System Interaction and Emergent Gameplay

Summary

Introduction

This document's purpose is to analyze how simple systems in games can interact with each other generating gameplay of greater complexity and how this phenomenon called Emergent Gameplay is beneficial for skill depth, strategy, and systemic design.

This document will explore these interactions in 2 games. After a brief overview of the game, we will break down and analyze 2 simple systems, focusing on their interaction and how they influence the players' gameplay.

NEO: The World Ends with You

https://www.igdb.com/games/neo-the-world-ends-with-you

Overview

NEO: The World Ends with You is an action RPG co-developed by Square Enix and h.a.n.d. and published by Square Enix.

Players will play as a young Tokyo citizen trapped in a twisted game to escape death. In the game players will face many enemies and, during combat, control multiple characters at once attacking enemies with abilities called "psych" granted by equipable collectible items called "pins". Each pin is assigned to a single button and requires different input from the players to be used.

The NEO: The World Ends with You Combat System's rhythm, smoothness and depth heavily depend on the interaction of 2 smaller and simpler systems: the Pins System and the Party System.

Pins System

The Pins System is the Combat System's building block. Pins are special items that give characters their abilities and can be assigned to each character. Only one pin can be assigned to each character.

During their gameplay players collect Pins to get access to new abilities called "psych". Each pin has a serial number to keep track of its collection, a command linked to it that corresponds to a single button to be pressed to use it, a power level, an affinity (the pin's element type), a level with its experience bar, a brand, and the psych that characters will acquire equipping it. Each psych has a cooldown after being used in combat.

Abilities given by pins correspond to physical, elemental, melee, or range attacks and go from simple punches and kicks to charge holding down the button, to energy shots to fire button mashing the command, resulting in a large variety of inputs and approaches to combat.

The system provides players with lots of possibilities resulting in a breadth system that promotes a sense of variety, exploration, thanks to the pins level-up mechanic, and collection. Finding pins that send out swirling saw blades or teleport your character in melee to throw a flurry of punches is a joy for players who can experience a variety of attacks and approaches to combat.

Party System

Players have access to up to 5 party members and each member can equip a pin resulting in binding the use of a specific character and its ability to a button. New characters can be acquired by proceeding through the main story. During combat, players can use psychs to swiftly switch between characters by pressing the corresponding command.

The Party System gives a clear sense of progression to players. Through the main story players watch their party grow into an unstoppable force featuring characters with their own stories and charming design.

Pins and Party System interacting

These two systems are intertwined to build the Combat System they heavily rely on each other and their interaction brings out deeper implications.

The skill depth of the Pins System is hugely enhanced by the Party System allowing players to assign pins to party members and not only increase its mechanical skill depth by introducing multiple buttons and inputs to press during battles but also its strategy depth by combining multiple psych, multiple effects, new strategies and different approaches to each combat.

At the same time, the Pins System strengthens the Party System's experience. Players start with just 2 party members and slowly reach 5 members, the Pins System increases the sense of growth and teamwork highlighting the gameplay difference in having more pins available and options during combat and forcing the player to use each party member to maximize its gameplay experience.

A more direct result of the interaction between these two systems is the Groove System.

Groove!

The direct result of the Pins System and the Party System union is the Groove System which rewards players with powerful finishers for correctly timing moves and chaining attacks between characters.

After successfully landing a psych's last hit on an enemy, players will have a small window of time to "Drop the Beat!". Using another psych on the same enemy

will build up a combo meter and the process can be repeated. After successfully hitting several "Drop the beat!" the "Groove!" will be available to the player.

This system enhances the depth of the Combat System even more, introducing a combo system in the game and allowing players to create a constant flow of inputs and buttons while constantly trying to manage cooldowns and be highly rewarded for doing that.

With a huge amount of pins with different effects, last hits timings, inputs, cooldowns, interactions between pins, and pins' brands, the NEO: The World Ends with You Combat System results in a deep and stylish system that keeps players engaged with its possibilities and pins combinations in constant search of that rewarding chain of Drop the Beats. The extreme satisfaction that comes from carefully planning a pin setup to continuously connect psychs and hit the groove with consistency in a super stylish way is what players strive for in this combat system.

Groove - https://techraptor.net/gaming/guides/neo-world-ends-with-you-scramble-slam-points-guide

Monster Hunter Rise

https://www.igdb.com/games/monster-hunter-rise

Overview

Monster Hunter Rise is an action RPG developed and published by Capcom. Rise follows all the main established conventions of the Monster Hunter series introducing some new mechanics and features.

Players are hunters entrusted with hunting various types of dangerous monsters. Slay monsters allow players to carve parts from their bodies to enhance their equipment and weapons to hunt even more dangerous monsters.

Monster Hunter Rise introduces the Wirebug System allowing players to ride monsters and have full control of their movements. This system combined with the inherited interactive and alive open map creates a new way to approach missions and emergent gameplay.

Wirebug Wyvern Riding System

Wirebugs are a feature introduced in Rise, they are unique bugs that weave a special kind of wire that players can use in many many ways. One of these uses is as reins for monsters.

While hunting, players can perform attacks that inflict a special type of damage called "wirebug damage" to monsters, this damage stacks up until the monster becomes weakened and ridable. Players can interact with the monster and start to ride it. They can ride the monster until a resistance bar is depleted or for a time limit and during this time they can move the monster against its will, make it attack, or slam against things up to 3 times to damage it and stun it. The monster then unsaddles the player and falls to the ground, open to attacks.

The system is a well-received addition to Monster Hunter features that gives new ways for players to interact with monsters other than bashing their heads or cutting their tails. It adds meaning and immersion to the already present riding system previously consisting of just a minigame to stun the monsters. It adds layers of strategy to hunts, allowing players to use it to move monsters from a disadvantageous zone to another, stun a monster against a wall, inflict more damage, or just move faster around the map. It also adds a learning curve thanks to the variety of monster attack kits that the player can use while riding them, letting them explore and evaluate the best attacks to use while riding each monster.

The Wirebug Wyvern Riding System acquires its highest level of deepness when combined with the alive and constantly input listening world inherited from Monster Hunter World.

https://www.pcinvasion.com/monster-hunter-rise-ride-wyvern-guide/

https://game8.co/games/Monster-Hunter-Rise/archives/315996

Alive Open Map

In Monster Hunter Rise we can talk about "Alive Open Map" thanks to some key features. Most of the elements in the map are intractable, from berries and larger plants to birds and other fauna, everything seems to exist, live, and interact without player interaction. Monsters roam around the map based on their needs, and they interact with each other in Turf Wars to establish the strongest.

This state is achievable thanks to the constant awareness of the world the player is immersed in and directly changes players' behaviors and strategies. In this kind of environment, players can feel like expert hunters, surviving in an unwelcoming habitat full of dangers using every tool nature gives them to make the hunt more efficient and less threatening.

In a world full of options, players can take advantage of a lot of elements to enhance the Riding System with more strategy choices.

https://www.gameinformer.com/2020/10/09/what-is-monster-hunter-rise

Riding in a lively world

By combining these two systems we can enrich the easily masterable Wyvern Riding System. Players can now ride a monster and force it to fight another monster, chopping away a big chunk of its health, as well as slamming monsters against poisonous plants to poison them or explosive plants to inflict a little more damage. The possibilities are expanded even more when the player realizes that slamming a monster with another inflicts high "wirebug damage" to monsters making the other one ridable as well, resulting in a chain of riding, and making the player feel like in a fun monster rodeo.

The combination of these two systems results in a stratification of strategies and a radical change in the player approach to a Monster Hunter title. Monsters not relevant for the hunting mission, instead of annoying threats to ignore and avoid, become useful tools for the mission. Players can now plan how to act in each mission differently, should they approach another monster first to take a ride to the target monster, lure the target monster into harmful zones where they can take advantage of the native flora and fauna, or plan a chain of ridings bringing a monster to another to maximize the damage? Why not everything? A planning approach also largely promoted by developers that made it way easier to ride non-mission target monsters, lowering the wirebug damage threshold needed to ride them.

https://www.shacknews.com/article/123383/how-to-ride-wyverns-monster-hunter-rise

Conclusions

We saw how the interaction between systems creates new systems and interesting interactions between different entities. But why this approach is useful and meaningful for game design?

In simpler games where there's no interaction between systems, players can interact with the mechanics or entities involved in just one way: directly. Clever system interaction, however, allows players to interact indirectly with systems opening the possibility to articulate plans and interactions exploiting, as we saw with the Monster Hunter Rise riding system, making them feel really smart.

Another really important result of these interactions is the moments of drama and surprise that emerge from them. The interaction between systems often offers the player a more memorable and original experience, from the high satisfaction that comes from a flawless chain of Drop the Beats in NEO: The World Ends with You to the surprise and astonishment after a monster behaves differently from what planned and ruins the hunter's plan in Monster Hunter Rise or casually slams a monster on a surface that reacts to the input and do something cool that the player has never seen before. All these things are the results of the players' plans and an unpredictable chain reaction coming from the interaction between many parts of these systems and is called Emergent Gameplay.

In conclusion, design should strive to achieve Emergent Gameplay because leaves the player with good memories and experiences, making them feel as if the world they are immersed in is more alive promoting flow state and immersion.