

SUBNAUTICA

A deep dive into Terror

De Guzman Adrian Lorenzo Yongoyong

UXG1501

Assignment 3

TABLE OF CONTENTS

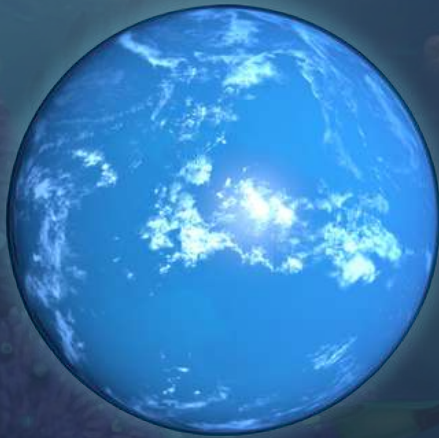
Introduction	3
External Study	11
Game Loop	15
Motivation	23
Terror to Engagement	26
Specific Moments	37
Conclusion	46

INTRODUCTION



INTRODUCTION

Overview



Planet 4546B



Subnautica is an **open-world survival adventure** game developed by Unknown Worlds Entertainment. The game is set within the expansive and unexplored oceans of an extraterrestrial world designated as **Planet 4546B**.

INTRODUCTION

Overview



Aurora

Released in 2018, the game commences with players stranded on this planet following a catastrophic **crash-landing** of their spaceship, the Aurora.

INTRODUCTION

Overview



Lifepod



Safe Shallows

From the outset, Subnautica immerses players in an unfamiliar and daunting underwater environment where survival is precarious, and apprehension pervades each excursion. The objective is unambiguous: **acquire resources, establish a base, explore the ocean's abyss**, and ultimately find a way to return home.

INTRODUCTION

Terror



Terror



Horror

Ultimately, **terror stands in stark contrast to horror**. While horror's primary objective is to **evoke a primal and shocking response**, terror operates on a more insidious level. It **exploits the individual's imagination**, inducing a **state of heightened anxiety** and overthinking. Notably, terror derives its power from the **absence of information**, whereas horror relies on an **overwhelming abundance of stimuli**.

INTRODUCTION

Terror



In definition, terror is a **strong and overwhelming fear or dread**, often accompanied by **panic or extreme anxiety**. It is often associated with a **loss of control** or an inability to escape a perceived threat.

INTRODUCTION

Terror



Crater's Edge in Subnautica

In Subnautica, terror is rooted in the **ocean's abyssal, extraterrestrial depths**, where players encounter threats and environmental perils. This form of apprehension **intensifies players' emotional responses and sustains their engagement**, as each excursion promises the discovery of novelties, peril, and survival.

EXTERNAL STUDY



EXTERNAL STUDY

How terror and anxiety drives player engagement



$$\begin{aligned} \text{ContinuedPlay} = & (\beta_1^{AU} + \beta_1^{PT})\bar{p} + \beta_1^{surp}\overline{\text{surprise}_t} + (\beta_2^{surp} + \beta_2^{KR})\overline{\text{surprise}_t^2} \\ & + \beta_1^{susp}\overline{\text{suspense}_t} + \beta_1^F p_0 + \beta_2^F p_0^2 \end{aligned}$$

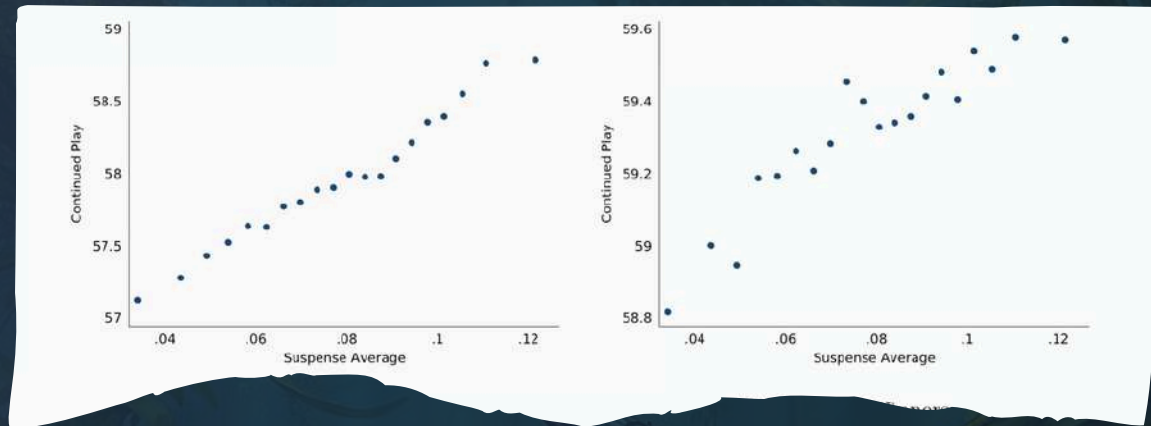
TERROR = SUSPENSE

HORROR = SURPRISE

In a study conducted by UCLA students in 2014 (<https://ucla.app.box.com/v/BeliefsThatEntertain>), a correlation between anxiety levels and player engagement was discovered.

EXTERNAL STUDY

How terror and anxiety drives player engagement



Terror

Based on their research, it can be inferred that **terror, in essence, is a form of suspense**. This occurs when the brain constructs information about potential threats based on limited sensory data. The study demonstrates **a correlation between the duration of gameplay and the level of suspense** experienced by players.

EXTERNAL STUDY

How terror and anxiety drives player engagement



By eliciting potent emotional responses, **players are driven by a combination of risk, reward**, and the exhilaration of surmounting obstacles, even if these challenges initially instill apprehension.

EXTERNAL STUDY

Thesis

Subnautica's game loop instills terror,
which leads to player engagement.

GAME LOOP



GAME LOOP

Core Mechanics



Exploration



Resource Management



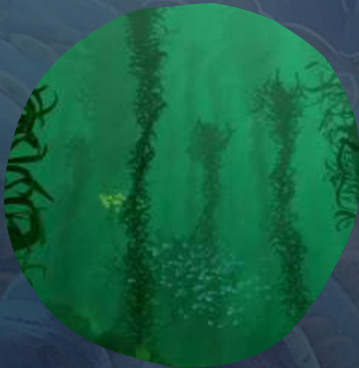
Base - Building

At the core of Subnautica lies a fundamental gameplay loop that integrates three primary mechanics: **exploration**, **resource management**, and **base-building**. Each of these mechanics is meticulously crafted to **generate tension and sustain player engagement** through a series of progressively challenging obstacles.

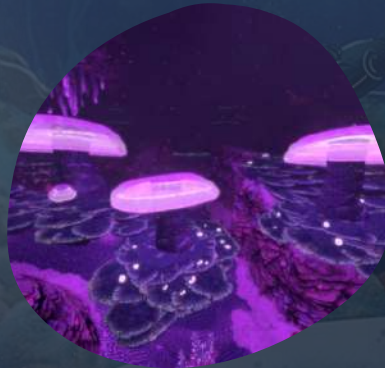
GAME LOOP

Core Mechanics

Exploration



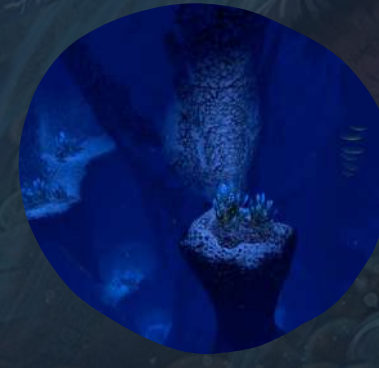
Kelp Forest



Jellyshroom Caves



Blood Kelp Forest



Underwater Islands

Players must navigate **unfamiliar, often dark, underwater biomes**. Each dive into new territories not only offers the potential for valuable resources but also instills a **sense of threat from unseen creatures and unknown environments**.

GAME LOOP

Core Mechanics

Exploration



Seaglide exploration



Biome Map

The diverse range of biomes ensures the **continuous novelty of the gameplay**, presenting players with a variety of challenges. This dynamic keeps them engaged and alert, as the more they explore, the more they discover, **creating a sense of uncertainty and wonder**.

GAME LOOP

Core Mechanics

Resource Management



Health, Food, Water, Oxygen



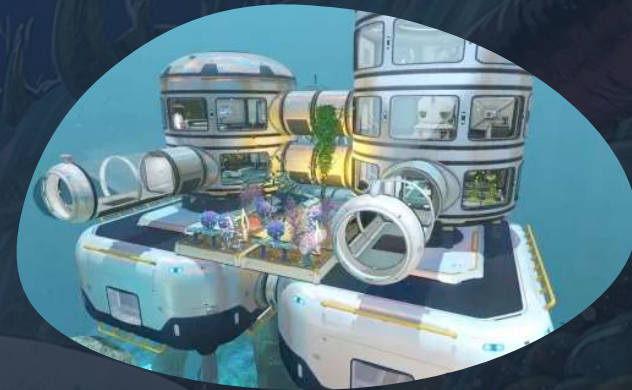
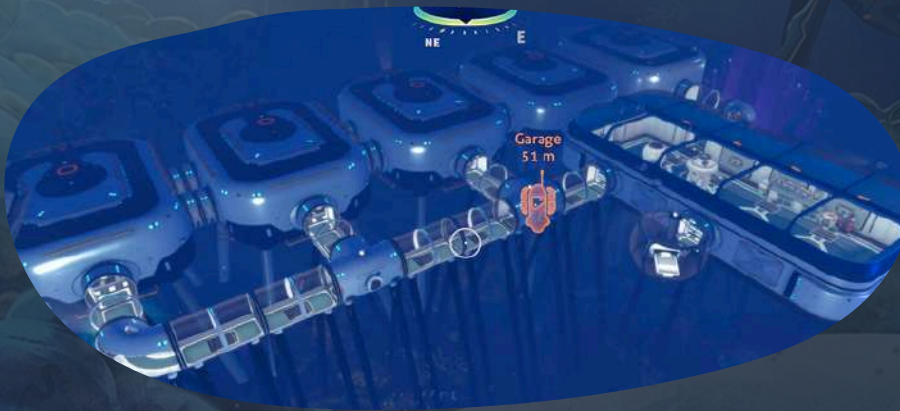
Materials

Gathering essential resources, including **food, water, and materials**, pushes players to venture into **progressively hazardous environments**. This mechanic ensures continuous player movement and instills a sense of urgency, as **players must meticulously balance the risks** associated with exploration with the requirement to sustain their health, hydration, and oxygen levels.

GAME LOOP

Core Mechanics

Base Building

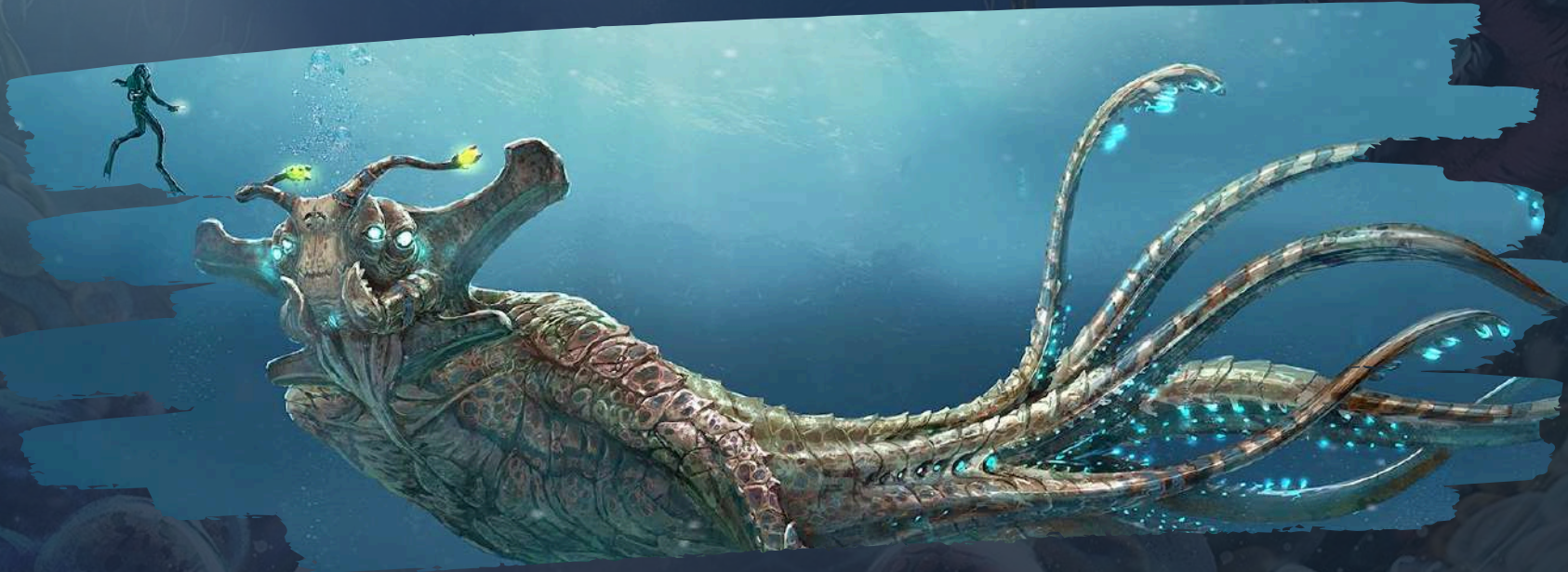


Able to place bases anywhere in the map

Establishing a base serves as a **sanctuary** for players amidst the tumultuous nature of the ocean. These bases assume paramount importance as pivotal hubs for survival, offering essential amenities such as **storage facilities, oxygen replenishment, and crafting stations.**

GAME LOOP

Cycle of Discovery & Resources



Subnautica's game loop heavily relies on **discovery as a means of enticing players into deeper peril**. To progress, players must persistently venture into uncharted territories, both metaphorically (by exploring unfamiliar environments) and literally (by descending into progressively more hazardous depths).

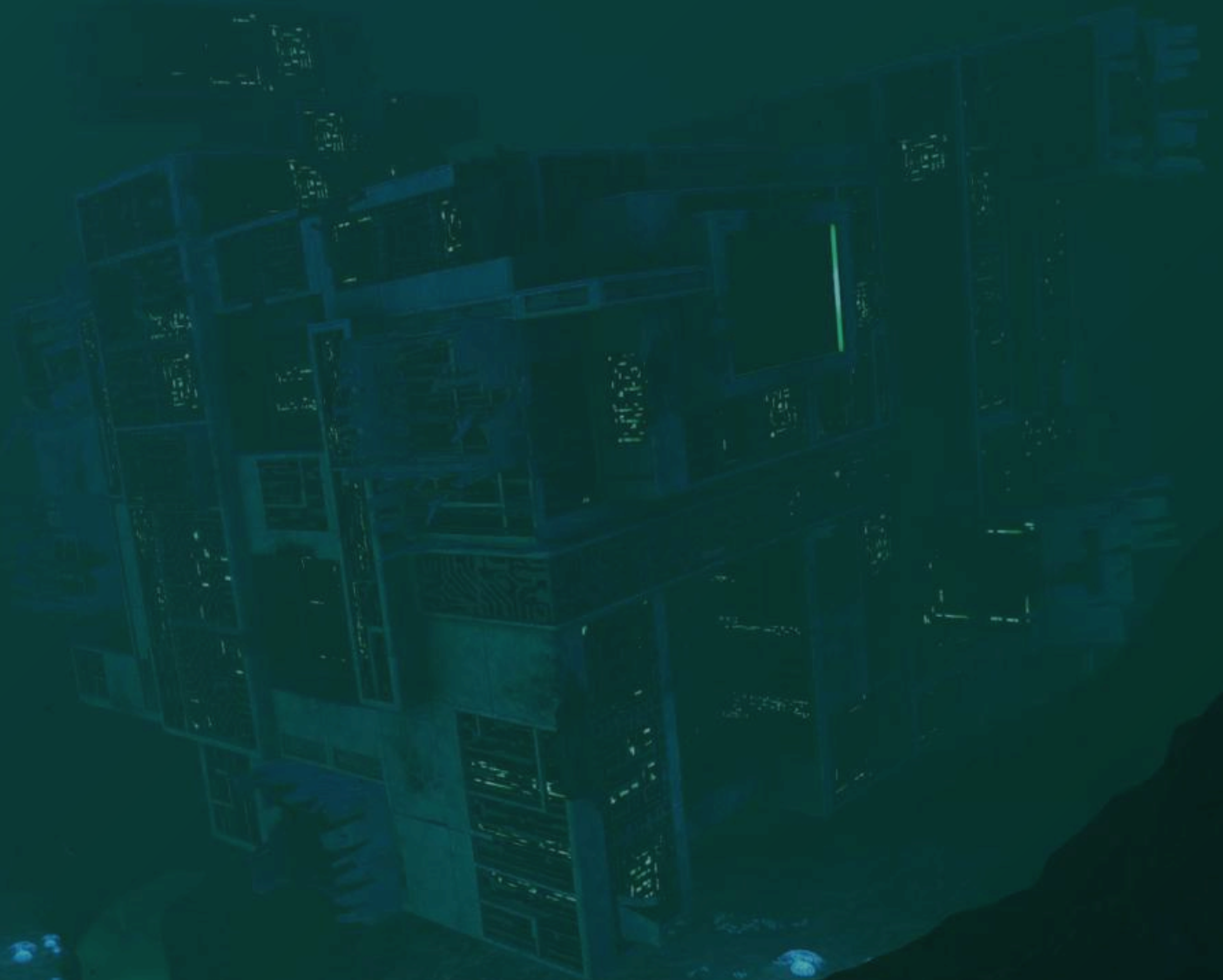
GAME LOOP

Cycle of Discovery & Resources



New regions unveil resources crucial for crafting higher-grade equipment, thereby **facilitating players' further exploration**. This dynamic cycle generates an alluring loop where discovery, albeit perilous, remains the linchpin of survival and advancement.

MOTIVATION



MOTIVATION

Resource Scarcity



Resource scarcity is another factor that compels players to explore perilous regions. As the game progresses, **essential materials become increasingly scarce**, necessitating players to **venture into areas inhabited by hostile creatures or fraught with environmental hazards**.

MOTIVATION

Resource Scarcity



In Subnautica, the finite nature of material resources necessitates exploration as the sole means of acquiring additional supplies. This scarcity presents a dynamic challenge for players, who must continually **assess the value of the resources they require in relation to the risks associated** with their retrieval.

TERROR TO ENGAGEMENT



TERROR TO ENGAGEMENT

Oxygen and Depth



Player Resource HUD

The fundamental elements that instill terror and anxiety in the Subnautica experience are the depletion of oxygen and the depth of the ocean. The game's introduction of an oxygen meter serves as a pivotal tool in evoking anxiety in the players. This meter serves as a **constant reminder of the players' unfamiliarity with their environment, being submerged underwater.**

TERROR TO ENGAGEMENT

Oxygen and Depth

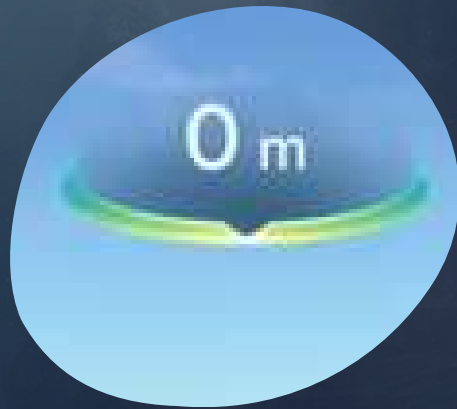


Player Resource HUD

Additionally, the oxygen meter's functionality is directly correlated to the player's current depth within the ocean. As the player descends, the **oxygen in the meter depreciates at a faster rate**, instilling a natural apprehension within the player. This apprehension **discourages them from venturing beyond their vehicles** or base into the frigid and unforgiving depths of the ocean.

TERROR TO ENGAGEMENT

Oxygen and Depth

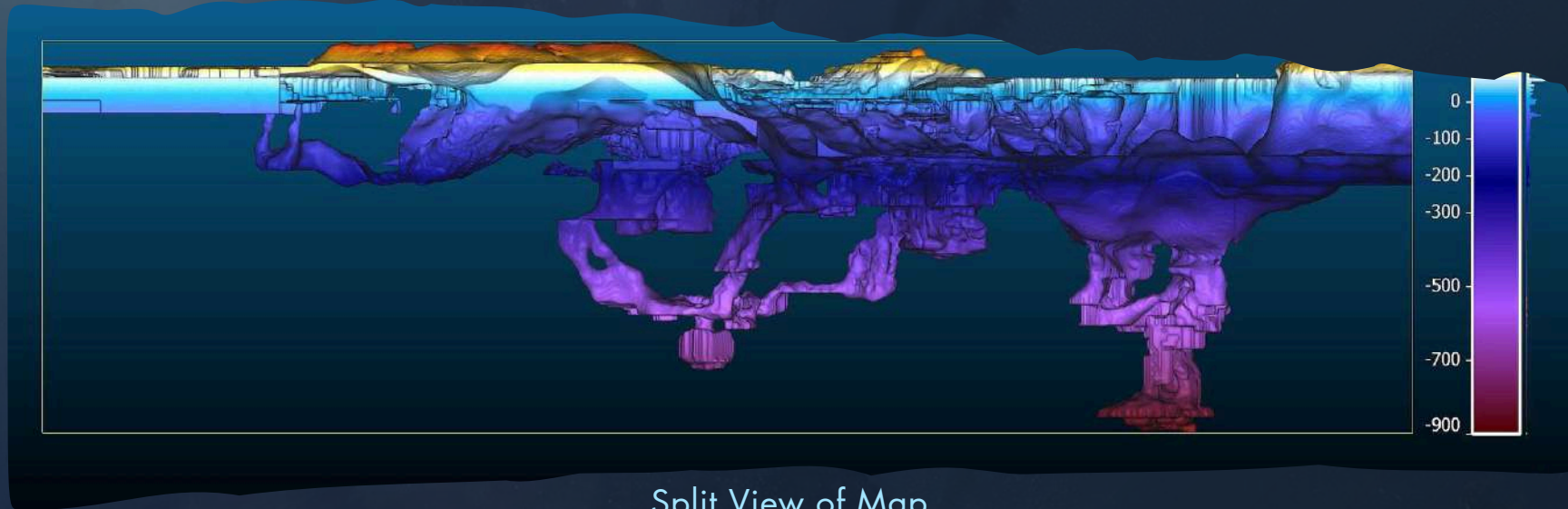


Depth Indicator HUD

Deeper depths introduce heightened risks, encompassing hostile creatures and environmental threats, all while players must meticulously manage their limited air supply. This mechanic introduces an additional layer of stress, **compelling players to make prompt decisions and intensifying the suspense.**

TERROR TO ENGAGEMENT

Oxygen and Depth

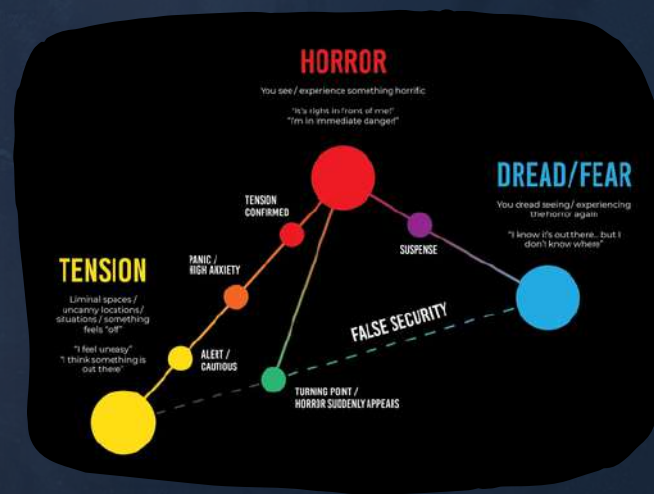


Split View of Map

Given the considerable depth of the ocean, the perilous nature of the journey intensifies the sense of urgency, transforming each voyage into a race against time.

TERROR TO ENGAGEMENT

Lack of traditional relief cycles

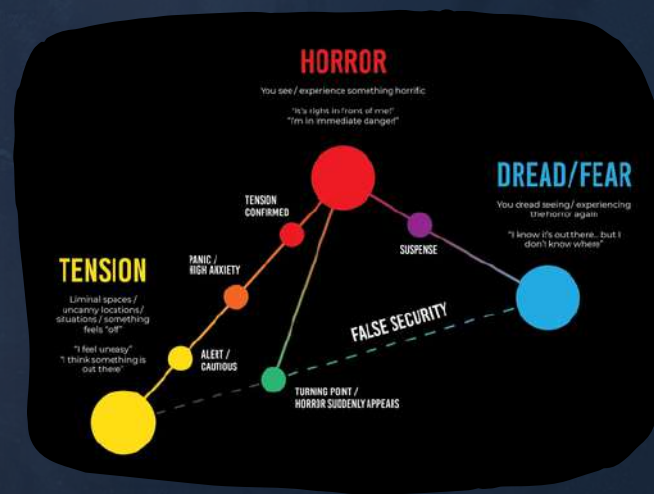


Traditional Relief Cycle

Many games in the horror genre utilise relief cycles. These cycles serve to **maintain player engagement by providing a balance of tension and relief**. These can be seen in horror games where the player is jump scared or killed by the game and the relief is the down time in which the player is dead.

TERROR TO ENGAGEMENT

Lack of traditional relief cycles



Traditional Relief Cycle

Additionally, traditional horror games provide players with the ability to acquire information. Upon death, players gain valuable insights into how to avoid or overcome specific threats. This is where Subnautica distinguishes itself, **employing terror as its primary mechanic rather than horror.**

TERROR TO ENGAGEMENT

Lack of traditional relief cycles



Damage to players
80% of healthbar per attack

Movement
Linear, easily dodged by weaving



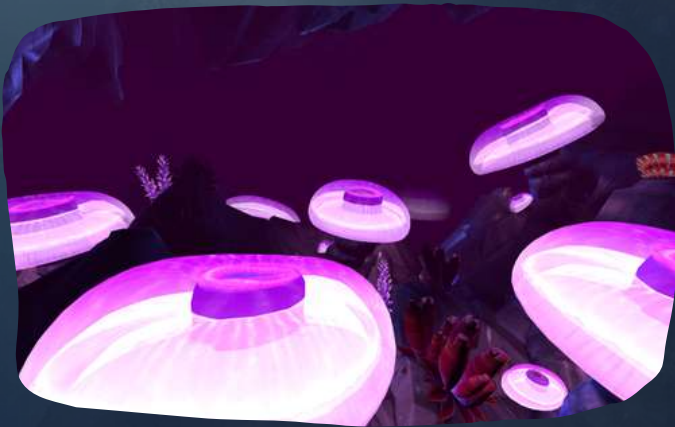
Damage to players
87% of healthbar per attack
Swims away after each attack
as if losing interest

Designed not to kill players
instantly, only to terrify

Subnautica game system is designed to fully terrify the player whenever they take a dive into the unknown. **Most of the monsters can't kill players instantly, and their movements are also not as fast as the players.** However, this information is not given to the players.

TERROR TO ENGAGEMENT

Lack of traditional relief cycles



JellyShroom Cave



Crabsnake



Hides inside
jellyshrooms

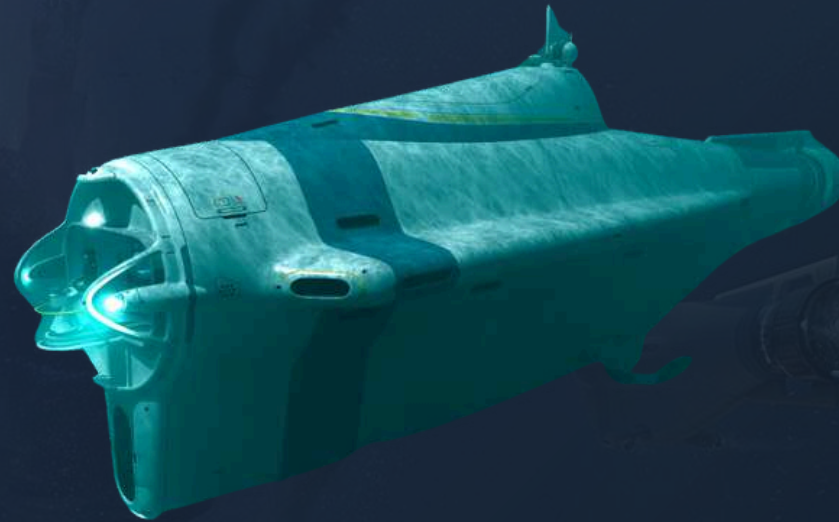
This lack of crucial information gives the players a feeling that **every encounter with a threat in the game is one that they have barely gotten away from**. Such lack of information gives way for an interesting relief cycle in that **terror is sustained** throughout every time the player goes out **and relief is only available in the safety of home**.

TERROR TO ENGAGEMENT

Player emotional investment



Player Base

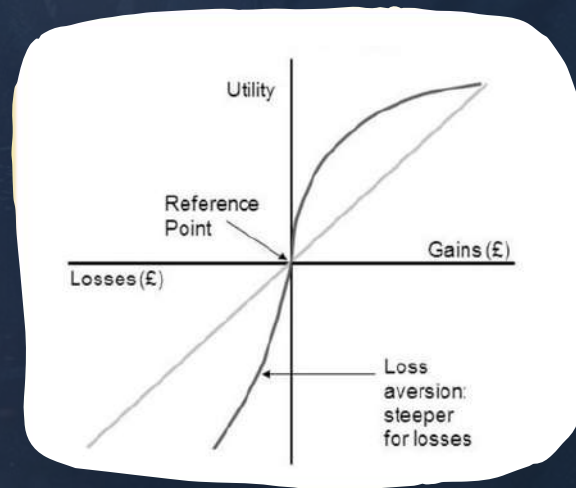


Expensive Submarine

As players advance in Subnautica, they develop a **strong emotional connection to their base, equipment, and accumulated resources**. This attachment intensifies their **apprehension about potential loss**, as environmental hazards pose a threat to their hard-earned progress.

TERROR TO ENGAGEMENT

Player emotional investment



Loss Aversion Graph

The psychological principle of loss aversion emerges as a potent motivator for players. They are more **inclined to assume calculated risks and maintain their progress**, resulting in a stronger emotional commitment to their survival. This attachment, coupled with the inherent risks of the game, **perpetuates a cycle of anxiety and engagement**, compelling players to **safeguard their accomplishments**.

SPECIFIC MOMENTS



SPECIFIC MOMENTS

Aurora and the Crash Zone



Aurora Wreckage

The wreckage of the Aurora, enveloped in radiation, exemplifies Subnautica's tense gameplay. This zone is full of environmental hazards and lurking predators.

SPECIFIC MOMENTS

Aurora and the Crash Zone



Inside the Aurora



Inside the Aurora

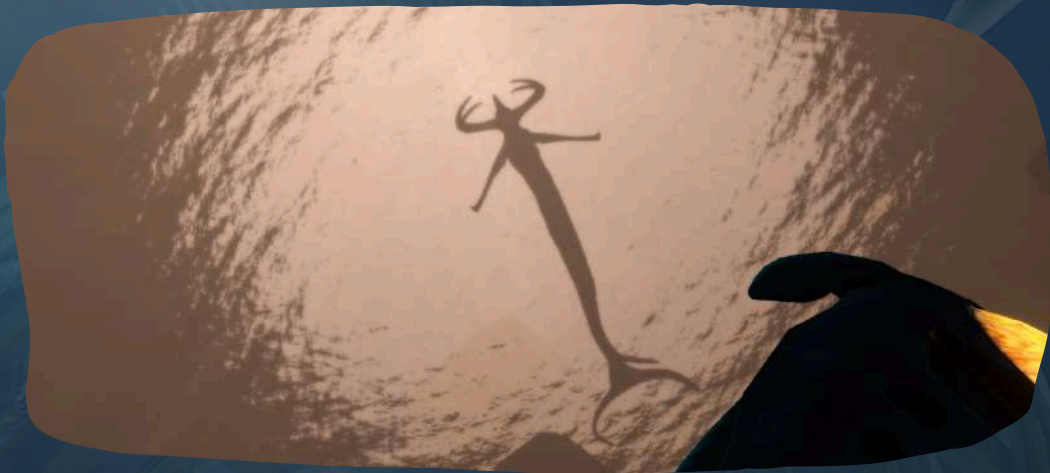


Crash Zone outside the Aurora

Exploring the Aurora presents both challenges and opportunities, as it contains valuable resources and narrative clues. The radiation and limited resources further complicate the experience, heightening the sense of trepidation as players venture into this perilous region.

SPECIFIC MOMENTS

Aurora and the Crash Zone



First Sighting of a Leviathan



Reaper Leviathan Attack

The Aurora is also most likely the player's **first encounter with a hostile leviathan-class creature, the Reaper Leviathan**. Being used to the safety of the Safe Shallows biome, travelling to the Aurora and the Radiation Zone is an eye opening experience for the players; them finding out that nothing in this world is as it seems.

SPECIFIC MOMENTS

Leviathan Encounters



Reaper Leviathan



Sea Treader Leviathan

Leviathan-class creatures are among the **most intimidating encounters** in Subnautica. These colossal and frequently aggressive beings **generate high-stress situations** that compel players to meticulously plan their routes, evade detection to ensure their survival during encounters.

SPECIFIC MOMENTS

Leviathan Encounters



Ghost Leviathan



Sea Dragon Leviathan

The presence of these creatures **instills a palpable sense of terror, reinforcing the game's tension** as players are constantly aware of the possibility of encountering a Leviathan lurking in the depths.

SPECIFIC MOMENTS

The Depths and Late-Game areas



Blood Kelp Zone



Lost River

As players progress, they must explore deeper biomes that introduce **harsher environmental conditions**, **hostile creatures** such as different types of leviathans, and even **greater oxygen constraints**.

SPECIFIC MOMENTS

The Depths and Late-Game areas



Lost River

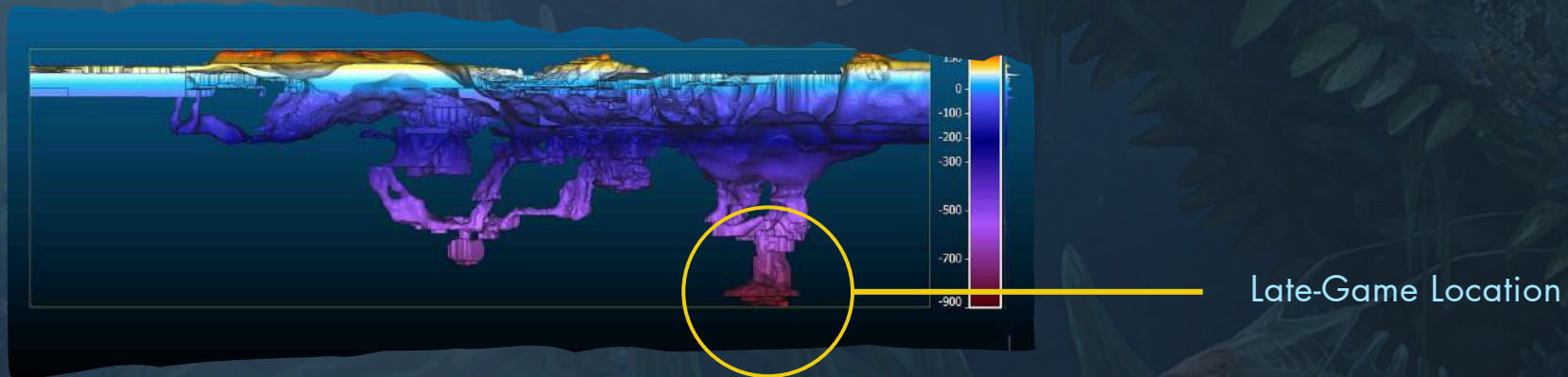


Lava Lakes

These late-game areas, such as the Lost River and the Lava Lakes, significantly elevate the stakes, necessitating the utilization of advanced equipment and an elevated level of caution. The apprehension of the unknown, compounded by the potential encounter of even more formidable creatures, sustains player engagement by reinforcing the perception of discovery and apprehension.

SPECIFIC MOMENTS

The Depths and Late-Game areas



Furthermore, with the locations being deeper and further away from the player's base, the **player experiences heightened loss aversion**; the environment being extremely dangerous and if they die, there is **no way for the player to retrieve precious equipment that they have brought on their journey**.

CONCLUSION



CONCLUSION



In conclusion, Subnautica stands as an exemplary horror-survival game that effectively **utilizes its game loop to evoke terror and anxiety**, thereby **engaging players in an emotional cycle of fear and relief**.

CONCLUSION



By employing core mechanics centered on exploration, resource management, and survival, Subnautica **immerses players in a world of perpetual tension**, exacerbated by the unpredictability of the extraterrestrial ocean.

CONCLUSION



The meticulous integration of terror, anxiety, and reward into the gameplay loop effectively demonstrates Subnautica's ability to seamlessly **blend primal fears with survival mechanics**, thereby crafting a profoundly immersive player experience. This strategic approach not only **sustains player engagement but also imbues each moment within the game with a genuine sense of impact.**

CONCLUSION

SUBNAUTICA



Through this analysis, we discern that Subnautica **transcends its classification as a mere survival game**. Instead, it presents an immersive exploration of fear, resilience, and the exhilaration of discovery, thereby **elevating the boundaries of player engagement within the horror gaming genre**.