

Level Design: Part 2

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Progression and Pacing

- Designing Progression
- Designing Pace
- Tutorials

Designing Progression

- Mechanics
- Experience duration
- Ancillary rewards and environmental progression
- Practical gameplay rewards
- Difficulty
- Available actions
- Story progression
- Character growth

Designing Progression

- **Mechanics**
 - Game Mechanics should become richer/deeper as the game progresses.
 - Games with economies are likely to grow

Designing Progression

- Experience Duration
 - Later levels should be longer than earlier levels on average

Experience Duration

- Portal 2 -
https://www.youtube.com/watch?v=BAE_nicTj58

Designing Progression

- Ancillary rewards
 - Rewards unrelated to gameplay
 - Cut scenes, achievements, costumes
- Environmental progression
 - Change the landscape as the game progresses

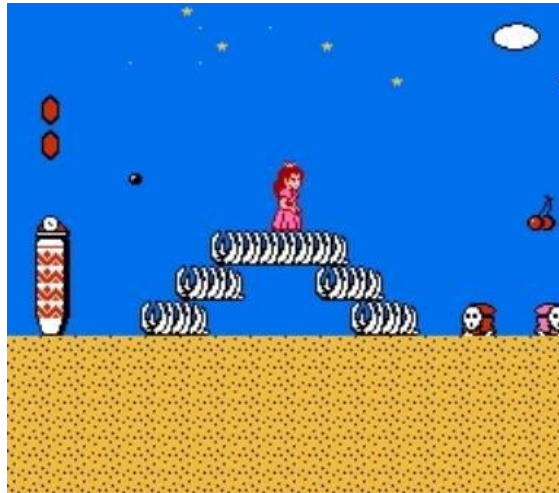
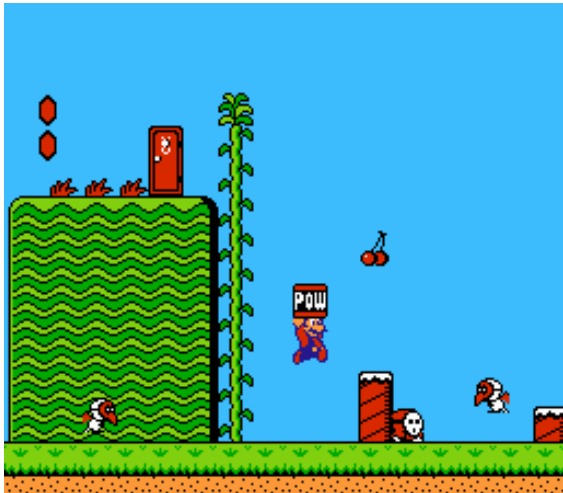
Ancillary Rewards

- Diablo 3: Transmogs and cut scenes



Environmental Progression

- Super Mario Bros 2



Designing Progression

- Practical Gameplay Rewards
 - Rewards that directly impact future gameplay

Practical Gameplay rewards

- Legend of Zelda: Heart Containers



Designing Progression

- Difficulty
 - The end of the game should be perceivably harder than the beginning.

Difficulty

- Portal 2 (again):

<https://www.youtube.com/watch?v=vYRHZOZsQbc>

Designing Progression

- Available Actions
 - Similar to mechanics but not the same
 - Possible for mechanics to change very little while offering more actions from level to level

Designing Progression

- Story Progression
 - The story should progress with the game

Designing Progression

- Character Growth
 - Story Based
 - Smarter, more experienced, more mature
 - Gameplay Based
 - Better Equipment, more skills, higher stats

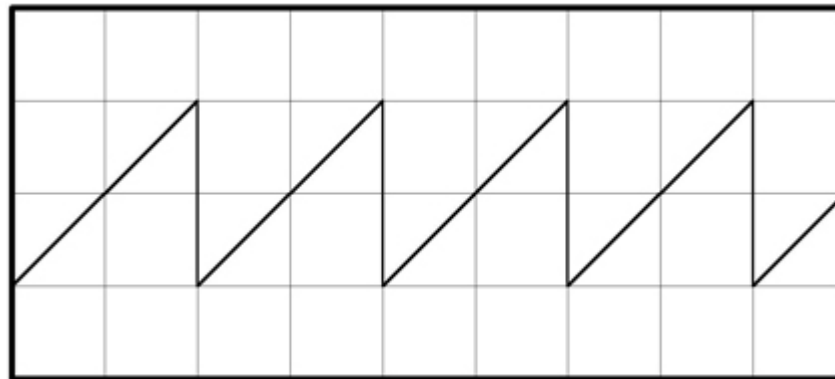
Character Progression

- Story Based: The Last of Us



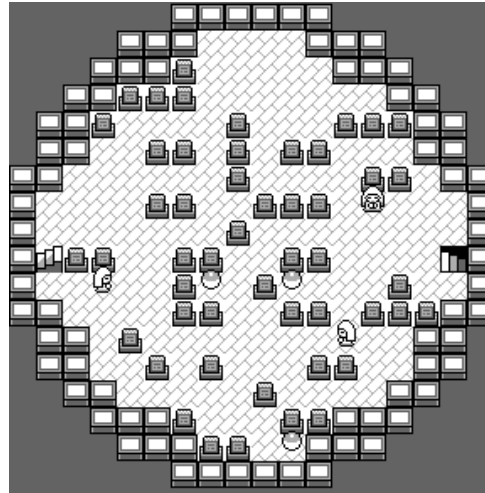
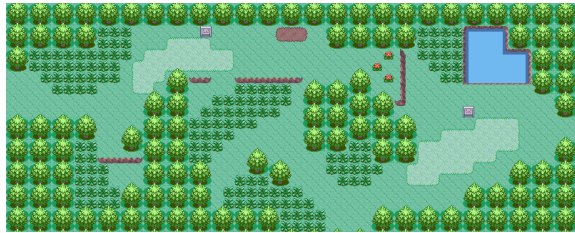
Designing Pace

- The pace should:
 - Alternate between fast and slow
 - Give players time to rest after a difficult challenge
 - Stay steady or slightly increase as the game progresses



Designing Pace

- Pokémon: Saw tooth pace



Tutorial Levels

- Explicit tutorials: the game tells you that you are playing a tutorial
- Implicit tutorials: you aren't told you are playing a tutorial

Tutorial Levels

- Not all features should be available at once
 - Very confusing for new players
 - Most features should be disabled and introduced later

Limiting Features

- Hearthstone:



Tutorial

VS



Full Game

Tutorial Levels

- Complex games should have multiple tutorial levels

Multiple Tutorial Levels

- The Lord of the Rings: The Battle for Middle Earth 2



Tutorial Levels

- Highlight the UI
 - Make people look where you want them to look

Highlight the UI

- Hearthstone:



Tutorial Levels

- Let the player go back
 - Some players may want more practice than you think
 - Penalties for failure should be turned off in the tutorial

Design Rule: Make Tutorial Levels Optional

- Tutorials are irritating if you already know how to play

The Level Design Process

The 11-stage process

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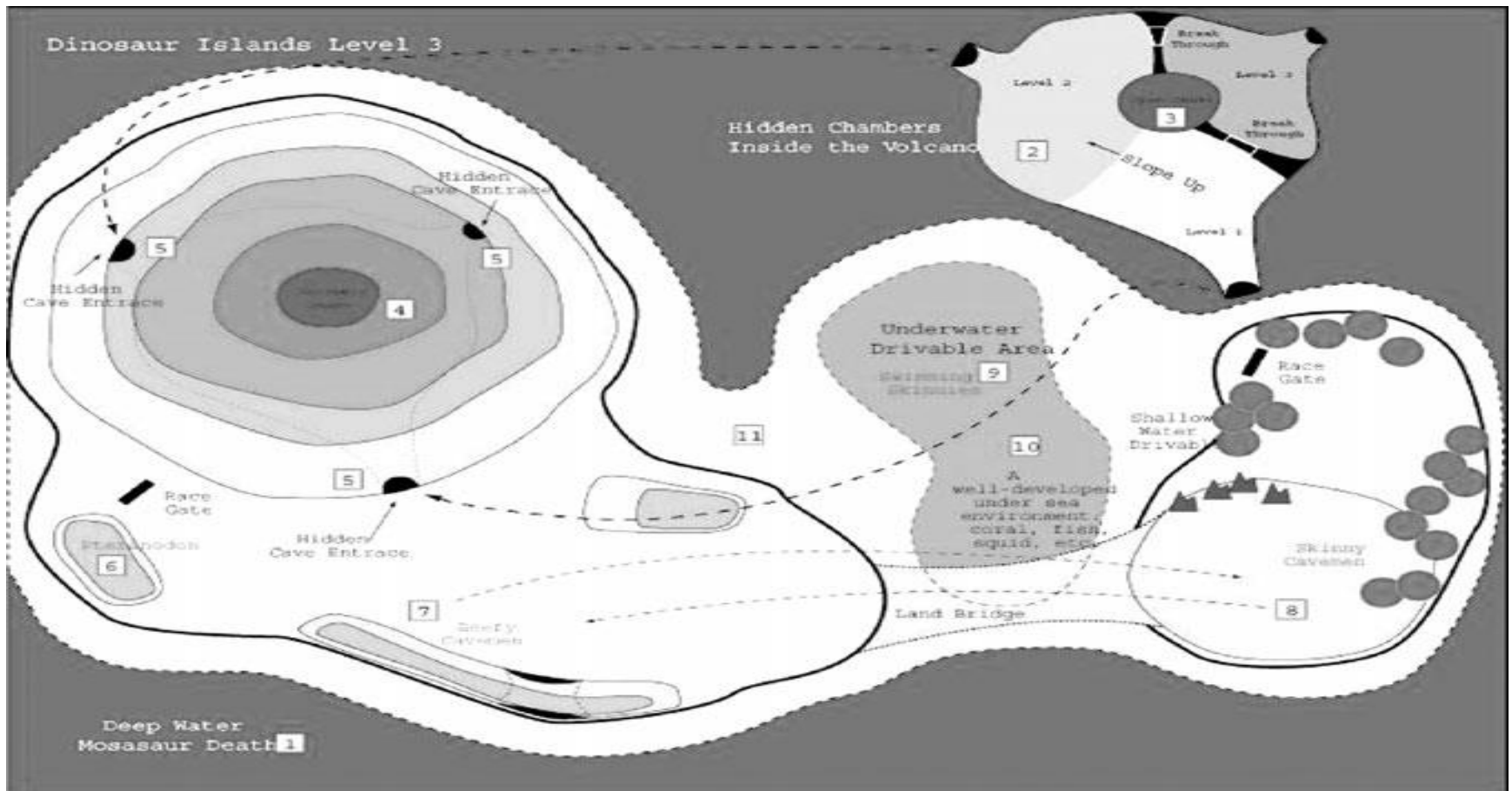
Level Design Process

1. Design to level design handoff
2. Planning phase
3. Prototyping
4. Level review
5. Refinement and lockdown
6. Level design to art handoff
7. First art and rigging pass
8. Art to level design handoff and review
9. Content integration
10. Bug fixing
11. User testing and tuning

1. Design to level design handoff

- Game designers give level designers:
 - Events triggered by player action
 - Props
 - NPCs
- Level Designers create a rough overview map

Overview Map



2. Planning Phase

- Gameplay considerations:
 - Layout
 - Major challenge areas
 - Pacing
 - Termination conditions
 - Resource placement
 - Start and end points
 - Elevations
 - Secret areas
 - Special event issues
 - Landmarks
 - Destruction
 - Storytelling
 - Save and check points

2. Planning phase

- **Art**
 - Scope → level of detail
 - Props
 - Textures
 - Special effects
- **Performance**
 - Don't overload the game
- **Code**
 - Special cases per level

3. Prototyping

- Include as many of the following as possible:
 - Basic geometries
 - Temporary textures
 - Temporary models
 - Basic AI
 - Lighting design
 - Triggers and event locations
 - Temporary Audio

4. Level Review

- Using the prototype, test issues with:
 - Scale
 - Pacing
 - Placement of objects and triggers
 - Performance
 - Code issues
 - Aesthetics

Level Design Process

5. Refinement and lockdown
 - Fix issues from review
6. Level design to art handoff
 - Give artists prototype with required assets and explanations
7. First art rigging pass
 - Artists use prototype to create art assets
8. Art to level design handoff and review
 - Check for errors in artwork
9. Content integration
 - Assemble assets into completed level
10. Bug fixing
 - Testing between art, audio, code and level teams
11. User testing and tuning
 - Formal testing by QA

Pitfalls of Level Design

1. Get the scope right
 - Don't aim too high, design within your resources
2. Avoid conceptual non sequiturs
 - Don't punish the player for using their head
3. Make atypical levels optional
 - They should be easier/shorter than the standard level
4. Don't show the player everything at once
 - Otherwise the rest of the game becomes boring