Heimdallr, I've recently had an idea. I'm  
not sure if it's absurd.

HEIMDALLR

Go on.

LOKI

I... I wanted to change the  
universe, make it more

spontaneous, spice things up, let the colours fly.

HEIMDALLR keeps silent.

LOKI

I know I can't change this world.  
But what if I...

LOKI (CONT'D)

What if I created a new world.

HEIMDALLR

Is that a tad bit ambitious?

LOKI

I know, that's what I thought at first.

HEIMDALLR

You can't be serious.

LOKI

But I am. I've found a way.

HEIMDALLR

To make a new world?

LOKI

To create another form of life. To improve the world. To break the Great Chains of Being.

HEIMDALLR

The chains are there to bring order.

LOKI

Order limits freedom.

---

**INT. MARKET-DAY**

The bright sunlight blinds us before the market slowly comes into focus. It is packed with Asgardians.

LOKI

To think that I planned this whole event single-handedly, yet, I don't even get the right to relish the view of it all from the throne room.

HEIMDALLR

Please don't sulk, just have fun. Don't you love the chaos of festivals?

LOKI

Oh I do, you better bet on it, but I'm not going to watch Baldr steal the limelight.

HEIMDALLR

You could just sit out when he performs.

LOKI

I could.

HEIMDALLR

For now just enjoy the festival. We gods rarely get to relax like this.

LOKI

Especially not with the Allfather keeping us busy.

HEIMDALLR

You know it. Duty always comes first.

LOKI

I hate it.

HEIMDALLR

Well, it gives us our purpose, our function in life, there's no need to hate it, we just follow it.

HEIMDALLR (CONT'D)

Loki, I'll be over there, seems to be a stall selling items for the performance later.

LOKI

I'll leave you to that then.

LOKI and HEIMDALLR split ways.

LOKI walks alone through the market, hands in his pocket, unsure whether to feel proud or jealous.

He passes by:

People bargaining at stalls,

Children playing around,

Families strolling about.

STALL-OWNER

Anybody want tomatoes? Cheap tomatoes ready for flingin'!

LOKI walks past the STALL-OWNER silently.

STALL-OWNER

Hi Oi sir! You look empty-handed, would you like tomatoes to fling at Baldr? I promise ya, their dirt cheap. Come take a look.

LOKI

No thanks.

LOKI turns to face the STALL-OWNER.

STALL-OWNER

Ah! You're Loki aren't ya? Aye, no wonder you won't buy tomatoes from me. Baldr's your good old brother! It's fine, I'd do the same in your position. Have a good day, sir.

LOKI

I actually would buy some tomatoes, but I haven't the currency on me.

LOKI empties his pockets and a mistletoe dart falls out.

STALL-OWNER

Oh, what've we got there?

LOKI instantly bends down to pick up the dart as he speaks.

LOKI

Nothing much, just a little something to throw at Baldr, figured since he doesn't feel no pain, might as well have some fun.

STALL-OWNER

So ya did bring something to join in the fun with. Good for you sir!

The STALL-OWNER pats LOKI's shoulder as LOKI walks away, dusting his shoulder off moments later.

LOKI continues walking alone in silence...

he continues...

and continues...

seemingly contemplating something...

until...

...

HEIMDALLR can be seen waving his hands in the air.

HEIMDALLR

Loki! Over here! Come over! We have a great show on our hands today. Based on what they're saying, one of them is going to try and throw a javelin at Baldr.

LOKI

Oh really...

HEIMDALLR

I wonder what else the people have brought to throw today?

LOKI

Nothing that'll hurt him I bet.

HEIMDALLR

True.

HEIMDALLR

Come, he's making his speech now.

HEIMDALLR moves nearer to the podium with LOKI following reluctantly.

BALDR is standing tall upon a podium. BALDR reads from a scroll.

BALDR

Hear ye! Hear ye! As most of you know, death has come closer to me than most, in ways unimaginable. Yet, by the powers of invincibility bestowed upon me by the Allfather, I have survived. I Baldr, the great, am the greatest of them all. I am fair, strong and handsome. Today's ceremony will not be a test of my

gargantuan might, but a spectacular display of my armadillo will. With that, I implore each and every one of you to throw your best at me!

LOKI

He wrote that himself. What a smug brute.

HEIMDALLR

You might want to keep your thoughts to yourself.

LOKI rolls his eyes.

LOKI

No one will hear me over the shouts anyway.

HEIMDALLR

Just enjoy yourself, stop lamenting.

At this moment, LOKI, from the corner of his darting eye, spots a BLIND MAN looking very lost in the crowd.

LOKI

I'll leave you to watch the show then.

HEIMDALLR

Where are you going?

LOKI

Someplace where I won't get to see "Baldr's perfections".

LOKI leaves HEIMDALLR to mingle amongst the crowd, shoving his hand into his pocket and clenching it. The crowd is screaming and cheering, praising BALDR's strength.

LOKI goes up to the BLIND MAN.

LOKI

Sir,

LOKI puts his hand on the BLIND MAN's shoulder.

LOKI (CONT'D)

I see you have nothing to throw at the great Baldr?

BLIND MAN

No. I've thrown everything.

LOKI

We can't be having non-participating bystanders at the festival of the gods now can we?

BLIND MAN

Mister, I'm actually blind-

LOKI

Who said the blind couldn't join in?

BLIND MAN

Mister-

LOKI

Here, I brought a dart. But you see, my arm is injured so I can't throw it. Could you help me throw it?

BLIND MAN

If I really must..

LOKI

With all due respect, I insist.

LOKI shoves the dart into the BLIND MAN's hand.

BLIND MAN

Well then... would you at least guide me?

LOKI

Of course, my apologies.

The BLIND MAN weighs it in his hand, before LOKI guides him in flinging it at BALDR.

The dart's spiky head glints in the sunlight as it is released. The dart, as harmless as it may have seemed in comparison to the weapons that were lobbed at BALDR, sliced through the air, perfectly balanced, like all things should be.

Shredding the skin like paper, the dart slowly inserts itself into BALDR's supposedly invulnerable chest, like a key fitting into a keyhole, piercing all the way through. Now like a tiny fountain, blood spurts out upon the faces of the flabbergasted Asgardians, covering half of LOKI's face. BALDR falls, slowly, dramatically, pitifully. All the while, the sound of silence can be heard as people scream.

BALDR stumbles to the ground, claspimg his chest and gulping for air. Some Asgardians rush on stage to help him.

Some batter the BLIND MAN.

LOKI, face half-bloodied, tries to wipe off the blood with his hand, but only smears it across his face.

He stands alone in the middle of all the chaos.

---

**ACT 3****INT. LOKI'S ROOM-DAY**

The door slams shut. Silence.

Finally.

He stumbles and stabilises himself with his chair. He finds himself sitting at his desk. A desk covered in sketches and drawings ripped out of his parchments. He holds his hanging head in his shivering hands. A moment passes...

He takes a deep breath. He lets it out.

He looks up, lights a flame on the fire pit.

He stares deeply and intently into the flame.

It stares back.

He gathers the failed sketches. He takes one more glance and throws them in the fire to become ashes, poignantly but decidedly.

He stares out the window, out the balcony, at the ensuing chaos. He opens the window, looks out the balcony, music to his ears.

---

**INT. ASGARDEN-DAY-EVENING**

EUNOMIA walks through the garden at a quicker rhythmic pace. She is clearly deep in thought.

GUAN YIN meditates. She opens her eyes before EUNOMIA's meets hers.

GUAN YIN

What is the matter, Eunomia?

EUNOMIA

I'm honestly not sure.

GUAN YIN

Something happened?

EUNOMIA

I don't know.

GUAN YIN

Something to do with Athena?

EUNOMIA

Maybe.

GUAN YIN

I take it all the above are true.

EUNOMIA keeps quiet.

GUAN YIN

I heard you're investigating  
Baldr's death.

EUNOMIA

I am.

GUAN YIN

With Athena?

EUNOMIA

With Athena.

GUAN YIN

Is that what you're troubled by?

EUNOMIA

I shouldn't tell you.

GUAN YIN

I understand...

EUNOMIA

But it concerns Loki.

GUAN YIN

Loki?

EUNOMIA

You should know.

GUAN YIN

Has he done harm?

EUNOMIA

Not just harm. Baldr's death. The mistletoe.

GUAN YIN

Loki...

EUNOMIA

He did it.

GUAN YIN collapses on her lotus in shock.

GUAN YIN

Loki... Loki murdered his own brother...

GUAN YIN takes a deep breath to compose herself. She bows slightly to EUNOMIA, before turning to leave in a hurry.

EUNOMIA

You probably shouldn't confront him now.  
He's meeting with Athena-

GUAN YIN

Then I shall need to politely intrude. I  
need to talk to him.

EUNOMIA

But...

GUAN YIN bows again before leaving hurriedly.

EUNOMIA hesitates...

Before deciding to follow.

**EXT. LOKI'S ROOM-DAY-EVENING**

Rapid repetitive knocking on the door can be heard.

GUAN YIN

Loki? It's Guan Yin. We need to talk.

EUNOMIA

We probably shouldn't disrupt him.

GUAN YIN

I need to know why he did it.

EUNOMIA

Maybe he has his own reasons.

GUAN YIN

Then he will not be afraid to share them.

GUAN YIN (CONT'D)

Loki?

GUAN YIN continues knocking on the door. This time more  
aggressively.

EUNOMIA

He's not home.

EUNOMIA (CONT'D)

The fire's out. The curtains are drawn.  
There's no light coming from underneath  
the door.

GUAN YIN

Eunomia, where else can he be?

This is true. EUNOMIA twists the knob again. It remains locked.

EUNOMIA (CONT'D)

We can't get in. Unless we knock down the  
door.

GUAN YIN

That is not the way...

GUAN YIN looks over the windows to the horizon.

GUAN YIN (CONT'D)

The sun is already setting.

EUNOMIA

He must have gone with Athena-

GUAN YIN

Where to?

EUNOMIA

I've got absolutely no clue...

As EUNOMIA and GUAN YIN turn to leave, we enter LOKI's room  
through the keyhole.

The room is trashed. The brazier on the mantelpiece is noticeably  
missing.

We zoom in and see nailed on the table a single piece of drawing  
on it, a sketch of a modern day human model.

On the floor, we find a map.

A map of GREECE.

**INT. ASGARDEN-DAY-EVENING**

We follow EUNOMIA and GUAN YIN as they walk hurriedly back through the garden.

GUAN YIN

Eunomia, what do you know about Loki?

GUAN YIN (CONT'D)

Did he tell you anything about where he's going?

EUNOMIA

All I know is that he's with Athena.

GUAN YIN

What is his purpose?

EUNOMIA

He didn't say.

GUAN YIN

Where does he normally go at this hour?

EUNOMIA

You're his mentor. You should know better.

GUAN YIN

He thinks schedules are boring.

EUNOMIA

Well I'm definitely not bored. Maybe think along the lines of Athena?

GUAN YIN

We should seek the Allfather's assistance.

EUNOMIA

You can't get to him at this time of the day. He's feasting with the gods.

GUAN YIN

He'll care for his son.

EUNOMIA

He won't care about Loki.

GUAN YIN

Since I am here, he definitely cares about him.

GUAN YIN (CONT'D)

We should talk to the Allfather.

EUNOMIA

Loki wouldn't want that. He's got something confidential.

GUAN YIN

A bigger secret than murdering his own brother?

EUNOMIA

There is.

GUAN YIN

I should not be surprised, given Loki's complicated nature.

EUNOMIA

He may have gone to enact his plan.

GUAN YIN

Plan?

EUNOMIA

He's trying to recreate the system.

GUAN YIN

The natural order? The "metallic chains" that he is bound to?

EUNOMIA

By creating some form of sentient beings. That will lead to a free life. He's starting work immediately.

GUAN YIN

He has brought this up before.

EUNOMIA

So I presume you know where he is?

GUAN YIN

No. He knew better than to confide in me.

EUNOMIA

He knows it's a foolish idea. He's prepared to die for it.

GUAN YIN

His life has value and worths much greater than that.

EUNOMIA

He doesn't see that.

GUAN YIN

By that means, he shouldn't be in Asgard.

EUNOMIA

He couldn't be in Greece either, Athena warned him.

GUAN YIN

You said Athena was with him?

EUNOMIA

Yes, but she also said she warned him.

GUAN YIN

Did she take him with her?

EUNOMIA

She wouldn't do that. I know her.

GUAN YIN

Her nature as Goddess of War makes her volatile, Eunomia. She would do anything.

EUNOMIA

So he took her?

GUAN YIN

I wouldn't assume just yet.

EUNOMIA

Where else?

GUAN YIN

It is possible they are in Greece.

EUNOMIA

Impossible. Athena would execute him.

GUAN YIN

Eunomia, she has chosen to work with him.

EUNOMIA

She is... But she wouldn't take back her words. I'm sure of that.

GUAN YIN

She would do anything for her vision of a greater good.

EUNOMIA

... She would. I know that well.

GUAN YIN

Then we need to hurry.

Rising to a bird's eye view, we see the entire garden.

The garden, in the shape of THE SYMBOL.

---

### Acts 3-4: (Climax)

LOKI cups the flames. He presents them in an almost upwards direction, as though praying, even if he himself was a God. As though there was a God to seek forgiveness from. For his foul blunder.

His arms wide open, palms facing outwards, he swings his arms in a circular motion, all the while, the flames push his allies back, like a cannon of fire.

Now a ring of fire blazed the grass.

He eyed his sculpture. The time was now. He raised his hand up, in it laid the flames of revolution. Raise a glass to the new era.

The era of LOKI.

The selfish bastard had let greed corrupt him. He was, after all, imperfect.

ATHENA knew that. An imperfect being now trying to create a perfect world in front of her. To withstand the torture of that sight would be to impale herself. To stand up to the thunderous three-ringed circus would be to impale... him.

1.

2.

3.

There was no countdown.

ATHENA held the spear in her hand, before skillfully guiding it towards LOKI.

The spear's spiky head glinted in the sunlight as it was released.

He went cold. Quick.

His lifeless body fell to the ground, blood dripping down the spear. Drop. By drop. By drop. The fires blazed around an ice cold body. LOKI, his upper half suspended by the spear pierced into the ground. The spear tip shone no more, buried, like the legacy of its owner. His heels on the muddy, scorched, blood-stained, ruddy ground supported the weight of his slump legs. His arms slumped to his side. His head slumped to one side, unnaturally twisted, perhaps a reflection of his very soul, or maybe his agendas that brought him here in the first place. Or maybe, just maybe, the twisted nature of the world. The spear, a force that could not be reckoned with, now impaled the trickster god. This spear, the very one who had drawn the blood of great warriors and sadistic tyrants, and now, two innocent friends. Nobody else knew it but her.

Pallas Athena, her title, self-imposed. It used to be a friend's name. Pallas. It was friendly sparring, simply an accident. She did it in the spur of the moment, she extended her arm. The expression of shock, pain on both their faces. When Pallas fell to the ground, ATHENA failed to bring her back to life. Death doesn't discriminate between the sinners and the saints. She made a mistake, she paid for it. She made it again, she pays again.

All these emotions...

She looks down, away from the cold sky.

All this comes to her in a matter of seconds, a mere moment.

We see from a bird's eye view:

The ring of fire around his carcass burns.

And it burns... and it burns... and it burns.....

Just like his ambition.

LOKI's dying scene is unlike that of BALDR's. Instead of Asgardians rushing up stage to honour the mighty death of BALDR, LOKI's death is very much honoured by the silence of an empty funeral. Nobody rushes up. Afterall he did surround himself in flames.

The fire stopped crackling and dancing, its life sucked out of it. It remained stagnant and silent, quietly moaning inside. Its

warmth, the only source of heat, warming his icy cold death.  
Sympathetic.

GUAN YIN quickly draws water from the Evros river and the water  
cries over the fire, dousing the chaotic fire with peace and pity.

A long pause. The forest is silent. Crows fluttering and cawing.  
Mourning...

ATHENA collapses onto her knees in shock, body trembling in horror  
at the promise she has broken. Her knees crash onto the ground  
like her spear crushing anything beneath it.

EUNOMIA'S stick clatters to the ground. It breaks into two almost  
symmetrical and identical halves, just like LOKI's life. Broken  
and forgotten. She rushed to support her sister.

GUAN YIN stares at the gruesome scene, before floating down  
serenely and landing next to LOKI. The only thing betraying her  
emotion is that of a single tear rolling down her cheeks. A  
single, pathetic drop for her mentee. Her robes are tainted with  
blood. Perhaps it is a sign of her tainted moralities.

GUAN YIN steps up, both palms tightly clasped together, head  
slightly yet gracefully bent forward, like a teardrop on the verge  
of dripping down.

GUAN YIN

May all your negative karma, destructive  
emotions, obscurations, and blockages be  
purified and removed,  
May you be forgiven for all the harm you  
may have thought and done,  
May you accomplish this profound practice  
of phowa, and die a good and peaceful  
death,  
And through the triumph of your death,  
may you be able to benefit all other  
beings, living or dead.

A minute of silence.

GUAN YIN (CONT'D)

A Mi Tuo Fo.

LOKI'S blood reflects a broken-looking ATHENA.

ATHENA, uncontrollably, continues to stare blankly at LOKI'S dead body. His bright blue eyes stare back at ATHENA'S dull, red-rimmed ones.

A sole tear droplet flows down Eunomia's squarish cheeks like the Evros River, a reflection of her inner conflicting soul. The teardrop flows and stops, flows and stops, and continues to flow uninterrupted, reflecting her conflict between duty and her newfound sense of love and belonging. Are her tears for LOKI or are her emotions for her beloved sister? We will never know.

### **Thematic analysis(all quotes are cited from our screenplay):**

1. The relationship between the creator and his/her/their creations is fraught - the creation by their very nature is discontent with their place in the universe, and inevitably seeks to become a creator in their own right.

- *"A species free from the metallic chains of the Allfather."-Loki*

Loki wanting to create "a species free from the metallic chains of the Allfather" is a reflection of Loki's inner desire of him wanting to be free from the clutches of the Allfather. With other instances in the screenplay, their relationship between the creator, the Allfather, and the creation, Loki, is portrayed to be fraught, filled with hatred and resentment, which can be inferred as the reason for the formation of Loki's inner desire.

- *"Fool. You have no peace whatsoever, you're merely an empty shell."-Loki*

The diction and tone of the word, "Fool", in response to Guan Yin's previous dialogue, reflects Loki's own dissatisfaction with just being Loki "programmed" and controlled by the Allfather. The metaphor of Guan Yin being a mere "empty shell" suggests the insignificance, pathetic-ness, hollowness of the creation's disregarded place in the universe, fuelling the creation's dissatisfaction and discontentment which fills up the hollow space in the "empty shell".

2. LOVE is POWERFUL but love is also a burden

- *"Now reduced to a fool, ATHENA walks off to fight the army."*

Athena being "reduced to a fool" and her solely walking off to face the entire army, with the diction of, "army", connoting a huge numerical figure which outnumbers the only Athena, emphasises the sheer power of Athena's love for Eunomia and Guan Yin that led to Athena being willing to fight the army off singly given her unfavourable situation as mentioned above.

- *"She raises her hands in the air.She surrenders.A criminal, a god, a warlord, surrendering for the first time in her life. How it feels, the burning and the utter bitterness. How it burns."*

The anaphora of "a criminal, a god, a warlord" implies that the immense power of love led Athena to go against her very nature. However, "the burning and the utter bitterness" is the cost that Athena has to pay in order to fulfil her love for Eunomia and Guan Yin, showing the true burden that comes with powerful love.

3. Chaos and peace are not mutually exclusive. Chaos can result in peace and peace can result in chaos

- *"We see the crystal clear water surface, with the reflection of flames bouncing before we PAN TO REVEAL:"*

This "reflection" implies almost that "flames" or "fire" can be seen in the "crystal clear water surface", conveying our sub-theme, showing that despite the symbols of "fire" and "water" being direct opposites(emphasised by their juxtaposition), in this example, "fire"(chaos)can be in "water"(peace), and vice versa.

- *"GUAN YIN quickly draws water from the Evros river and the water cries over the fire, dousing the chaotic fire with peace and pity."*

I In our screenplay, the symbol "fire" is portrayed as a medium, be it a medium for destruction, a medium for warmth or a medium for the giving/spreading of life. The personification of the symbol "water" crying "over the fire" and dousing it shows the audience that the symbol "water" is a mean of control over the symbol "fire", exerting control over the rapid spreading medium "fire" if it goes out of control. The symbols "fire" and "water" meet along a very faint line between them, conveying our sub-theme of dualism. In this example, it shows their interrelated relationship: the presence of "water" diminishing and driving out the "fire". However, in other instances in our screenplay, both symbols are shown to be coexisting. The personification of "chaotic fire" further emphasises the symbolism of "fire" and "peace and pity" further represents the symbolism of "water".

4. The act of overthrowing one's creator is inevitably doomed to fail. This is the tragedy of humanity.

- *"The ring of fire around his carcass burns.And it burns... and it burns... and it burns... Just like his ambition."*

The motif of the symbol, "fire", can be associated with one's failure. The simile seems to suggest that this tragedy of humanity is inevitable as Loki's predetermined trait led to his failure. The repetition of the phrase, "And it burns", further exaggerates the tragic sense of this failure.

- *"The spear's spiky head glinted in the sunlight as it was released."*

The repetition of this expression, which is the same expression used in Baldr's death scene as well, further highlights the inevitability of failure and that this theme, this tragedy, applies to all of humanity, just like how it applied to both Loki and Baldr, and this applies to even the "perfect " beings in the universe, as seen in Baldr's murder.

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