

Emergent Gameplay

Overview

The purpose of this document is to demonstrate, through the use of three different games, how game systems can interact with one another to generate emergent gameplay. Emergent gameplay refers to video game mechanics that change in response to player's actions and are enhanced by the proper combination of systems.

Sea of Thieves

Sea of Thieves is a 3D action-adventure multiplayer game developed by Rare and published by Microsoft in 2018.

The player takes on the role of a customized pirate in a shared world, where there are multiple goals and objectives. The focus of the experience is on playing with friends managing a ship that must be handled and repaired in order to reach islands to rescue treasures, fight with other ships or simply enjoy the experience of sailing on the sea.



System 1: Harpoon

On the boat is possible using a tool commonly associated with whale hunting: the harpoon.

The harpoon is very useful in game thank to its ability to catch objects in the sea, such as chests, and to take over other ships, in order to board them.

As an example of emergent gameplay, the player can also use the harpoon to catch other players when they are on an island or in the sea, speeding up the process of reaching the ship.

System 2: Environment

The world of Sea of Thieves is surrounded by water and every island that the player can see is reachable and contains different treasures.

Around islands, there are rocks that often pose an obstacle to players trying to dock on islands. As such, the crew must be able to avoid them and ensure the safety of the ship.

Emergent Gameplay:

In Sea of Thieves, the harpoon can be used not only to just catch objects in the game (such as chests, ships and players) but also to steer the ship. During movement, the crew can decide to make a tight turn by attaching the harpoon to a rock in the sea.

This maneuver brings advantages in the movement of the ship in particular situations, such as during a battle when it's important to find the right direction to hit the enemy crew or to quickly steer and avoid the collision with other elements in the environment like rocks or a wharf. Movements that are impossible to perform just steering the rudder.



Super Mario Odyssey

Super Mario Odyssey is a 3D platformer game developed and published by Nintendo in 2017.

The player takes on the role of Mario, who must chase Bowser through many worlds just to save Princess Peach, who has been kidnapped by him. Alongside Mario there is a sentient hat named Cappy, whose main function is to allow Mario to control other characters, enemies and objects.

The different worlds are distinguished by specific themes and they serve as playgrounds for the player to collect the Moons (symbol of success in a level or mini-game), which are necessary to fuel the airship used by Mario to reach Bowser and Peach.

System 1: Cappy

Cappy is the throwable hat that Mario can use to control elements in the scene, such as characters, enemies or objects. Once thrown to one of these elements, Mario can use their characteristics to progress through the level. For example, if Mario takes control of a frog, he can jump very high. Or, if he takes control of a Bullet Bill, he will move, sprint and crash like a Bullet Bill!

Furthermore, the player can use Cappy to interact with other elements in the scene; for example, they can throw it to destroy boxes or collect coins that are far away.

System 2: Movement

As a classic 3D platformer, the player can move within a certain area by running and jumping. These basic actions form the foundation of a classic platformer game, where the main goal is to survive through challenges posed by dangerous obstacles and enemies while trying to reach a certain goal within the level.

Emergent Gameplay:

The designers at Nintendo have thought of more ways for Cappy to be used than just possessing enemies or destroying boxes. In fact, the hat can be used to perform more advanced jumps that require a certain experience with the gameplay. The main game can be completed without knowing about this feature, but if the player wants to take on more difficult challenges in the game, these actions are necessary.

These particular jumps are not only necessary to obtain certain Moons but are also very satisfying to use; the player can reach previously unreachable places. For example, the player can leap further than they normally could by throwing Cappy and using it as a trampoline.



The Legend of Zelda: Tears of the Kingdom

The Legend of Zelda: Tears of the Kingdom is a 3D open world action game developed and published by Nintendo in 2023.

The player takes on the role of Link, the hero of the game, who must to save the Princess Zelda after she disappears during a patrol beneath the castle basement.

The main focus of the game is to let the player free to experience it as they prefer, with a free approach to game's missions and the ability to easily build instruments and vehicles in a way never seen before.

System 1: The Weather System

The game features a constantly changing weather to simulate a real-life experience. There is day-night cycle, temperature can rise and fall depending on the player's location. There are sunny day, rains, typhoon and snowfalls.

This system affects player's experience because they must be prepared to face different weather conditions. For example, when it's cold, Link should dress warmly, while if it's raining Link will have difficulty seeing far and the climbing actions will be affected because walls will be slippery.



System 2: Weapons

In Tears of the Kingdom, the player has access to many weapons that can be gathered throughout the adventure. They are divided into:

- Weapons
- Shields
- Bows and arrows

These weapons are made of different materials and have their own characteristics and durability. In fact, they have limited usage until they got destroyed. This feature enhances the possibility for players to try out many weapons in the game and experiment with different strategies.



Emergent Gameplay:

When these two systems interact, the overall experience is enhanced. In fact, the combination of weather and weapons can create both advantages and disadvantages for the player due to the nature of the weapon and its behavior in certain conditions.

For example, during a rainy day, the player can use electric arrows to maximize their effect, but at the same time, if there is lightning, it would be wise not to carry metal weapons that could attract lightning to the player. Instead, in a very warm place, the player will suffer from hot temperatures and if they do not have appropriate clothing for the situation, they can use weapons made with cold materials to lower the temperature near Link.

As such, weather affects many aspects of the game, including NPC and enemy actions, but particularly with weapons there is so much freedom in approach that it elevates player actions in a very smart and intuitive way.

