

Depth and Breadth Analysis: Dead Cells

Summary

Summary	1
Introduction	1
Dead Cells Overview	2
Dead Cells' Breadth	3
Weapons	3
How random generation influences the Weapon System	4
Dead Cell's Depth	5
Synergies	5
How random generation influences Synergies	6
Conclusions	7

Introduction

In this document we will analyze some of the elements that enhance depth and breadth in Dead Cells, focusing on the breadth of its systems first, and its depth after. We will talk about what are the elements that contribute to these characteristics, how they are influenced by other elements in the game, and how they are delivered to players.

At the end of the document, we will extract the core points that come from this analysis and explore how to apply them to our design.

Dead Cells Overview



Dead Cells is a 2D sidescrolling rogue-lite Metroidvania developed by Motion Twin and Evil Empire and published by Motion Twin.

Players take the role of a mutant anthropomorphic creature called The Prisoner in its journey across a diseased island to slay its cursed King.

During their journey, players must defeat enemies and explore various maps to collect weapons, items, upgrades, money, "cells" and blueprints to increase The Prisoner's effectiveness in battle.

Upon death, following the rogue-lite formula, players lose everything they acquired during gameplay, except for blueprints and special upgrades called "runes" that give The Prisoner special abilities to access zones previously inaccessible in Metroidvania style.

Blueprints allow the player to spend cells to unlock new weapons, items, and upgrades available in future runs. Cells can also be spent to unlock permanent upgrades.

Dead Cells has simple premises and expresses its breadth thanks to the large amount of content it offers. The game grants instead depth with synergies, randomness, and permanent death.

Dead Cells' Breadth

Dead Cells has a vast amount of content to offer to its players that hugely contributes to the breadth of the title. From weapons to routes that players can take through their journey on the island, players have plenty of exploration and content to discover. The principal example of breadth in the game is weapons.

Weapons

A weapon can be equipped in one of two slots linked to the button to be pressed to use it and has an intuitive behavior. Each weapon category is based on the stat that influences their damage numbers, some weapons have a mixed type that takes the influence of the highest level between 2 or 3 stats.

These stats are

- Brutality: influences melee fast weapons (knives, katanas) and fire-based weapons
- Tactics: influences ranged weapons (bows, throwing knives) and lightning-based weapons
- Survival: influences melee heavy weapons (hammers, greatswords) and ice-based weapons



https://www.ign.com/wikis/dead-cells/Tips_and_Tricks

Each weapon work similarly when it comes to commands, melee weapons often come with a 3-hit combo and most ranged weapons have ammunition. Each weapon also has a passive ability related to that weapon and based on rarity and level, a variable number of **random** bonuses.

With a huge array of options and little space for skill expression, the weapons system on its own is shallow, contributing more to the game's breadth rather than its depth. The weapons' variety in the game is used to push players to explore new options and new approaches, feeding into that "maybe with this weapon I will beat the final boss" feeling and making each run through the island unique.

How random generation influences the Weapon System

Due to Dead Cells' random generation, weapons become available to players during gameplay randomly, they don't get to choose a specific weapon to use and master, and thanks to weapons design, players don't need to. These unique weapons are easy to pick up and master with simple controls and intuitive behaviors. Picking up a new weapon in the heart of the fight and easily grasping it, makes players feel strong, adaptable, and true weapon masters.

Random generation is what pushes players to respond and adapt to what the game offers them, and this brings challenge and depth to the overall gameplay experience. Randomness promotes learning, experimentation, and mastery, pushing players to try a huge variety of weapons without overwhelming them and experience the majority of the game content.



<https://www.thegamer.com/best-dead-cells-blueprint-locations/>

Randomness is what determines random bonuses that come attached to each weapon, and these bonuses are the main responsible for **synergies**, one of the core features in the game.

Synergies are one of the features that truly enhance the depth of the weapon system and are made of interactions that emerge from the clever combination of game elements and the random nature of the rogue-lite genre.

Dead Cell's Depth

Thanks to frequent deaths and randomness, the game assures to serve its depth in small doses through a spaced-out and accessible approach. We talked about how weapons are introduced sparsely and are easy to master, a simple system that allows deep implications. And when some smaller parts work together to enhance depth and complexity, we can talk about one of the main responsible for the game's depth: synergies.

Synergies

During gameplay, players will come across different weapons with different random effects, and soon players start to find weapons that are more involved than simply dealing more damage or having a different moveset.

Some weapons inflict status effects, some have both advantages and drawbacks and others suggest more in-depth strategies. Players also start to discover other weapons and items that suggest using them in combination with others, and that's when players discover a synergy. These synergies slowly spiral to a level of complexity that needs knowledge, skill, adaptation, and planning to achieve.

During gameplay, for example, players can find weapons that deal bonus damage to burning targets and others that set enemies on fire that intuitively, work very well together.

Here's a very complex (and lucky) example from Reddit:



Here the player has an Alchemic Carabine that Poisons victims, inflicts bonus damage to burning and frozen targets, and leaves a trail of flames on the ground that burns enemies.

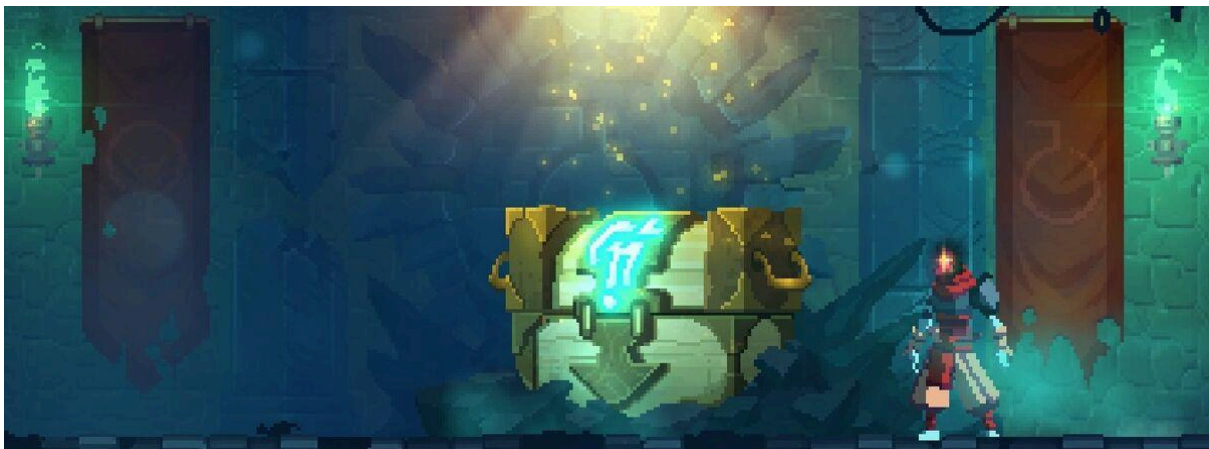
The Hokuto's Bow deals bonus damage to burning enemies and poisoned targets, and freezes nearby enemies when it kills an enemy. Items, on the bottom, further increase these damage boosts resulting in a devastating kit and huge damage numbers.

Synergies make players feel powerful and smart, like master strategists, and sometimes they feel almost like cheating. But most importantly synergies add depth to a game without increasing complexity too much. By creating these links between fewer simpler parts, with simple effects that suggest interaction, developers show to have planned for a large amount of possible and meaningful combinations for players to explore and learn.

How random generation influences Synergies

One of the main points of strength that comes from these synergies is the sense of anticipation that players experience when planning their synergies each run, and accomplishment when their synergy takes form or they rearrange plans to adapt to the game's **randomness**.

Through random generation, the game asks players to find links between weapons and items and create synergies on the run increasing the positive feedback effects of synergies but also adding constraints and replayability. This also adds to the compulsive nature of the game, the feeling that maybe by trying again, you will find the perfect synergy creating engagement (or addiction) in players.



Conclusions

Dead Cells shows us how with simple systems we can achieve a high level of depth and how this depth dictates the bones of the game.

Thanks to its rogue-lite features and how they are managed to create synergies between simple elements, Dead Cells laid down strong foundations to expand the breadth of systems that rely on these foundations, using its breadth as a tool to enhance depth and not as a feature.

We explored only a few of the elements that increase the depth of the game, other elements like items, mutations, and a clever reward system that rewards players for their efficiency in clearing levels are also heavily impactful on the game's depth.

Depth can be achieved with mechanics, systems, and interactions that encourage learning, anticipation, planning, and mastery. With a solid "depth engine" we can freely add breadth to our game to add exploration and novelty to a repetitive system assuring engagement for players in the long run without the fear of exhaustion of content.

