Taru Tillman

# NARRATIVE CREATURE DESIGN How creature design can impact the narrative

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## ABSTRACT

The purpose of this thesis was to explore how creature design can impact the narrative in visual media, such as films, comic books, and video games. The study examined the ways in which visual design elements, such as repetition, contrasts, and shape language, could be implemented withing creature design to influence the viewer's perception of the creature, and ultimately affect the story being told.

Qualitative research methods in the form of interviews, surveys, secondary research, and observations of media showcasing creature design were used to analyse different methods of creating creature concept art with the goal of ultimately enhancing the worldbuilding and narrative. To showcase the entire progress of the creature design process, the thesis covers the basics of storytelling, design elements, and ultimately creature design from the point of real-world anatomy and biology before progressing into exploration and analysis of creature design in pre-existing media.

Ultimately, the study showed that creature design as intertwined with the narrative from the moment of conception. The believability of a creature will ideally immerse the viewer into the world and create intrigue towards the world and narrative. Overall, artists, writers, and designers working on visual media will benefit from learning the basics of storytelling and design and seeing a concrete example of a creature being designed to fit a predetermined narrative in order to enhance it.

Keywords: game design, creature design, storytelling, concept art

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## **1 INTRODUCTION**

Creatures have been present in storytelling since ancient times; tales of dragons and demons have been told around the world long before the concept of creature design was invented. In modern times they are most often present in games, movies, books, and comics. Creatures can play a multitude of roles from hordes of enemies to lifetime companions and as such their importance to the stories being told cannot be overstated.

Within the games industry, the job of designing these creatures often belongs to concept artists whose job is to create original creatures from imagination that perfectly fit the world and story being told. Concept art is an important tool that creates a link between ideas and production. Though the concept artist rarely has say in the overall story or the plot, it is still important for them to understand it on a level that allows them to create something that fits withing the restraints of the world. They must explore and implement a variety of design principles and real-world anatomical knowledge in order to create something visually striking and believable enough so that the design does not break the suspension of disbelief.

The aim of this thesis is to explore how creature design can be used within narrative structure and demonstrate how a well-implemented creature can enhance the story being told. In order for this to be achieved, it is important to discuss the basics of creature design and storytelling as both independent and co-dependent concepts and to explore how these two concepts can be implemented within one's own projects.

Qualitative research methods such as interviews with industry experts, surveys, secondary research and observations in the form of media analysis have been used in the writing of this thesis.

Additionally, as creature design continues to become more present in the current day entertainment industry, several professional artists within the industry have

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been reached out for a short interview on their views, processes, and thoughts on creature design and its role in storytelling.

#### 2 BASICS OF STORYTELLING

Stories are a part of everyday life: telling someone about yesterday's events is a form of storytelling just as much as writing a book. Both are forms of communication and a part of being human (Spaulding 2011, 7). According to Truby (2007, 3), anyone can tell a story, but an author must be able to tell a great story.

For a story to be effective, it must have a strong premise, interesting characters, a compelling setting, and a plot with enough twists to keep the reader's attention. How would the story be told without the characters, or how would it change without the dramatic plot twists and struggles the characters go through?

For a story to be told, it must begin somewhere. Truby (2007, 12) suggests starting out with a premise, with the entire story being condensed into a single sentence which combines characters and plot and most commonly includes an even which forces a reaction from the characters. Storr (2021, 11) on the other hand proposes that any story begins with a moment of unexpected change.

Characters are not human beings (McKee 1997, 375). Characters are the creations of the authors and a vessel to which to tell their story through. Truby (2008, 46) notes that most stories cannot be told through a single character and instead for a change to occur in the character, a story must have a web of characters which are all connected and support the lead in a narrative sense. Like people in real life, humans do not exist separate from each other: family, friends, co-workers, and local baristas are all part of a person's life and affect it one way or another. "The most important step in creating your hero, as well as all other characters, is to connect and compare each to the others" (Truby 2008, 46).

It should be noted that, according to Storr (2021, 71–100), when creating the hero for a story, the most important thing one can give to a character is a flaw. All humans are flawed; a flaw does not have to be large and dramatic. A collection of smaller flaws like being too open or naive can make the character feel more relatable. When a character is written in a believable way, it allows the audience to identify and relate to the character. The reader experiences the story through the hero, so it is important for them to care about the struggles and hardships they face. (Skolnick 2015, 38–39.)

The actions of the hero must take place somewhere; an epic bank heist cannot take place in a single white room which the characters never enter nor leave from. The setting or the world in which the story takes place in is another tool for the author to use to drive the characters forward. The setting illustrates the forces of society shaping the world from its history to present day; it can reveal the political, economic, ideological, and even the psychological aspects of the world and the people in it. (McKee 1997, 69.) As discussed by Skolnick (2015, 148–149), the setting should not simply be a beautiful scenery to describe or see, but a way to inform some aspects of the worlds history.

The plot describes the way in which a story is told (how to structure a story). There are several ways to structure a plot. It depends on the story being told and the author's intent as to which method works best for the story. Truby (2008, 208) criticises the use of plot techniques like "three-act structure" for their lack of clarity for the entire story, noting that most authors misunderstand what the plot means by equating it to the story, while, in reality, the plot is simply a method in which the story is being told. It should be noted that despite the criticism of plot techniques, Truby (2008, 208) still encourages using them as a starting point to create an organic story; noting that it is limited to the subsurface web of actions and events to keep in mind throughout the progression of the story.

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#### 2.1 Narrative structure

Narrative structure is the framework of a story which incorporates both the storyline and the plotline. There are several flexible ways to frame the narrative and the events of the story. (How to use narrative structure in your writing 2021.) In Pixar in a Box: Story Structure (2017), the narrative is defined as what one wants to tell your audience and when, noting that getting the order wrong can be detrimental to the storytelling. The specific elements that make up the narrative structure can vary depending on the genre and the overall story being told, though in most cases, the narrative will include a build-up, a climax and then the resolution (Cavallari 2023).

In Narrative structure (n.d.), narrative structure is divided into types and examples. Different types of narrative structure consist of different ways of telling the story, which are more focused on what information is revealed to the audience and when, while the narrative structure examples are more focused on the way which the story is told, what drives the story forward and what events take place throughout the story.

Discussed next are two examples of narrative structure types and two narrative structure examples. It should be, however, noted that there are several other ways to implement narrative structures, and that these are simply the most common.

#### 2.1.1 Linear plot structure

Linear plot structure refers to storytelling in which the events are presented in a predefined, chronological order (How to use narrative structure in your writing 2021). While linear plot structure is a method of storytelling in a chronological order it may still include flashbacks in which the characters past or memories are explored briefly throughout the story, these should however be clearly recognisable as such (How to structure a story: The fundamentals of narrative

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2018). As noted by Truby (2008, 9), most stories, especially ones made in Hollywood, follow the linear plot structure.

# 2.1.2 Nonlinear plot structure

According to How to structure a story: The fundamentals of narrative (2018), a nonlinear plot structure is a method of storytelling in which the story is told out-of-order, or in a nonchronological order where the plot jumps back and forth on the timeline. A good example of nonlinear plot structure are movies which include time travel in some shape or form.

Stories that do not follow the traditional, chronological order can at times be confusing to follow but feel extremely rewarding when all the plot points are tied together as the story travels towards its conclusion (How to use narrative structure in your writing 2021).



# **Nonlinear Narratives**

Figure 1. Example of a nonlinear narrative structure (The Art of narrative 2019)

According to Exploring nonlinear narratives: What they are & how to use them (2019), the nonlinear narrative structure can be beneficial in highlighting characterization and themes; this includes creating story questions, serving

multiple character arcs, and conveying character's memories. Furthermore Exploring nonlinear narratives: What they are & how to use them (2019) notes that the best way to compare two characters across significant time to explore changes in their lives, goals, and relationships towards one another is best achieved through the nonlinear plot structure.

Figure 1 provides an example of how nonlinear narratives might be constructed and possible methods of moving on the timeline such as flashback and flashforwards. Parallel storylines can also be considered nonlinear.

#### 2.1.3 The hero's journey

According to Yang (2021), the term "hero's journey" was coined by Joseph Campbell in 1949 after he began noticing parallels between various religious texts such as the Christian bible and stories from Native American stories. After continual observation and analysis, Campbell came to the conclusion that mythologies worldwide shared a universal narrative backbone. Campbell outlined the hero's journey in three basic stages and 17 detailed steps which were later simplified to 12 steps in 1992 by Christopher Vogler since then, the 12-step method, visualized in Figure 2, has become more popular amongst writers due to being easier to remember (Yang 2021).



Figure 2. Example of the hero's journey (Pace. N.d.)

While the titles for Vogler's twelve-steps can sometimes vary between different sources, the content is usually the same. The twelve-steps are as follows.

- 1. The ordinary world is the introductory phase of the story where the hero is introduced in context to their normal daily life (Skolnick 2015, 32). Meeting the hero in their mundane world sets the stage and allows the author to explore the hero's relationship with the world around them, and hint at the conflicts to come (Callaghan 2022). According to Chesson (2022), the ordinary world phase is also an ideal time to tell the reader what they need to know of the world and to get an understanding of the hero's wishes for something different. As such, the first step of the story is crucial in getting the audience to relate to the hero in some way; they do not need to necessarily agree with the hero, just to understand what they strive for and why.
- 2. The call to adventure or the inciting incident is the stage when something disturbs the status quo and forces the hero to leave the ordinary world and towards a journey that will ultimately bring forth change in their life (Chesson 2022). As stated by Skolnick (2015, 33), it should become clear

to the audience at this step that the hero will not be able to stay in the ordinary world any longer; the stakes of the story should be made very clear at this point as well.

- 3. Refusal of the call is the part in which the hero doubts themselves and refuses to take on the task presented to them (Narrative structure n.d.) As noted by Callaghan (2022), the hero may refuse the challenge for a variety of reasons such as fear, feeling like they are not the right person for the task, or because they refuse to acknowledge what's at stake if they refuse. For every refusal, the stakes should rise and the until the hero finally realizes that they must partake in the challenge presented to them or face the consequences of their refusal (Chesson 2022).
- 4. Meeting with the mentor should happen after the hero has responded to the call but their initial refusal is still there due to lack of skills, items, knowledge, or confidence (Chesson 2022). To move the story forward, the hero should meet with a mentor character that can encourage the hero to move forward and to gift them something to aid them in their journey. The gift can be physical items, training, encouragement, or all of them. (Skolnick 2015, 33)
- 5. Crossing the threshold is the step in which the hero leaves behind the ordinary world and their life as they knew it and enters the world ahead with no possibility of turning back (Callaghan 2022). Chesson (2022), refers to this point in the story as the point of no return and suggests using the antagonists to illustrate how the dire the situation truly and to allow both the audience and the hero to understand just how powerful the villain truly is.
- 6. Callaghan (2022), defines tests, allies, and enemies as the part of the story where the hero is fully immersed in the quest ahead and is forced to navigate a string of challenging obstacles that allow them to put their new abilities to test. It should however be clear that the hero still needs help in order to resolve the main conflict of the story, which is the ideal time to introduce long term allies that the hero can grow with and sometimes be challenged by Chesson (2022). This is also the section where new enemies should be introduced; they should be formidable and pose a challenge to the hero and their new friends Skolnick (2015, 34). As a result of this, Chesson (2022), notes that during this phase the reader should care not only for the hero, but for the allies as well as by the end of this section, not all the hero's companions may have made it out alive.
- 7. Approach to the inmost cave, according to Skolnick (2015, 35), is the point at which the hero, either willingly or unwillingly, must approach the worst

place they could possibly go. On the other hand, Chesson (2022), defined this section as a possibility to reflect on the challenges of what has happened on the journey so far and proposes that the group of heroes should regroup and gather their wits as they prepare to face their biggest foe so far. Both agree that the previous step should have been the hardest yet, but that the tension must continue to rise, and the goal must be within the hero's sight now.

- 8. The ordeal is when the stakes are at their highest and lives are often on the line (Skolnick 2015, 35). As this is the biggest obstacle the heroes have faced yet, it can be viewed as a transformative even which effects the way the hero will continue their journey. With the stakes at their highest, this section of the story should drag the hero to their darkest point yet, to break the hero in pieces, and then allow them to come out of the ordeal stronger than they were before. (Chesson 2022.) Since this section of the story is crucial to the narrative, it should be a point of focus for the writer, and something carefully considered. This section should take nearly a fifth of the total story and speak directly on the external and internal conflicts within the story so far (Chesson 2022).
- 9. Reward, seizing the sword is the part of the story in which the hero reaches their goal of obtaining something of value, be this a physical object, knowledge or a loved one (Callaghan 2022). Whatever the hero's reward is it should be clear to the audience why it is important in defeating the antagonist in the approaching climax of the story. The heroes should also be allowed to take a breath, reflect, and celebrate all that they've achieved so far in the story. (Chesson 2022.)
- 10. The road back is the part of the story in which the hero realizes that despite their accomplishments, total victory is yet to be achieved and the true forces of evil are yet to be defeated (Skolnick 2015, 36). As noted by Chesson (2022), this is the part of the story in which the hero attempts to return to the ordinary world with their reward only for unforeseen consequences forcing them to face the antagonist head-on before they will be allowed to return to the ordinary world; the story is about to reach its climax.
- 11. Resurrection is defined by Callaghan (2022), as the part of the story in which the hero must face the greatest battle of them all; it's the story's climax. During the final conflict the audience should believe that all hope is lost and the hero defeated, before through often unforeseen events the hero is able to get back to their feet and finish the fight (Skolnick 2015, 36). As noted by Chesson (2022), at this point of the story the tension and stakes should be at their highest; the audience should be aware that if the hero fails then the world as they know it will be forever changed for the

worse. Furthermore, the hero should earn the victory through the sacrifice of something significant, sometimes even their own life.

12. Return with the elixir is the conclusion of the story in which the protagonist emerges victorious and goes back to the ordinary world (Narrative structure n.d.). At this point of the story, not only is the hero themselves rewarded, but also the "good" and "bad" characters are either rewarded or punished for their actions, allowing for the conclusion of their stories as well (Skolnick 2015, 36). The most important part of the return of the hero is that they should return to the normal world changed in a fundamental way; the journey they went through and the sacrifices they made along the way should have shaped them to become a different person from whom they were before setting on this journey, they should become the person they were meant to be all along (Chesson 2022).

With the basic outlines of each step explained, it should be easy to identify how a lot of successful stories have benefited from using such a structure for their stories and how one might use it in their own.

## 2.1.4 Three act structure

According to Skolnick (2015 12), the concept of three-act structure was first described in 335 B.C by the Greek philosopher Aristotle in his Poetics where he is quoted saying "a whole is what has a beginning, middle and end." Figure 3 below provides an example of how the three-act structure is often viewed and the key points of each act. The three-act structure is a simple way of viewing a story, though, as pointed out by Truby (2008, 4), the description is far too simplistic to be applied. When creating a story following only the three-act structure, it makes the plot progression feel too mechanical and leads to episodic instead of organic storytelling. As such, the three-act structure might be a helpful tool for writers who are just starting to plot out their story, for it is an easy and often visual way to present how the story will progress.



Figure 3. Example of the three-act structure (Maio 2019.)

Act one, the setup, is where the story begins in the three-act structure and where the setting, characters, and the narrative for the story are established before the inciting event kicks the story into motion and helps the plot move on to the next act Narrative structure (n.d.). According to Skolnick (2015, 13), act one is a crucial part of the story as it allows the audience to understand who the hero is as a character, allowing for a point of comparison once the story is over and the hero is changed. Without the setup of act one, it would be impossible to tell in which way the characters and the world have changed after the conflict is solved; the audience needs a point of comparison to see the effect of the events of the story.

Act two, or "confrontation", is the largest section of the story and the point in which the hero must finally commit to solving the conflict of the story. At this point the tension should continue rising as the hero comes across obstacles and enemies trying to block them from solving the underlying conflict of the story (Skolnick 2015, 14). In How to structure a story: The fundamentals of narrative (2018) it is noted that act two should include the first obstacle, the midpoint of both the act and the story as a whole, continuous rising action and the biggest obstacle the hero will face. Even though the hero should face their biggest

obstacle so far in act two, they should not be able to solve it and instead it should prompt the hero to learn and reflect on themselves before they are finally ready for the climax (Narrative structure n.d.).

Act three should bring the story to its conclusion. In the third act, the tension rises to its highest in the form of the climax where the hero must try to solve the conflict, they failed to solve in act two or fail (Narrative structure, n.d.). Skolnick (2015, 14–15) notes that the story may resolve in a victory or a loss; happy endings where the hero succeeds are more common and often feel more rewarding to the viewer while endings where the hero loses can be considered risky as they may lead to the audience feeling disappointed, angry, or even depressed. There are of course stories which attempt to combine the two possibilities and are considered to have bittersweet endings where something significant is lost, but something just as important is gained. As noted by Narrative structure (n.d.), the third act should not end on the climax, and instead a brief look at the effects of the resolution should be made clear to the audience before the story can truly be considered finished.

It can be noted that if the three-act structure were to be broken down into further steps, the narrative would share several aspects with the hero's journey. As such, the three-act structure can be considered a good starting point in the planning phase of the story before the events are more thoroughly planned out using the hero's journey.

#### 2.2 Story themes and genres

The theme describes a concept which encompasses the entirety of the story; it can be abstract like love, loss, or redemption or something more concrete such as war, or a motif such as night and day (Chesson, 2022). According to Glatch (2022), the theme can be explored and expressed through several elements such as characters, plot, setting, conflict, and dialogue. As such, it is easy to imagine that an effective way to communicate a theme might be to have characters with

opposing views be shown through their actions and speech. This allows for a discussion rather than an answer.

McConnell (2019) describes the theme as the "message" of a story and can operate on multiple levels which depend on the form and genre of the particular story being told. A horror story about the forces of nature would be told in a significantly different way than a romantic comedy with the same theme.

If theme can be described as the concept encompassing the plot, then genre is a method of classifying stories by sorting them according to their shared elements such as form, content, and style (McKee 1997, 79).

# 3 DESIGN PRINCIPLES & IMPLEMENTATION IN CREATURE DESIGN

Reid (2022) proposes that design principles are fundamental rules about aesthetics which a designer should follow in order to create a pleasing and attractive composition. Depending on the source, the amount of principles of design often vary. As such, it can be hard to determine which rules are the true fundamental rules to follow (Chapman 2019).

In context to creature design, the implementation of these principles varies slightly from their use in graphic design, though the core remains the same. According to Ries et al. (2021, 106), the most crucial reason to master the principles of design is so that as an artist, one is able to develop artwork which communicates successfully with the viewer.

The aim of this section is to explore a few of the key principles of design and possible methods of implementation within creature design, as well as real world examples from the animal kingdom. Fowler (2023) states that creature design must be fundamentally strong from its conception; it must rely on solid research, reference, and real-world animal anatomy in order to read clearly.

#### 3.1 Balance

A composition can be considered to be in balance when elements within it are equally distributed and arranged in a manner that communicates stability and harmony. Within this design principle there are formal and symmetrical, dynamic and asymmetrical, and radial designs. (Poulin 2018, 113.) Symmetrical designs are created when elements with equal visual weight are aligned on either side of the centre line (principles of design). Asymmetrical, balanced designs on the other hand are created when the two sides of the centre line take out the equal amount of visual weight but differ in size, colour, or some other visual element (design and art). Radial balance is based on a method of arranging visual elements of the composition in a manner that creates the illusion of them radiating out from a central, common point, creating for a strong vocal point which always leads the viewers eye back to the vocal point of the composition. Furthermore, balance can be created through colour, direction, location, shape, texture, value, and weight. This allows for a range of different ways to create balance within ones own composition. (Poulin 2018, 117–118.)



Figure 4. Example of balance as a design principle (The little black book 2018)

Figure 4 provides an example of balance through difference in colour and amount of elements can be seen above between the solid black triangle and the three golden triangles forming something of equal visual weight. Though as mentioned previously, these are not the only possibilities for creating balance in an illustration.



Figure 5. Photograph of a mandrill (Morales n.d.)

In nature, balance can be seen all around us. For example, mandrills fur consists mostly of dark browns and greys, while the face and the surrounding area consist of lighter colours and a highly noticeable, furless snout consisting of blue and red, which can be seen in Figure 5. As such, the mandrill creates balance through the level of detail and contrast which guides the viewer's eye to its face. The topic of creating balance through differing levels of detail, colours, saturation, value, and contrast is further discussed in the book *Fundamentals of Creature Design: How to create successful concepts using functionality, anatomy, color, shape & scale* (Ries et al. 2021, 108–109). In this work, the author discusses that using such methods to create balance allows more visually pleasing and easily readable creature designs which will then capture the viewer's attention from the first glance.

## 3.2 Repetition

Repetition is a way of repeating components with similar features arranged in a composition (Shikhrakar 2019). Chapman (2018) furthermore conveys that repetition can unify and strengthen a design; if a single element differs wildly from

the rest, it can at times read like a mistake but with repetition of colour, form, pattern, size, or font it creates a motif and reads as intentional.



Figure 6. Example of repetition as a design principle (The little black book 2018)

For example, a grid made entirely out of repeating shapes in the same size and colour creates a sense of repetition visible in Figure 6. This makes the pattern seem organised and intentional.



Figure 7. Photograph of a tiger (Kirkgoz n.d.)

The concept of repetition is broken down further by Ries et al. (2021, 110–111) in which shapes, materials, patterns, and colours are used to reinforce creature designs by repeating elements at strategic points to unify the designs and draw attention to the most important parts. The concept of repetition can also be found in nature. For example, a tiger's fur repeats a striped, black pattern that gets thinner and more complex around the face as shown in Figure 7.

#### 3.3 Contrast

Contrast can be described as the difference between visual elements within a composition; this difference between the various elements makes the point of focus standout (Chapman 2018). By implementing elements with differing properties such as colour, size, shape, form, or value a clear vocal point is created in the composition (Shikhrakar 2019). The concept of contrast can be depicted as a set of black lines with a singular line that differs from the others either in shape, orientation, or colour as demonstrated in Figure 8.

# CONTRAST



Figure 8. Example of contrast as a design principle (The little black book 2018)

It can be assumed that contrast is one of the easiest design principles to spot in general; this is also often the case in nature. A bald eagle with its otherwise dark feathers and near white head creates an obvious contrast in value and colour the same way that brightly coloured flowers often bloom from thin, green stems

creating an obvious vocal point. This contrast is present in the photograph of a bald eagle in Figure 9.



Figure 9. Photograph of a bald eagle (Cone n.d)

When creating a creature, contrast between values, colours, levels of details, shapes, and forms are few of the things highlighted by Ries et al. (2021, 112–113). If contrast is correctly applied to a design, it should become easily readable and believable to the viewer.

# 3.4 Proportion

Proportion refers to the relationship of one object to another in reference to their scale and visual weight. While proportion most commonly refers to the scale of objects, it can also relate the elements of shape and visual clutter in a composition. (Shikhrakar 2021.) As noted by Chapman (2018), grouping of items related to each other can help convey their importance despite their smaller size. A simple example of scale is presented below in Figure 10.



Figure 10. Example of proportion as a design principle (Shikhrakar 2021)

In concept art specifically, it is common to apply different scales of details by following a rule called "big, medium, small". The idea behind this concept is to use large, simple shapes in your composition 60% of the time, medium shapes with some amount of details 20% of the time and small, highly detailed shapes only 10% of the time. (Drieghe 2017.) This allows the viewer's eye to have places of rest while drawing their attention to the most detailed areas, the focal point.



Figure 11. Photograph of a rhinoceros (Visser n.d.)

The implementation of the "big, medium, small" rule is also present in notable amounts in living animals. For example, most of a rhinoceros is made up of large, blocky shapes with little details such as the torso and the upper part of their legs, while medium shapes make up the lower part of the legs and the general shape of the head. The ears, horns, tail, and eyes can be considered the small, detailed shapes which make up the animal. All these points are presented well in the photograph of a rhinoceros in Figure 11.

As noted by Ries et al. (2021, 114), some elements in the creatures' design can be used to convey the size of the creature without necessarily needing to add another object for reference, for example, the size of the eyes in relation to the skull tends to be larger in smaller animals and vice versa.

#### 3.5 Movement

Movement, as described by Poulin (2018, 92), is the suggestion of motion within a composition. Movement can also be described as a method of controlling the elements within a composition in a manner which leads the eye to move from one element to another, allowing for the information to be properly communicated in the correct order (Chapman 2018). When implemented correctly, movement makes it easy to prioritise certain aspects of the composition and creates a hierarchy of importance in regards to which information is presented first to the viewer. According to Chapman (2019), it is possible to lead the viewer's eye in context to movement via positioning and emphasis as demonstrated in Figure 12.



Figure 12. Example of movement as a design principle (Shikhrakar 2019)

Movement in nature is evident; all creatures move as they breathe and live. Even plants are constantly growing, withering, or spreading by wind. As such, conveying movement in a creature design makes it apparent to the viewer that the illustration is depicting a living, breathing being. According to Ries et al. (2021, 118), creature design is all about communication. By portraying a creature in action, even if it is slight, conveys to the viewer something about the creature, be it their role in the prey-predator hierarchy, the limits of their anatomy, the way in which they move or the climate in which they live.



Figure 13. Photograph of a horse running (Köpf n.d.)

In Figure 13 provided above, movement is depicted in the horses action as it runs, as well as it's mane and tail flowing in the wind. The movement within the image allows the still frame of the horse feel more alive than a picture of a stationary pose would.

# 3.6 Shape language

At its most basic, shape language refers to shape psychology, which explains why certain shapes invoke specific emotions in humans (Naghdi 2021). Al-Ali (2019) breaks shapes down into organic, geometric, and abstract shapes. Organic shapes often appear asymmetric, irregular or have a certain amount of soft curves in them; geometric shapes are basic shapes which everyone is familiar with such as circles, squares, and triangles; abstract shapes are often a combination of both, being recognizable shapes without being real. Furthermore, Naghdi (2021) explains that humans tend to associate circles with softness, unity, power, and innocence. Squares are associated with strength, stability, and balance, while rectangles are often associated with movement, power, danger, and harmony.



Figure 14. Example of shape language as a design principle (Korshak 2020)

In Figure 14 the shapes of a circle, square and triangle are drawn with thin lines. Even from a simple drawing of the shapes, the shapes should still be able to invoke the feelings associated with them as described above.



Figure 15. Photograph comparing a rabbit and a hare (Pearsall 2020)

A possible example of how shape language changes the human perception of animals can perhaps be found in rabbits and hares. Most humans tend to agree that rabbits are cute and innocent, while hares can often be seen as an annoyance in the cities and something to hunt down in the woods. When inspecting the silhouettes of both animals, it quickly becomes apparent that the rabbit is rounder and barely has any sharp angles associated with it, while the hare is slenderer with sharper shapes (Figure 15).

Ries et al. (2021, 116–117) note that creatures with sharp and angular designs are often viewed as swift and dangerous, while designs consisting mostly of squares and other solid shapes are seen as strong and stable, and designs with softer, round shapes are usually associated with cute, innocent creatures that pose little to no harm.

## 4 CREATURE DESIGN

Creature design can be thought of as a sub-genre of character design; one way of defining creature design is the design of any living being that is not explicitly human. It can be argued that creature design has existed for millennia in the shape of mythology and other cultural stories from around the world; from dragons to unicorns and demons, these are nonhuman beings that do not exist in the real world and have been though up by the people who have long since passed. (ART in VIDEO GAMES: Subnautica, Creature Design, and Immersion 2019.)

According to Fowler (2023), creature design and character design are fundamentally very similar; both must be well researched, grounded in reality and have an emotional resonance with the viewer. The need for an emotional resonance is further echoed by Metheney (2023) who explains that creatures are more about feeling than anything else. After all, humans are hardwired to identify predators in the wild, and this primal awareness can be taken advantage of in the field of creature design.

Creature design is used in a multitude of media. When a movie or a game is being developed the task of creature design falls on the concept artist. The people in charge of the project might have some idea of the creature they want, but ultimately it is up to the artist to create a variety of designs for those in charge to choose from before the design is handed off to the 3D-modelers. (Batchelor 2017.)

Creature design is most commonly used in either concept art or the promotional illustrations for all types of media. Furthermore, creature design is one of the central pillars of a concept artist's skillset along with character, environment, machine, and prop design. (Fowler 2018.) It should also be noted that one of the biggest reasons designers pay special attention to creature design is because a badly designed creature can break the immersion of the story and make the world feel poorly realized (Ostrowski 2023).

# 4.1 Basis in reality

Most professionals who work in creature design tend to agree that a strong design must have its basis in reality. Even an alien creature should have

something that the viewer can recognise as real-world anatomy; this helps make the audience feel as though the creature design could be biologically plausible (Fowler 2023). Brynn (2023) talks about this concept further and notes that having something that humans can recognise, such as a face or a body shape or something else which might remind the viewer of a real-world animal will help the audience believe the design; this enhances the setting and overall believability of the world which the creature lives in. Camehl (2023) even explains that in the past he has accidentally created a few designs which were too alien and too unrealistic which caused disconnect with the viewer.

When designing creatures, it is important to understand real-life anatomy of people and animals since anatomy is the base structure for all creature designs (Batchelor 2017). Furthermore, it is important to consider the creature as a living, breathing being which has evolved to adapt to the surrounding environment through thousands, if not millions, of years. Rather than just a mix of different animals without any further thought of how these creatures would blend together, it is important to follow the evolutionary logic of a creature (Ries et al. 2021). To take the concept of realism even further, the creature's anatomy should reflect its environment, diet and even its behaviour. For these reasons, it can be beneficial to begin designing a creature by asking several questions. Where does the creature live? What does its diet consist of? How does the creature's anatomy aid in its survival? Does the creature have the ability or the need to hide from predators or prey? (Antoniou 2019, 13). Summarising Bang (2019, 21), creature design should always start with a purpose; each element that makes the whole of a creature must have a reason for existing other than looking pretty.

As the professionals within the video game industry place such high importance to grounding creature design in reality, the next sections will briefly delve into several key aspects to keep in mind while designing a creature. These aspects will be discussed from the point of real-world animal anatomy and behaviour, as well as how they can be implemented within creature design.

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## 4.1.1 Climate

"Climate is the characteristic condition of the atmosphere near the earth's surface at a certain place on earth" (Climate n.d.). Amongst the animals of the planet, factors such as temperature, water and light levels, natural competition, and even soil play a large part in determining where an animal is suited to live in. For example, animals with thick coats of fur or large amounts of bodyfat are more suited to live in the freezing conditions of the tundra than animals with thin fur or scales. (Animals n.d.)

According to Climate (n.d.), there are three basic climate groups: low-latitude, mid-latitude, and high-latitude climates. Each of these climates can be further broken down to specific biomes with their own specifications.



Figure 16. Photograph of a snow leopard (WWF n.d.)

A great example of how a climate can change an animal is to compare snow leopards to African leopards; they are both leopards and yet live in completely different climates and parts of the world. Both animals have adapted to the climate which they inhabit: the snow leopard has a much longer, thicker fur that allows it to stay warm (Figure 16). To keep from getting frostbitten, the snow leopard's face and ears are shorter in comparison to its African counterpart, which respectively has a larger and longer build covered in shorter fur allowing it to stay cool in the warm climate of the African savanna (Figure 17).



Figure 17. Photograph of a leopard (Visit Africa n.d.)

A more recent discovery in how the climate effects animals comes from Ryding and Symonds (2021) who note that several species of birds, especially Australian parrots, have evolved to have larger beaks in comparison to the norm of the species from 1871 as a direct result of climate change. Grose et al. (2021) have been measuring the global average increase in heat around the globe for over 20 years and has since declared that the earth's climate has increased by 1.5°C since the pre-industrial era. While some animals may be capable of adapting for climate change, a large number of species will not be able to evolve in time and may become endangered or even go extinct as a result (Ryding & Symonds 2021).

## 4.1.2 Habitat

A habitat is a specific region in which a specific species of animals or plants inhabits; habitats support these species by providing them with food, water and shelter and thus ensuring their survival. Habitats are a part of an ecosystem, which is composed of living and non-living things that work together. Biomes are larger than ecosystems and contain large geographical areas that contain specific plant and animal groups which are adapted to thrive in these environments. Few of the major biomes are tundras, taigas, grasslands, deciduous forests, fresh water, deserts, alpines, rainforests, and oceans. (Freeman 2016). McComb (2010, 155) defines habitat as "the resources necessary to support a population over space and through time." Furthermore, it should be noted that species are dependent on a number of environmental resources for their long-term survival; these resources are a key factor within the species' habitat and play a key role in the quality of said habitat.

As noted by Ries et al. (2021, 28), all of the animals on earth encounter different types of terrain in their lifetimes; each environment has had a direct effect on how the animal has evolved and adapted to survive in such habitats. This concept is further discussed by Camacho et al. (2020) in their study which demonstrated that grasshoppers are able to adjust their movement patterns to select specific substrates that appear to improve their camouflaging ability given the grasshoppers individual-specific colors.

Notably, some animals which do not belong in the same species or class, such as mammals, fish, or birds have evolved to have webbed appendages to traverse aquatic environments. This refers to convergent evolution, or the evolution of different species that are similar in phenotype but share no recent common ancestors. Convergent evolution most commonly occurs when several species occupy similar environments and adapt in similar ways due to shared ecological pressure. (Maloy & Hughes 2013, 178.) At its simplest, convergent evolution can be described as a form of evolution where different organisms or species independently evolve to have similar traits (Wood 2019).



Figure 18. Screenshot of a creature design from Hardy Fowlers Udemy course (Fowler 2018.)

Fowler (2018) demonstrates the concept of using real world environments as a basis for creature design by creating an armored creature with a spiny shell and front legs specialized in stabbing pray in dark caverns. By borrowing inspiration from hermit crabs, praying mantises and several cave dwelling animals, he arrives to a creature that is something unique but familiar enough to read as dangerous to the viewer (Figure 18). The dark colors and spiky exterior of the creature's shell could easily camouflage the dangerous creature in a dark and jagged cavern. Similarly, the long reach provided by its forelegs allows for deft capture of prey.

#### 4.1.3 Diet

Animals can be categorized into three distinct groups based on what they eat (Dayton 2019). Animals that gain their primary nutrition from other animals are categorized as carnivores and animals that gain their primary nutrition from plants are categorized as herbivores while animals that are able to gain their primary nutrition from both plants and animals are categorized as omnivores. To maintain

a balanced ecosystem, the balance of different types of animals with different types of nutrient requirements is required (Grover 2022).

An animal's diet can impact its anatomy; a sea creature feeding on alga has no need for sharp incisors specialized for consuming meat, or even need any teeth at all. Teeth are just one of the many examples of how an animal's diet can impact their anatomy (Ries et al. 2021).

According to Bear et al. (2016, 1064) the word carnivore is derived from Latin and means "meat eater". As meat eaters, carnivores possess long, claws, sharp teeth, and strong jaws that allow them to tear through flesh. In contrast, carnivores tend to have reduced facial muscles, shorter intestines, and larger head to mouth ratios relative to herbivores (Difference between herbivores and carnivores 2022). Furthermore, carnivores can also be divided by the basis on how they prey into predators which actively hunt on their food and scavengers which feed on carrior. (Grover 2022).

Herbivores are animals which feed exclusively on vegetation. They are known as primary consumers of the food chain (Grover 2022), due to their diet of primary producers (i.e. plants). Furthermore, herbivores can be classified by the food they primarily consume: frugivores which consume fruits, granivores which consume seeds, nectivores which consume nectar and folivores which consume leaves (Bear et al. 2016, 1062). Though herbivores only consume plants, this does not necessarily make them small. While guinea pigs and rabbits might come to mind when thinking about herbivores, animals like horses, cows, giraffes, and elephants also fall under the classification (Dayton 2019). Herbivores have broad and flat teeth which help them to grind the food they consume into fine paste, and when compared to carnivores, herbivores have complex facial muscles, longer intestines, and a smaller head to mouth ratio (Difference between herbivores and carnivores 2022).

According to Bear et al. (2016, 1064), the word omnivore comes from Latin and means "to eat everything", as the name suggests, omnivores are animals which

consume both consumers (animals) and producers (plants). Omnivores often have long, sharp incisors to tear flesh and flat molars to grind plant matter (Difference between herbivores and carnivores 2022).

#### 4.2 Anatomy

Similar to diet, animals can be classified in several different ways based on their anatomy. For the purposes of this thesis, the classification will focus on vertebrates, specifically, bipedal, quadrupedal, avian, and cetacean animals and their anatomy. It should be noted that within each group there is a large variety of animals with their own unique anatomical landmarks and specifications and as such this section is only meant as an overview of common landmarks one may use to guide their creature design progress.



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Figure 19. Skeletal structures of a human and a primate (Napier n.d.)

As shown above (Figure 19), the very basic elements which make a bipedal humanoid are the ability to stand on two legs, the inclusion of collarbones, skull, ribcage, and the pelvis (Batchelor 2017).

All primates possess some degree of bipedalism, movement involving two feet. Many stand upright without the need to support their body weight with their arms. In some cases, especially among apes, they are able to walk upright for short periods. (Napier n.d.) Human anatomy can be related to all vertebrates in some way due to all of us having evolved from a common ancestor; this holds true for terrestrial vertebrates especially, though it can also be applied for certain animals that have since returned to live in water, such as dolphins (Ries et al. 2021, 66).

By familiarising oneself with bipedal, or even just human anatomy it becomes easier to detect and accurately place specific landmarks, such as the pelvis, when creating or viewing a creature or an animal; knowing how the bones and muscles connect to each other will make it easier create accurate looking creatures from imagination (Batchelor 2017).



Figure 20. Simplified skeletal structure of a cat (Williams n.d.)

Quadrupedal animals walk on four feet and most mammals that walk on land fall under this category (Ries et al. 2021, 69). Typically, quadrupedal animals tend to have longer necks than bipedal animals and more often than not they also have a tail. Most common quadrupedal animals such as canines and felines tend to have more angled leg bones in relation to each other (Figure 20), whereas bipedal creatures limbs tend to be straighter when in a relaxes pose, especially on humans.



Figure 21. Simplified skeletal structure of a human (Williams n.d.)

If the hind legs of humans and cats were to be compared, a human would have to stand on their toes with their knees bend to achieve a similar posture to that of a cat; the bones however are very similar in shape. This can easily be viewed by comparing the illustrations of Figure 20 and Figure 21.



Figure 22. Skeletal structure of an avian (Veterian Key 2017)

There is quite a large number of variation in avian, or bird, anatomy when it comes to the muscles and overall shapes of the bodies; however, the skeletal make up is still quite similar (Batchelor 2017). Though there is a variety of flightless species of birds, most avians still have compact bodies, very light but strong bones, feathers, wings, and extremely efficient respiratory and circulatory systems (Ries et al. 2021, 86).

As noted by Batchelor (2017), most avians tend to have very large sternums, long necks, and short tails. In birds, the sternal vertebrae are fused together; the large size of the sternum allows for large pectoral muscles to attach themselves into the ridges, providing strong flight (Basic avian anatomy and physiology 2017).

An anatomically correct illustration of the bone structure of an avian is presented above along with the names of the structures making up the skeleton (Figure 22). However, when designing creatures, especially early in the process it is acceptable to simplify the structure for clarity.



Figure 23. Skeletal structure of a whale (Whales online n.d.)

Cetaceans are aquatic mammals such as whales, dolphins, and porpoises. Within their order they can be further split into "toothed whales", such as dolphins and orca, or "baleen whales", such as blue whales, which filter-feed on tiny pray such as krill (Ries et al. 2021, 82).

Despite living in water, cetaceans still breathe air. To make it easier for cetaceans to breathe their nasal passages have evolved to be on the top of their skull (Life of whales: Skeleton 2020). Cetaceans have also evolved to have streamlined, hairless bodies which reduce drag in water, allowing them to move faster in water. The only protrusions in cetaceans are the dorsal fin, two pectoral fins and two horizontal tail flukes; each of these have their own task in aiding the creature to swim. (Ries et al. 2021, 82).

As shown in Figure 23, even the skeletal structure of a whale consists of parts such as a spine, a ribcage, finger like fin bones and a pelvis.

## 4.3 Case study: A Quiet Place I

A Quiet Place (2018) is a post-apocalyptic horror movie in which a family must survive in a world now overrun by strange creatures known as Death Angels (Figure 24). These creatures have an extremely keen sense of hearing, making something as ordinary as talking or going for walk a possibly deadly ordeal.



Figure 24. A screenshot from the movie A Quiet Place (Industrial Light & Magic n.d.)

In the opening scene of the movie the audience is shown a family going through an abandoned store looking for medicine. The scene sets the stage for the eerie silence and lack of talking throughout the movie, reiterating through demonstration how deadly noise is in this new world.

Soon after leaving the store, the family's youngest child begins to play with a toy plane which lights up and beeps. This sound alerts the creatures to the child's location. The father tries to run to the child to get rid of the toy, only for the boy to be snatched away by one of these creatures.

As the movie skips forward almost a year, the mother is shown to be nine months pregnant, and the family has made several systems to allow them to live in their farmhouse and to be able to harvest enough food to last them throughout the year. Scenes in which the family uses leaves as plates and uses their hands to eat instead of risking using cutlery and possibly dropping something that could shatter really help sell the importance of silence, especially so when one of the children knocks over a lantern and it is shown that this sound was enough to alert one of the Death Angels to come to the farm. Luckily for the family, the creature is oblivious to them and instead eats a raccoon which had fallen from the family roof.

In the end, it is discovered that the frequency used by hearing aids can be amplified and used against the Death Angels. When hearing the low-pitched sound, it appears to hurt them and forces them to open their hard, armour like shell to expose their soft, fleshly insides. The movie ends with the mother successfully shooting and killing one of these creatures as two more approach the house.

From the perspective of creature design, the Death Angels are visually well designed. They are shown as fleshy, skinny creatures that move incredibly fast whenever alerted by sound. It could be argued that the design could have leaned a bit more into the armoured aspect of the designs to better convey why these

creatures are so hard to kill, but this would have undoubtedly made the creatures appear bulkier and as such the believability of their agility.

One could suggest that the information that is provided throughout the movie of the creatures could have been conveyed in an alternative, more fitting manner. The opening scene in which we first see one of these creatures appear out of nowhere to kill a child for making a sound is extremely powerful, but this intensity does not last as more is discovered of the creatures and the seemingly arbitrary decibel threshold to which they respond. While the family seems safe traversing their sand pathway to the store, a glass broken can seemingly be heard from miles away by the creatures and trigger an attack. Inconsistency with the creatures is a hinderance to the movie. Beyond hearing, there is little consistency into the speed and agility of these creatures, either. In the beginning, one of these creatures appears seemingly out of nowhere the second the son begins playing with his toy, but moments later it is show moving just barely faster than the father who rushes to try and save his son.

Furthermore, a creature is shown attacking a racoon for making sound, but similarly the sound of birds singing is present throughout the movie, making it unclear why they have been left alive by the monsters. If these creatures are only hunting humans, it was in no way communicated as to why or how they can distinguish what is human and what is not, and if they do go for everything and anything that creates noise, the world would have looked incredibly different in the span of a year with the entirety of the local animal population being wiped out.

These inconsistencies do not necessarily ruin the film, but they can break the immersion for certain viewers. It should also be noted that these issues are more to do with how the creatures behave during the course of the movie, rather than the designs itself. That being said, since the Death Angels are the primary antagonistic force in the movie, a clearer design based on principles of logic would help build the world more and provide the viewer more immersion to the struggles of the characters.

## 5 MAKING OF A CREATURE

For the production part of this thesis, I have decided to create an original creature to inhabit a world I have come up with. First, I will go over some aspects of the story itself to provide context for the design choices made later on in the sketching phase.

## 5.1 Setting

The story takes place in a post-apocalyptic world which has been "taken over" by several species of never-before-seen creatures with strange abilities. These creatures were discovered deep within ancient structures that had been buried for centuries.

While there are several different species that have appeared around the globe, the one common skill each species shares the ability to influence the actions of humans which they make eye contact with. It is uncertain why these creatures are able to lure humans to willingly walk to their deaths by their gaze alone.

It was quickly discovered during the outbreak that these creatures appeared to be claustrophobic; they would avoid buildings and caves even when in full pursuit of a human pray. It has been theorised that the creatures dislike contained spaces due to their sudden entrapment underground which forced them to not only cannibalise each other, but to also evolve rapidly to survive such harsh environments.

## 5.1.1 Theme & genre

The main themes of the story are that of discovery and overcoming one's fears. I want the protagonist to discover the outside world which they had previously been too terrified to explore due to their agoraphobia; in juxtaposition I want to showcase the creature discover how trusting a human can help it overcome its deep running claustrophobia.

Due to the inclusion of otherworldly creatures, the story can be classified to belong in the subgenre of post-apocalyptic media in science fiction.

#### 5.1.2 Role in the story

The interviews with industry professionals discussed creature design and the possible roles they might play in stories. The answers received during the interviews helped to better determine in the development process why this creature in particular had to be designed to fit both as an individual of its species and a character with an important role in its own right.

Metheney (2023) pointed out that creatures are one of the oldest forms of human anxieties and they have been used as symbols for the fears and challenges of humans within folklore and myths. This point seems obvious in hindsight, but by viewing creature design through the lens of human anxiety and a symbol of fear drove me to change a fundamental part of the story about the lore of these creatures. In my original draft of the story, these creatures were the descendants of long forgotten Gods, much more akin to the monsters found in Norse mythology, which had been trapped away the ancient humans. The reason why these creatures were unable to enter establishments was due to lack of worship from the moder humans, but after thinking about this further I decided to leave the creatures to be more akin to normal animals and simply refuse to go indoors due to their prolonged entrapment underground where they struggled to survive. This makes the claustrophobic creatures a better mirror for the agoraphobic protagonist; without any magic or religious context the journey for both the creature and the protagonist overcoming their fears of the world feels more genuine and equal.

Another important issue that was pointed out by Ostrowski (2023) was that a good creature design evokes a specific emotional response from the viewer and conveys the mood and the message of the story and most importantly is believable within the context of the story. The last part was something that was further discussed with Camehl (2023) as he went on to explain that different

creatures play different roles in stories depending on the storyline. The example he gave was the creatures from Avatar 2 in which most of the creatures are present to help populate the world and make it feel more alive while a small portion of these creatures actually play a larger role in pushing the story forward. Furthermore, Camehl (2023) noted that creature design, when done well, can tell a story in itself.

The role of this specific creature is to present the otherwise feared species that have been hunting humans for years now as something more nuanced. This one in particular forms a deep bond with the protagonist of the story and works alongside them as a protector, mount and a companion as they explore the world and work alongside one another to overcome their fears.

The feeling this particular species should evoke is some sense of intelligence and ability to work together with its own and other species. It should be ferocious beast evolved to hunt in the dark.

## 5.2 Research

Keeping in mind the advice of basing designs on reality, a video from Norlund (2017) goes through her method of three when it comes to designing. Norlund (2017) decides on three animals which to use as a base for her designs; one of these animals will be the primary inspiration for the species and dictate the overall shape and anatomy of the creature while the two secondary animals will be used to add interest, determine the habitat, and otherwise help her create something truly unique.

The research phase was started by looking into real world animals with nocturnal hunting habits and animals which live in caves. It was also important to keep in mind that the creature would have to be large enough to be ridden upon; this meant that most of the inspiration was drawn from quadrupedal creatures due to the association of horses being animals most commonly ridden by humans in the real world.



Figure 25. Moodboard depicting several species of canines, a nile monitor and an aardvark

At first, it was considered using a feline animal, such as a tiger or a jaguar for the majority of the design, but eventually it became clear wolves might be the ideal base for the design instead. Wolves are known to hunt in packs and are seen as one of the worlds top predators and despite this, most humans just see big dogs when looking at wolves. In a sense, using a wolf as a base for a creature which is considered feral but still ends up forming a bond with a human seemed extremely fitting and a good way to inform the viewer that despite these creatures currently disliking humans, they could perhaps learn to work alongside them in the future. I also decided to include a few different dog breeds in the moodboard for possible shape variation in the designs.

For the first secondary species it was important to decide upon a creature which is known to either dig tunnels or live in caves to hint at the rabid evolution the ancestor of this creature would have had to go through to thrive underground. After some research, the aardvark was chosen for its interestingly shaped feet which it uses for burrowing and self-defence as well as its large ears which give it a very friendly and approachable appearance. For the second secondary species and the final animal for the initial moodboard a Nile monitor was chosen. The reason for picking a lizard rather than something more closely related to the first two animals was for its interesting scale patterns and its ability to eat poisonous animals such as frogs or toads. The fact that it would be interesting to try to incorporate the long slender tail or the shape of the lizard's neck into the design to be used as a threat display also played a part in the decision.

## 5.3 Creature sketching

As done in the video by Norlund (2017), I started the design process by trying to combine the three chosen animals in many manners of methods, while also taking the liberty of drawing from imagination and exploring different ideas such as the exposed skull looks of sixteen and twenty. At this point of the project, realistic anatomy, features, or clean lines were not a large concern. The goal was to achieve variety of different looking creatures that could possibly fit the role it plays in the narrative; that of a companion and a mount.



Figure 26. First twenty creature concepts

During the process of sketching the creatures, other animals ended up being used for inspiration such as sugar gliders and dragons. To generate new ideas in order to avoid creative blockage, inspiration would be sought from other media, e.g. *Pokémon* and *Dragon Age*.



Figure 27. Additional creature concepts

When the forty designs were created, this phase of the project was considered completed. The designs created varied in body shape and features, but the majority were designed to be quadrupedal due to making the most sense for a mountable creature.

## 5.4 Feedback survey & implementation

Even though this was a personal project, it was still considered important to receive feedback in order to enhance the design in the future and to better replicate the pipeline in commercial work. Feedback was gathered through Google Forms where the designs on Figure 26 and Figure 27 were presented along a small description of what was the purpose and intended role for this creature. Once complete, the survey was sent to a variety of arts- and games-

related servers where members were asked to look and pick out few of their favourite designs and the reasons behind their choices. This made it easier to see which designs resonated with the viewers and why; it made it possible to realize that most people clearly enjoyed the more agile looking creatures with unique aspects to them such as quills, horns, tusks, or skulls.



Figure 28. The top five most voted for designs

By the time of closing the survey on March 27<sup>th</sup>, 2023, it had received, in total 32 anonymous votes and several comments on the designs. Most of the comments that were received during the questionnaire were written down on the canvas as seen in Figure 28 and Figure 29. This made it possible to keep the feedback in mind when moving on to work on the variations based on the feedback received.



Figure 29. Personal favourite designs

In addition to using designs picked by the survey, I also decided to incorporate two of my personal favourite designs to the eventual variation line-up. This was especially beneficial as I found the face shape of my 39<sup>th</sup> design from Figure 29 to be the most unique out the ones created, and I decided early on that it would be used as a part of the final design.



Figure 30. Nine variations made using the most voted for designs and two personal favourite

With the five most voted for designs and two personal favourites picked, it was time to move on to the creation of subtle variations. As the most voted design, the 19<sup>th</sup> creature from Figure 26 received several compliments to its body shape as this it appeared the most suited for a mount. With this in mind, it was easy to

decide to use it as a base to add the features that had received the majority of the remaining votes such as tusks, quills, feathers, armour, exposed musculature on the face, and a more hunched over look. After nine of these variations, the 6<sup>th</sup> design from Figure 30 was chosen as it lent itself well for a canine mount. Though most people had seemingly preferred the long lizard like tails, it was decided that the curled up soft tail reminiscent of certain dog species and deer lent itself better to the design as it allowed for a method of emoting and expressing feelings for the creature and thus making it more approachable and sympathetic.



Figure 31. Color variations and more detailed face sketches

The last step before finishing the design was to settle on the colours of the creature. To reflect its nocturnal habits, it was clear that colours that are darker and more natural would lend themselves well for camouflage. Even so, the first palette that was tried out consisted of a light cream colour and dark accents; this design seemed to be more memorable but would work better in a story set in a wintery landscape.

In the end,the bottom left design in Figure 31 was the choice as it had a pleasant balance of dark fur and enough colour variation for it to both blend and stand out

in a dark background. It also seemed like the most realistic and natural palette out of the four created.

# 6 PRESENTATION OF RESULTS

With the design and palette picked out, it was time to create the finalized design. To do this few additional layers on top of the sketch were created. Details such as fur and feathers on its mane and tail were painted on top of the sketch layer to help it feel more polished. This was a relatively quick progress thanks to having access to several high quality fur brushes which helped convey the sense of fur length on the mane and tail.



Figure 32. Finished creature design

To make the illustration more presentable, a relatively simple background using some free textures of cracked walls and paint splatter was created alongside a human silhouette to better communicate the scale of the creature so that it would read as a mount sized beast. The size roughly matches that of an average shire horse.

As a final touch, the species was named and even give a Latin based scientific name to enhance the realism. Thralline comes from the word's "thrall" and

"canine" while Lupus hypnoticus was created from the Latin words for hound and hypnotism to hint at the creatures mind controlling abilities within the story.

#### 7 CONCLUSION

In conclusion, to create a convincing creature design which will enhance rather than impair the narrative a lot of factors must be considered. For the creature to be seen as a natural inhabitant within the setting, the creature's anatomy must fit the environment and work as a believable species which has evolved to survive the conditions outlined by the writer. The design must convey the desired emotion or reaction to its viewer, be this adoration or fear, which can be achieved through the implementation of design principles such as shape language and contrast. Furthermore, for the creature design to help convey the story, the role of the creature within the narrative must be clear even before the design process begins as this allows for different methods of approaching the process. A creature that plays a key role within the narrative should be more detailed and recognizable than a creature designed to simply fill in the world to sell its believability.

For anyone interested in designing creatures, it is important to understand the basic anatomy of real-world animals as it offers a wonderful starting off point to the creation progress that allows the creatures to feel grounded to reality. It is highly recommended that the brief by which one might approach designing creatures includes its purpose within the narrative so that an appropriate amount of detail can be given.

Ultimately creature design is tied to the narrative from the very beginning; a creature without a purpose might make for a cool one-off illustration, but a creature designed with a specific role and purpose in mind will lend itself to a variety of ideas and ultimately allow for a greater creative possibility.

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