Level Design

Blocking

Metroid Prime 2

Game Design Analysis

1) Objectives

The objective must be understandable using the room's structure. Overall, it'll either be the next room, in which case the door must be clearly visible, or reaching an item/solve a puzzle. In this second case, the player's gaze must be put on the target item or the mechanism to activate, then towards the secondary elements, in order to understand the path.

The way must be clear, using the platforms choice and position. In the case of "rail path", the next section must be visible.

Given that the rooms tend to be self-contained and limited in size, it's quite easy to move the player's attention toward what we want. The only exception being the "hub" rooms. For these ones, every option and potential path must be quickly understandable. As a way to better guide the player, it's often nice to have one part of the options being secondary (save point, bonus item, etc...), along with a blocked path. Indeed, the hubs tend to be in the beginning of the area, and showcase a part of the power ups that you'll need in order to progress.

2) Moving

The character's movements are pretty slow. As such, we won't be doing parkour or incredible aerial moves, at least in the beginning of the game. This means that the platforms must be large and easy to reach.

However, there is a certain number of movement upgrades that can be found. We can divide them in two categories:

- -The « normal » movements. At the beginning of the game, these are only moving and jumping. Then the double jump, which allows for room with more "breathing space", by spreading the platforms apart. Finally, there is the grappling beam, which allows the player to swing along a ceiling hook point. This one makes for great mobility, but must be carefully placed in the level.
- -Then there is the morph ball. This options makes the player transform into a small ball, as a way to move along small spaces. In this form, you can use bombs to jump. There is a way to

do a double jump with that, but it's kinda tricky and as such best avoided. In addition to this, there is the boost ball, which is a charged dash, allowing the player to speed through a collapsing path or reach the top of a half pipe. Then there is the spider ball, which is used to grab special railings, making for linear 3D paths.

These movement options must be combined during the exploration and puzzle phases. However, it tends to be best to separate the normal movements from the morph ball ones, due to the impossibility of quickly changing between one or the other.

3) Enemies

This is a solo game, meaning that enemies are all npcs.

They can either be in the room when you enter it, in which case it's best if they are clearly visible. This is mostly for weak and respawnable enemies. The other possibility is that they can appear during the exploration, mostly after a trigger (like taking an item, activate a mechanism, or go past a certain point). This case is itself split into two possibilities. Either the foes were already there, in an inactive state (corpses, robots, etc...), allowing the player to prepare for the inevitable time when they'll wake up. The other option is a surprise attack, with enemies teleporting themselves of coming through a path that couldn't be seen earlier. Those are designed to have the player at a disadvantage, often being in a bad place for the fight, and needing to quickly react.

As such, it's better to have the weak and/or annoying enemies at the beginning of the room. Then the powerful ones as visible and waiting for their awakening, to keep the player on their toes. Finally, the surprise attacks must be calmer than the reanimations and kept for important actions. However they do allow for a better enemies placement.

4) Weapons/Attacks/Actions

The game uses three main weapon types:

- -Beams. They shoot in a straight line, and are the main way for the player to attack. Those can be charged up, which means that the player needs to have some down time to prepare their shots.
- -Missiles. They are more powerful and lock on their target. A charged up version exists.
- -Bombs. Only available in morph ball mode. Normal bombs are mostly used to jump and open paths, whereas the Power bombs are fairly rare and hard to use but deals a great amount of damages.

The main consequence of these options is that we can't have highly mobile enemies, since they would be really hard to aim at. If we look at the game's bestiary, most of the foes are pretty slow, or only move in short bursts, allowing the player to manage them more easily. The fights tends to be in somewhat open rooms, in order to have more readable situations and have room to dodge and jump around.

The game doesn't have a cover system or anything like this. Instead, the main way for the player to protect themselves is the strafing, short fast side jumps, going around the targeted enemy. Thus, the more powerful foes need a circular area around them, in order to let the player dodge easily, whereas weak enemies can be placed more freely, acting as simple roadblocks.

In addition to this, the targeting range isn't that great, which means medium range combats. Short range is also a possibility but only for special cases, due to quickly getting messy. Due to the game relying on the lock-on system and the free aiming being hard to use, each enemy must be clearly visible and targetable.

Overall, weapons are not that deep, and don't vary much from "destroy what's in front of you", with variety coming from the enemies themselves and the room in which they are fought.

However, it's important to remember that the weapons are more useful as "keys". Each of them allows the opening of certain doors and/or give access to some secrets.

5) Spawns/Items/HP

The HP and ammo regeneration is mostly made with crates put in the rooms, along with drops from the vanquished foes. In both cases, they are random. However, the player's status is taken into account: Having low life means more and more powerful healing items, whereas lacking in missiles makes them drop more often.

Actually, ressources management is not the point of the game. There is no way to be locked with no ammo and no way to get some back, and getting some life tends to be kinda easy too.

The player's « spawn » points can be though of as the save points. Those are used both as a place from which to start again after defeat/starting the game again, and a way to recharge HP. They tend to be in low number, but there is always one near the beginning of an area, as a way to make the hub more safe and help the player explore.

6) Rhythm

The game is mostly centred around two times:

-Fighting, which tends to be quite short and focused on either a surprise attack or destroying everything in the room.

-And the exploration/puzzles, during which the player must navigate the level and solve small puzzles in order to progress.

At no point in the game do these two times crosses. They can however be chained together in a same room. Mostly having a surprise attack punctuating progress inside the puzzle, or having to kill things before thinking about the room.

In fact, the game's rhythm tends to be somewhat slow, with an emphasis on exploring instead of pure action. As said earlier, the fights are pretty easy and often rely on gimmicks to be more fun.

One element impacting the rhythm is the idea of an alternative world. Each level has a light and a dark side. In the dark side, the overall structure is the same, but paths and the content of the rooms is different. Enemies are more dangerous, and the player is losing HP while not in a life bubble. This makes these times more stressful, while still staying in the slow pace of the game. Even more, the player will be more anxious of fight sequences, due to needing to be careful with their HP.

Both phases and worlds tends to quickly alternate. As said earlier, it's quite common to have both in the same room, or having simple fights punctuating the exploring. The basic enemies also have this purpose of having a bit of action while navigating.

7) Misc

This game's level design, and then this present work on it, is mostly focused on the gameplay.

The rooms and environments must be a cohesive whole, but it's nor the biggest priority. As such, some elements may seem strange, or only be here for gameplay purpose.

In addition to this, the level's structure must be though in two different versions, with a way to change part of said structure. This alternate world concept also implies taking into account the points where the player can switch between them, and what purpose they'd serve.

Conclusion)

The rooms must be open enough to have a good visibility and freedom of movements. Despite being kinda slow, it's possible to have some acrobatic sequences, using the player's tools.

Enemies must be in low numbers, and easy to see.

The puzzle and exploration rooms must be build in a way that focus the attention on the main

objective, then on the rest.

The morph ball times must be separated from the rest.