

Hyper Light Drifter

Analysis and adaptation to the metroidvania genre.

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1 – Current state

Hyper Light Drifter (HLD) is a 2016 game, made by Heart Machine, on PC and consoles, then re-released on Switch in 2018 and iOS in 2019. It's an action-RPG, in which the player is « the Drifter », a sick character wandering in a desolated world, searching for a cure or a solution. The character moves in a 2D environment, seen from above, and can use a sword, a pistol, and a dash move, until getting new weapons and upgrades.

The game is divided in 4 separate regions, each one having its own characteristics, ecosystem, history, dangers, and secrets. In order to reach the game's final area, the player has to fight the boss of every one of the four regions, triggering the final door's opening, in the center of the city where the adventure begins.



In each zone are 8 modules. In order to reach the boss, the player has to activate at least 4 of them. These are found as switches with which the player must interact. Any combination of four is accepted to open the door, and in any order. However, some modules are closer to the player's critical path, and/or are easier to find. The fifth to eighth modules are completely optional, only used to open some secret areas.

Secrets are a core part of HLD. They tend to be hidden, behind background elements, subtle camera placements, or after invisible platforms. Yet, most of them can be found by looking for a symbol on the floor :



Even though some secrets don't bear this symbol, they are a clear minority, and usually rewards analysing the world and carefully looking around, instead of hitting everything and jumping in every pit, hoping to find something. Most of the secrets reward the player with « bits », which are the main currency in the game. Some secrets also come with modules, or Shadow corpse, which gives the player a new outfit, or a key. Those keys are then needed to open some even more secret areas.

As for bits, those are rarely found whole, and the player usually only finds a quarter of a bit, which means a lot more secrets in the world than if they were whole.

2 – Changes operated to turn it into a metroidvania

After considering what's already there, and with the will to change the least amount of the game's philosophy, while still making a true metroidvania, we settled on three main axes :

- Modifying the critical path and the way the world is travelled through.
- Intertwining the economy with the player's progression.
- Adding some puzzles to the progression.

We will then go into deeper details about these axes :

2.1 - Modifying the critical path and the way the world is travelled through

The heart of the metroidvania formula is to be in a world that's both interconnected and locked to the player, which will open up while the character gets new power-ups and items, allowing them to go through paths that were blocked until then.

This description can't be used for HLD as is, since all the areas needed to reach the final boss, which we'll call the critical path, can be travelled to and through with only the starting equipment of sword, pistol, and dash.

The only exception to this is the desert, in the south, which can only be done after vanquishing the three other bosses (north, east, and west). This means HLD actually is a funnel structure, with freedom at the start, then a linear path of doing the desert and the final boss.

There is no interdependency of the areas in the critical path, which means that the player is encouraged to choose a direction, complete it, and never come back, unless they want to look for the secrets, but those are out of the critical path. This also means a limitation on the difficulty peaks and evolution, since every area except the south must be balanced as feasible when done first. This is also the reason why the south is the only direction with mini bosses, meaning that the game believes the player's got enough skills by then, but not before.

For us, all of this meant we had to rethink the structure and accessibility of every place and point of interest, in order to change the critical path. This gave us more freedom on managing the difficulty.

The method we used was to reorganize the zones, in a way that incite the player to go back to them multiple times. In order to do that, we divided every direction in three tiers :

- The first one (T1) is the sub area that can be accessed when starting the game, by going in that direction from the central city. The aim of the T1 is to give the player a first taste of each area's ambiance and needed upgrades. The idea is to quickly stop the player with easy to remember roadblocks, in the classic metroidvania way, to make it so that the player will make the connection between the place and the upgrade they get that goes with it, instinctively knowing how to progress.
- The second one (T2) is a bridge between the tiers. It can't be accessed from the beginning, and needs an upgrade to be reached. Each T2 area also nests another upgrade, which will be needed to get to one of the T3 areas.
 - The third and last one (T3) is the one where the boss rests. To reach this zone, the player needs to get through some obstacles, which can only be done using a T2 upgrade from another area. The idea is to make it so the player has to come back after getting the upgrade in another place, rewarding their capacity to navigate between the zones and understand the puzzles.

There are some important things to consider for this idea to work :

- As in the original game, there are teleportation points. There is one of them for each direction, and one in the central city. The areas are big, and having no way of fast-travelling would be boring for the player. However, backtracking and learning the levels' layouts is core to the metroidvania genre. As such, there is a need and usefulness to having the player visit the exact same place multiple times. That's why we chose to only have the teleporters in the T2 of each direction, a short time after going through the T1 roadblock. The plan is to have less useless backtracking, but still having some, by needing to go through the whole T2 in order to reach the boss, and not having access to the teleporters until the player proves they can manage the T1 challenges (see *the* 2.2 section).
 - The secrets layout will be different. Even more for the T1 (see 2.2)
 - The 8 modules of each direction are spread out in both the corresponding T2 and T3. As such, there may be some times when the player activated the needed 4 modules but still lacks the upgrade to reach the boss and complete the region.
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- **2.2 - Intertwining the economy with the player's progression.**

The second thing that we found useful to deeply change is the money (bits) system. This money is mostly acquired after some arena type rooms, where the player fights waves of foes, as a reward for finding secrets, and after a boss battle. This currency is found in fragments, with 4 fragments creating one bit unit that can be spent in the town.

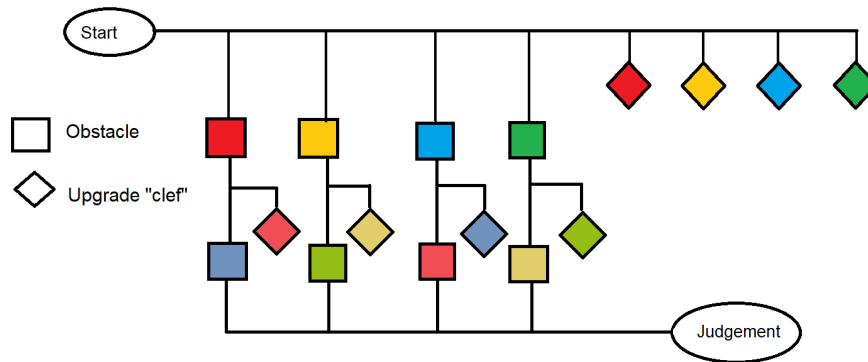
In the current game, each bit purchase are upgrades to things the player found elsewhere or to a starting capacity. As such, there is no real new power to be purchased. Even more, none of these upgrades are needed to go through the critical path, and they aren't even needed for the 100% (find every secret), except maybe one or two.

Here, we chose a different idea. We wanted the player to experiment the different T1 areas, as a way to get a taste of the atmosphere and challenges. As such, the road is quickly blocked, and the T1 is rather small. This is meant for the player to explore the T1 before going back in town. In each T1 are two bit fragments, for a total of 8 fragments (2 bits) by visiting all of them. 4 upgrades/weapons will be available in the main shop, and will each be acting as the "key" to reach one of the four T2 areas.

The other bits will obviously be spread out in the T2 and T3, making it easier to get the other keys and visit the other directions, by being more readily available. Once the four "core" upgrades are purchased, the convenience upgrades become available. Those are bonuses here

to make the game a bit easier but are never needed to progress, and only serve as an outlet for the surplus of bits.

This structure will force the player to visit the different directions, and thus organically makes them more familiar with their associated mechanics. Using this method, we can establish the following dependency chart :



Here, each losange is a « key » upgrade, whereas a square of the same color is an obstacle that needs the corresponding upgrade. Though, it's important to understand that this chart only speaks about the critical path. As such, each upgrade is not effectively used only once in the game, but will have general uses and be needed to access some secrets. We can also note that doing all four regions is still a prerequisite to reach Judgement, the final boss, and finish the game.

Since the economy becomes a core part of the game, we wanted to fix it in the player's mind. To do this, the town's layout was changed a bit. In the normal game, the player starts in an empty house, and then goes wherever they want. This is nice but it makes it easy to miss the fact that shops are a thing until much later. To avoid that, we moved the starting point to the second floor of a shop. This way, the player has no choice but to go through said shop at least once, which means they'll have been exposed to this mechanic and can remember it later.

- **2.3 - Adding some puzzle elements to the progression.**

The classical metroidvania progression implies some interactions between the player, their capacities, and the environment, as a way to further their ability to reach more and more areas. Since HLD doesn't need any upgrades for the critical path, we needed to change how the background works, and add some new elements, to pair them with the new interactions. Those also changed what the game wants from the player. Indeed, HLD mostly focuses on the fighting

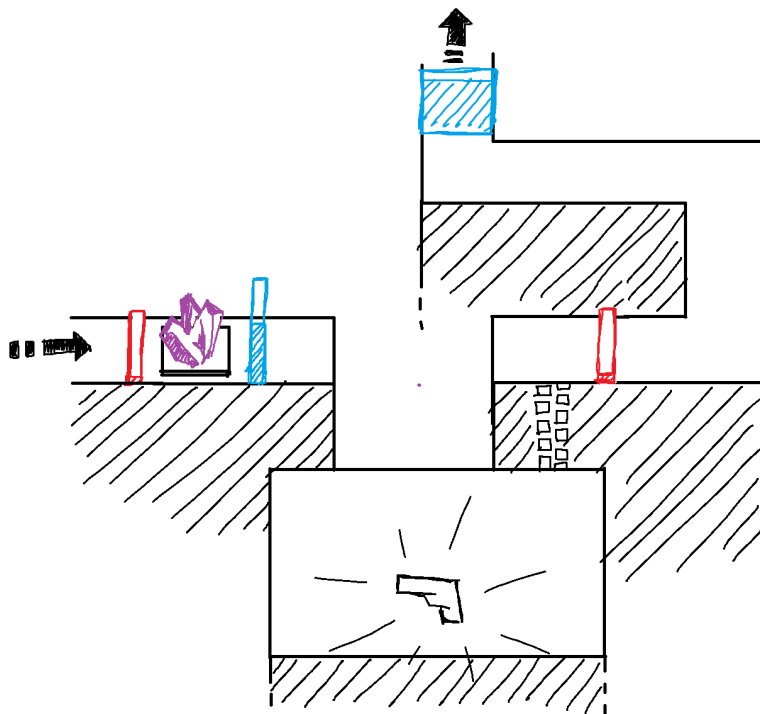
skills, with the player's capacity to move in their environment and read the situation. Here, the puzzles will also test the player on their spatial and logic skills.

Said puzzles can take different forms, depending on what interacts with them. Here we'll show two examples, with a micro and a macro progression.

For more explanations on the upgrades and how they interact with the environment, please look at the *annex* below.

2.3.1 – Micro Puzzle

For this micro puzzle, we'll take the idea of getting the Crystal Gun. This weapon shoots projectiles that become crystals, with enough weight to activate some pressure plates that won't be triggered by either the player or the enemies. Said plates are then linked to mechanisms. Here we'll consider doors :



The player starts at the left part of the room. It's important to understand that since it's the room where they get the new weapon, it's both a challenge and a tutorial to how it works.

The Crystal Gun's crystals can be destroyed by slashing or shooting them, which means they can be removed from a distance. A first crystal stands on the pressure plate that the player meets when starting the room. By breaking it, the plate deactivates, reversing the doors' position

(the red ones are open when the plate is active, the blue ones are closed, and it all reverses when the crystal is broken.)

This means that the player will shut the door from which they came, and thus can only go forward. By dropping down on the platform, they'll get the Crystal Gun. Once the weapon obtained, they can go back up, and try it, creating a new crystal on the pressure plate, and opening the way forward. Finally, the last door is blue, which means that the player will have to use another long distance weapon and break their crystal, in order to open the exit.

2.3.2 – Macro Puzzle

What we mean with macro puzzle is objects that will impact the whole region's structure, instead of being contained in only their specific room. For this example, we'll take the east area, the Lake (see section 3). The needed weapon is the shotgun, due to its short range and highly damaging shot. These are used to recharge some batteries, which would immediately discharge again if the damage threshold is not met. These are linked to some machines and contraptions, like some dams, which would allow us to modulate the water level.



By modifying the water level in certain part of the region, and by using floating platforms, the player can change their elevation and reach different parts of the level, while still having a need to remember and understand how the region is affected (dry lands that can't be gone through, paths underwater, etc...).

3 – Global Restructuring

Due to how we changed the upgrades usefulness and how to get them, the whole regions' structure had to be rethought, as a way to incorporate the T1-T2-T3 sections. As such, we had two main objectives while restructuring them :

- Keep the general spirit, atmosphere, and narration of the region.
- Make it fit the new sub-area system while still not being a simple straight line, in order to surprise the player and keep the exploration part.

That's why we made the following changes :

3.1 – The crystal forest (west)

The crystal forest is a war torn region, with green crystals in which we may sometime see trapped people acting as testaments of said war. Here, the player will meet « The Hanged Man », one of the last raccoons, which fought for the player's faction a long time ago.

To progress in this region, the player needs the Railgun, then the Roly Poly. In this area, they will find the Crystal Gun.

The T1 part is the edge of the forest, mostly made of trees. Near the end of this sub area, the player will see the first crystals, limiting the progression. They'll need to use the raygun, with the crystals redirecting the shot, in order to progress.

The T2 is a puzzle based section, in which the player must keep using the crystals as a way to redirect lasers.

The T3 part is the deep forest. To reach it, the player needs to have the Roly-Poly, as a way to blast through some crystals. Here, they'll meet the boss.

3.2 – The mountains (north)

The mountains is a region occupied by the « Hierophant » and his vulture cult, oppressing the other local birds. It is known for having a lot of pits and being mostly a vertical area.

Going through this region means getting the Multidash, then the Throwing Sword. In the T2, we can find the Shield Dash.

The T1 part is the bottom of the mountain, before climbing. Reaching the mountain implies going through a bunch of platforms that collapses when touched, needing the Multidash to be fast enough.

Then the T2 part is the main climbing. The ground is treacherous and collapsing, and the whole area is pretty much a dashing and platforming challenge.

As for the T3, it's the mountain summit, where the boss can be found.

This area doesn't really change when compared to the original design.

3.3 – The lake (east)

The lake is a water based region, with mobile platforms and a level management system. Here, the player will meet the "Emperor", leader of the invading toads, which decimated the local otter population.

To get through this area, the player needs to get the Shotgun, then the Crystal Gun. In the T2 lies the Roly Poly.

The T1 part is the lake's surrounding. The player will be stuck due to not being able to activate the batteries and thus change the water level.

The T2 part is the main level. It's mostly underground, and asks the player to use the batteries and floating platforms to get through.

The T3 part is the higher point of the lake, in the center. In order to reach the boss, the player will need to solve puzzles using pressure plates and the Crystal Gun.

3.4 – The desert (south)

The desert is a split region. On the surface, the sandy desert. And underground, an abandoned industrial complex. It's the most combat focused area, featuring the « Archer » boss, along with three mini bosses, "Reaper", "Summoner", and "Sorcerer", all of them being robots from the underground.

Getting through this region needs the Elevator upgrade, then the Shield Dash. In the T2 part, the player can find the Throwing Sword.

The T1 part makes the player go underground, by taking stairs under the cliffs that surround the desert. They won't be able to reach the sandy part, due to the presence of an elevator.

The T2 part is the sandy desert, reached from the elevator under. The player will have to switch between the two levels in order to reach the first miniboss, in another part of the complex.

The T3 part requires the Shield Dash, to get through paths with automated turrets, protecting the way toward the industry's heart. Here, the player will find the two remaining mini boss, along with the true boss.

Annex :

Here, all the items/upgrades and their effects will be explained.

-Multidash :

This upgrade allows the player to string dashes together, instead of having a short rest between them. This allows for better and faster movements. However, stopping a multidash results in a short loss of control, with the character trying to stop themselves.

-Elevators

This upgrade is used to activate some vertically moving plates. These makes the character travel between the ground, the underground, and between the different floors.

-Railgun :

This long distance weapon shoots a straight laser, going through enemies and some materials.

The railgun is mainly used in the west, where the crystals can be used to change the shot's direction. Also, going through some surfaces and foes means that this weapon can be used to activate a switch that is protected by a permanent spawner or a transparent layer. It may also be required in combat, if an enemy could protect their weakpoint with a layer of non stopping material.

-Throwing Sword :

Another long distance weapon. The throwing sword goes in a straight line in the chosen direction, until reaching an obstacle or until the player activates it again. Then, the sword comes back, with a circular motion going to the relative left, based on the throwing angle.

This item would be used against enemies with a directional shield, as a way to go around it. Being a sword, it also cuts things. This would be used in the north, with the need of cutting the Hierophant's banners during the climbing.

-Shotgun :

The last shooting weapon. The shotgun shoots 4 projectiles, in a 45° angle. They are weak, but together they make for the high

As said earlier, the main use, besides combat, is to recharge the easter batteries with a short range shot, used as a kind of dps check.

-Shield Dash :

As the name says, this upgrade adds a shield around the character when dashing, destroying nearby projectiles and protecting them.

In the wild, the shield dash would be used against turrets with a fast shooting rate, as a way to protect oneself while dashing between covers. This could also be useful in general combat, as a way to feel safer against enemies with guns.

-Roly Poly :

This upgrade allows the player to throw a small grenade, rolling on the floor for a few moments, before generating an electricity blast in a large area.

The roly poly would be used to destroy special green crystals in the western forest, which are unaffected by everything else, due to their structure. It's also useful in combat, as a way to manage large groups of enemies, or multiple foes that must be destroyed at the same time.