
Designing for Emergent Narrative

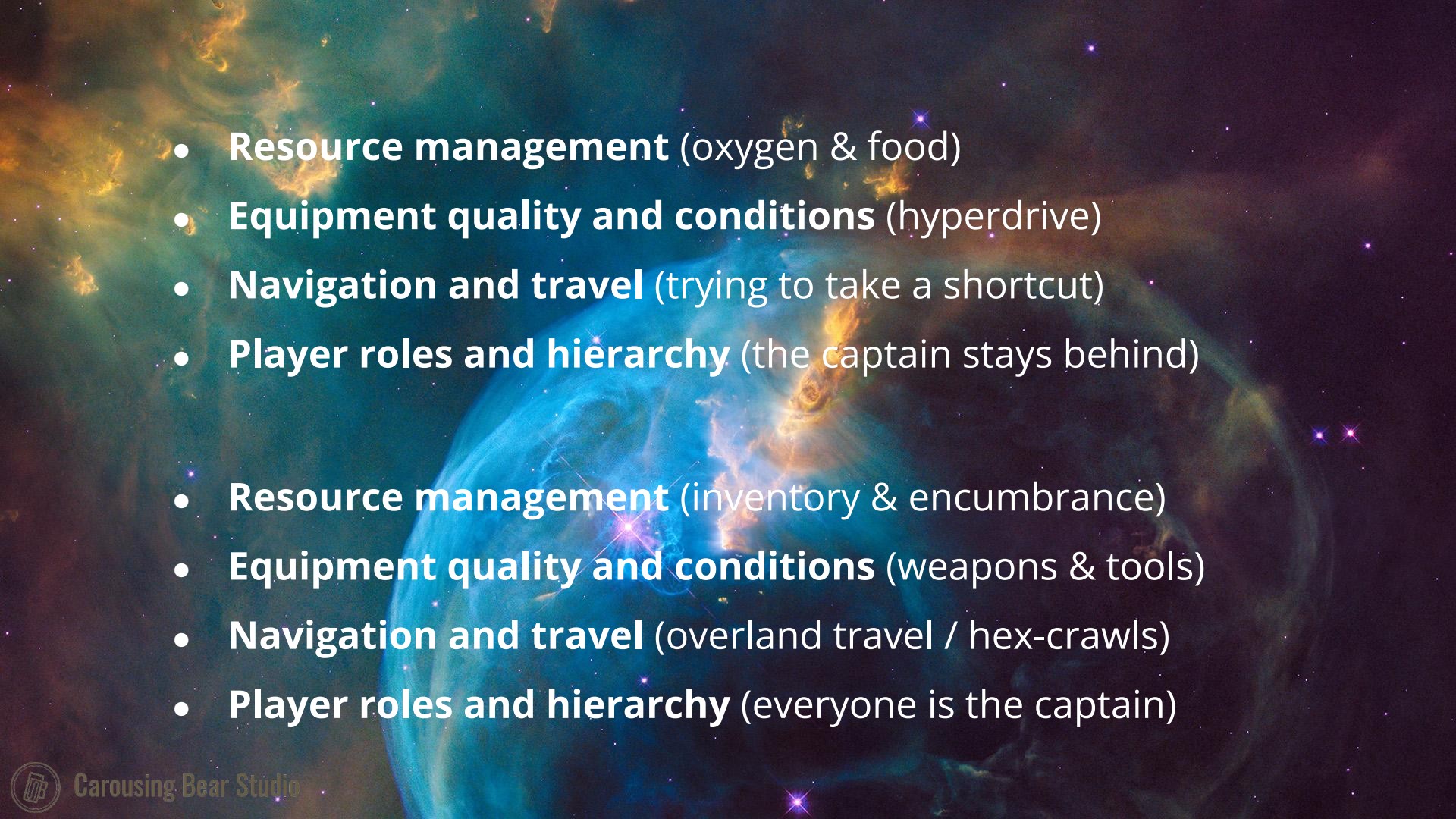
— Or how it's okay to burden your players sometimes... —





[Captain's Log, 4th of Astus, 2832] day 26 and surprise surprise, the universe is still just as empty and lonely as it was the rest of the month... Nothing much has changed, well safe for the fact that I think I've forgotten what it's like to not be hungry anymore. Breathing has steadily become more difficult too with the lack of oxygen around but I'm trying not to focus on it too much, panicking about it is just going to drain what remains of it even faster. The navigators told me it was only going to be a month of drifting through space for our ship to reach the nearest station, but I sure wish that any of them were awake right now to just double check it for me. Then again, if any of the crew was left out of cryo then we'd have run out of food and oxygen a long time ago so I should probably just stop complaining about it by now, wasting air and what not... I swear if I make it out of this I'll never skimp out by buying a shoddy hyperdrive again... or at least not try to take the "shortcut" by taking the long jump...
captain out.



- 
- **Resource management** (oxygen & food)
 - **Equipment quality and conditions** (hyperdrive)
 - **Navigation and travel** (trying to take a shortcut)
 - **Player roles and hierarchy** (the captain stays behind)

 - **Resource management** (inventory & encumbrance)
 - **Equipment quality and conditions** (weapons & tools)
 - **Navigation and travel** (overland travel / hex-crawls)
 - **Player roles and hierarchy** (everyone is the captain)



BUT FIRST!!...

some introductions are in order



Hi, I'm Wes

Communications and
multimedia designer

Functioning RPG-aholic

Notoriously dyslectic

Professional BBEG laughterer



Wesley Hölzel



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*I'm working
on it...* 😊



Let's start with some
DEFINITIONS



What is emergent narrative

What are arduous mechanics



Emergent narrative

A.K.A. procedural narrative

Narrative beats that are organically introduced into an experience.

Build on the interaction between a person(s) and a system(s).

Examples:

- Random encounters
- Skill checks
- Health & rest

Arduous mechanics

A.K.A. bothersome bookworking

Often repetitive and/or boring tasks that break player immersion

First targets to become automated
(though it often doesn't fix the problem)

Examples:

- Inventory management
- Encumbrance
- Travel & Exploration



Narrative vs. Story

Narrative

The smaller beats within a story, especially relevant in games.

Story

The overarching plot, events etc. that form a cohesive whole

Example [DARK SOULS]

N: Some undead murder-hobo's their way through a big mountain

S: Chosen undead prevails through implausible odds to lay to rest the god that shaped this world

Mechanics vs. Systems

Mechanic

A set programmed (re)action from a "machine".

Systems

A collections of mechanics that together fulfill a function.

Example [A CAR]

Piston: Single mechanic to convert gas into kinetic energy

Engine: A collection of mechanics that creates a system to provide energy/propulsion to the car



FORE WE PROCEED HEED THESE WORDS

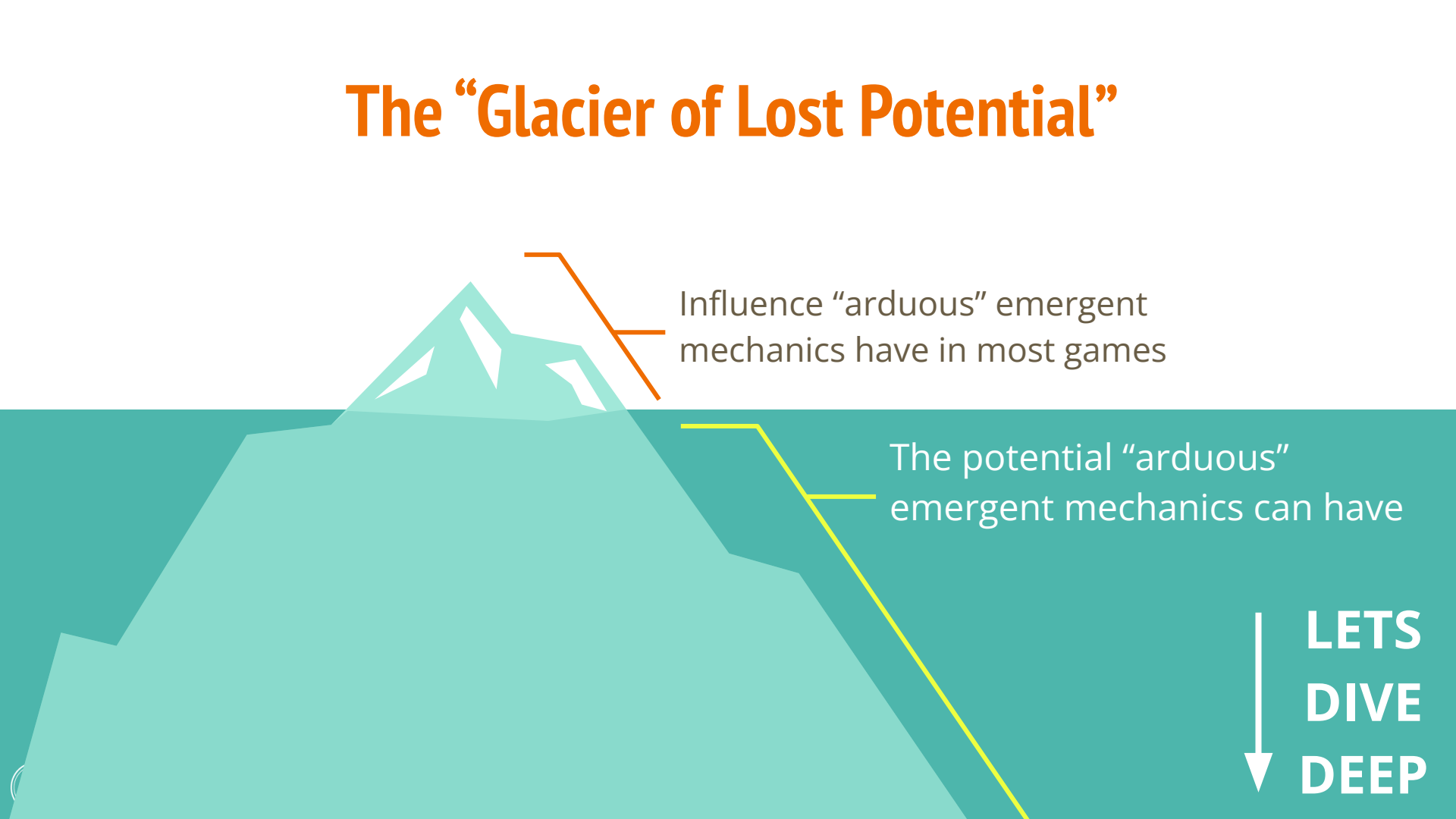
Much of the upcoming will be talking about **emergent narrative through mechanics**. In reality, emergent narrative is generally the product of a **system of mechanics working in unison**.

HOWEVER

These systems are often build around **a single core mechanic**, and that's what we'll be focussing on in this talk!



The “Glacier of Lost Potential”



Influence “arduous” emergent mechanics have in most games

The potential “arduous” emergent mechanics can have

↓
LETS
DIVE
DEEP

EMERGENT NARRATIVE

DEPTH 10 - 100M

Inherent Tension

Agency &
Consequences

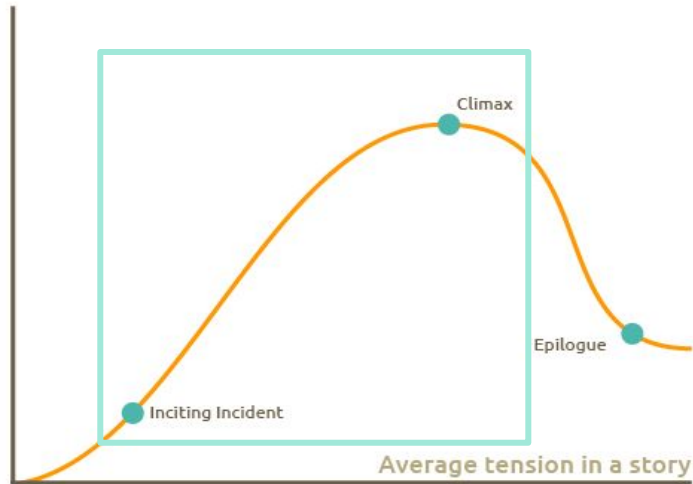
Dynamic Narrative

Mechanical
Reinforcement



Inherent Tension

Systems that organically introduce drama and tension



Drama. A conflict of interests, often rather instantaneous

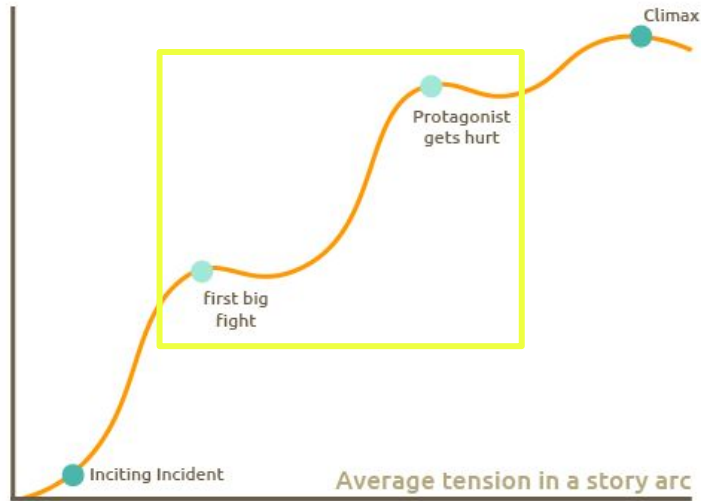
Tension. A rising pressure that tends to build over time.

Especially games rely on this to fill the gaps that would normally be skipped in movies etc.



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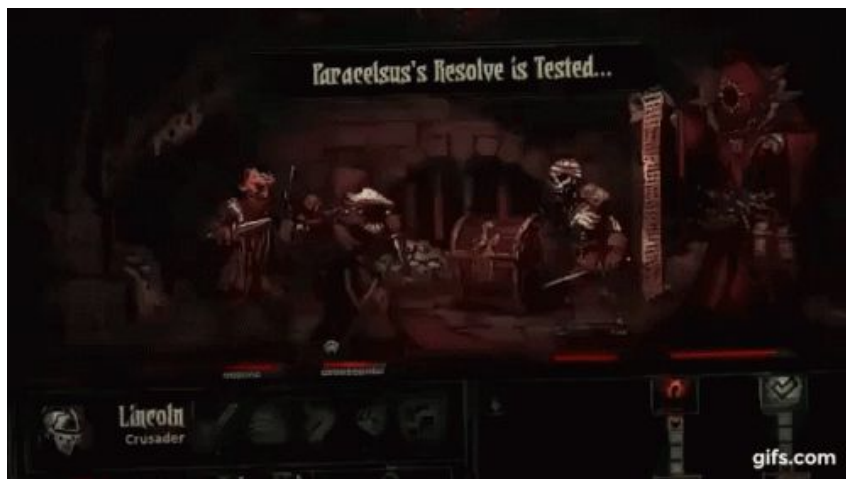
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Examples

Stress | Darkest Dungeon



Random Encounters



Harm | Blades in the Dark

HARM		
3		NEED HELP
2		-1D
1		LESS EFFECT



Agency & Consequence

Creating meaningful choices with tangible repercussions

Letting your players “*game the system*” can be an important part of agency as well

You need both for the mechanic to have value. Without..

- **Agency** your players get frustrated
- **Consequence** your players will lose interest

Doesn't always need to be extensive. Exp, coin, high scores can often be enough.

Choosing not to interact is a choice too

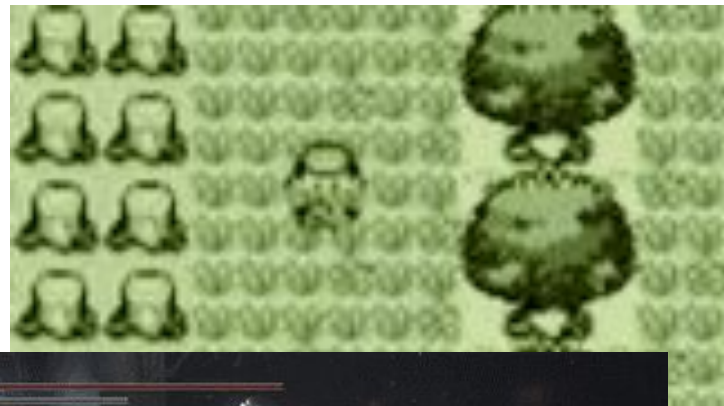


Examples

Weapon Durability | Breath of the Wild



Random Encounters... again



Encumbrance | Dark Souls



Dynamic narrative

Forming dynamic story events
that inspire and intrigue

*“Limited in their carrying capacity,
the crew needs to leave behind
plenty good loot. They hope to
return quickly with a cart before
anyone catches wind of the
treasure they found.”*

Allows narrative elements to grow
into story beats through
interaction with the system

Has to do just enough to inspire
or intrigue players

Preferably leads right back into
interactions with other systems



Examples

Factions | Stars Without Number



Combat Difficulty | Dark Souls



Mechanical Reinforcement

Don't just show and tell, let your players experience and feel

Players doing something exciting should **be** exciting

Players doing something dangerous should **feel** dangerous, but never be so

Backing up your themes and narrative through mechanical interaction

Allow your players not just to see, but to feel as well. But keep it within safe margins

Embrace creative and abstract solutions



Examples

A Hero's Value



Inventory | Resident Evil



Jenga | Dread



(dis)Advantage | DnD 5e



ARDUOUS MECHANICS

DEPTH 100 - 500M

Bad Design

Equivalent Exchange

Inverse Outcomes

Struggle & Labour



Bad Design

Keeping constant track of a 2~3 digit number

Plethora of resources that have their own quantity, capable of influencing the main resource

The main resource has a certain thresholds, breaching these will severely penalise the player

23 / 123

Resource | 3

Resource | 5

Resource | 1

Resource | 3

Resource | 5

Resource | 1



Bad Design

Keeping constant track of a 2~3 digit number

Plethora of resources that have their own quantity, capable of influencing the main resource

The main resource has a certain thresholds, breaching these will severely penalise the player

23 / 123 HP

Resource | 3 / Long

Resource | 5 / Short

Resource | 1 / Long

Resource | 3 / Long

Resource | 5 / Long

Resource | 1 / Short



Death Saves



Combat

More player agency

Can leave a strong impact on both the narrative and the character

More rewards for the players

Higher level of abstraction

Inventory

Can be ignored with relatively little impact

Interacting with the system is far more likely to penalize a player than to benefit them

Can be confusing to players do to the lack of abstraction



But what about **AUTOMIZATION?**

Bad mechanics can't be saved by a computer

Automization can do the arduous work so that a player won't have to, but it can't force in consequences, conflict, impact nor reward.



Equivalent exchange

If you make a player's life more difficult, then that effort must be rewarded

No matter how good your narrative reason, without player buy-in it'll never have the desired effect

Using stress | Blades in the Dark

- Burning stress increases your odds of success
- You have 9 slots, burning the last one will traumatise you

Torchlight | Darkest Dungeon

- Torches are a limited resource
 - Increasing torchlight lowers the difficulty
 - Decreasing torchlight increases loot
-



Inverse Outcomes

But First.. A tiny warning

We'll be dipping our toes into the realm of psychology. I won't be responsible for any future immersions that might be broken for knowing this nor for any friends you might choose to annoy with this knowledge later on



A

Close your books we're having a pop quiz! Gonna see if any of you all have been paying attention. Everyone that fails will have to come in tomorrow for additional lesson so buckle up idiots!

B

We'll have a quick and simple test at the end of class to go over what we learned today. Everyone that gets a 7/10 or higher won't have to come to our lesson tomorrow so do your best everyone!



Same effect - inverse approach

Effect: Anyone that fails the test will have to spend the next day in class

Approach: where the first gives emphasis to the **penalties**, the second gives focus to the **rewards**

You can apply the same to your designs by focussing either on rewards or penalties

Rewards: tend to be more long term viable. These emphasise player accomplishments and tend to positively influence player agency.

Penalties: tend to be effective very quickly but are draining on the long run. Over-exposure tends to make players avoidant or overly aggressive to get it over with and prevent further penalties.



Inverse Outcomes - Demon's vs. Dark Souls

The souls franchise likes to play with Max HP to establish the narrative impact of a character's state. Demon's Souls and Dark Souls II tried a similar approach that has been rather controversial, meanwhile Dark Souls III had the same effect but a different approach

Demon's Souls & Dark Souls II

State	Max HP	Effective HP
Hollow + Ring	75%	100
Hollow	50%	67
Human	100%	133

Disliked

Dark Souls III

State	Max HP	Effective HP
Ashen	100%	100
Embered	130%	130

Liked



Encumbrance

And how it so often gets implemented

Encumbrance forgot the spoon full of sugar and immediately starts whipping its cane around...

Simple: here's a set limit to the amount of things you can carry... anything more and your character is immobile

Complex: here's a set limit to the amount of things you can carry... if you carry more than a $\frac{1}{3}$ of that you get slowed down
If you carry more than $\frac{2}{3}$ of that you get badly slowed down and become bad at all physical checks



Struggle & Labour

Why even have mechanics that ask so much of your player?



“We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win, and the others, too.”

- John F. Kennedy



Struggle & Labour

It may be a chore...

It may be frustrating...

But it sure as heck keeps your
attention

3 main reasons to make a
mechanic arduous

Conqueror. The greater the
challenge the sweeter the reward

Empathy. Using the mechanics to
convey the themes of your design

Guidance. Teach your players the
best way to play without tutorials



The Conqueror

satisfaction of overcoming odds
previously thought impossible

Sense of pride from seeing how
much better they've become

“Street cred”



The Empath

The design strengthen the narrative beats of your game by putting an emphasis on the struggle

Aims to make the players feel the emotions tied to the theme

Example: never get attached to your heroes in Darkest Dungeon. The price of life is cheap



The Guide

Attempts to get the player in the habit of playing towards certain styles

Can be linked together to form a core gameplay loop

Example: Hollow Knights mapping system eases players into discovery & exploration



Map System Explained

Themes

Discovery & Exploration

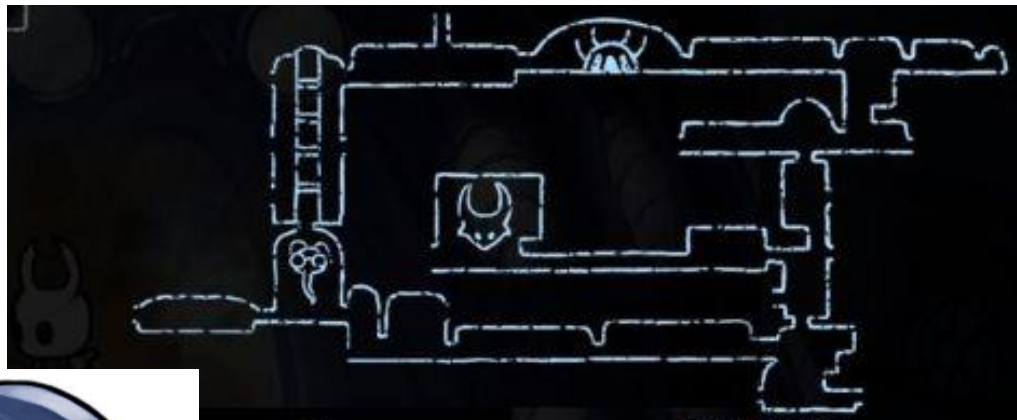
[D] Find hidden NPC location

[E] Buy the unfinished map

[E] Buy the Quill

[D] Fill in the map as you discover more of it

[E] buy pins to mark important spots



COMPLEXITY vs. ABSTRACTION

DEPTH 500 - 1000M

Know your Niche

Focus &
Abstraction

Simplify

Provide Variety



Know Your Niche

**Difficulty is subjective, so is complexity...
Get to know who you're designing for!**



Set a base level

Explore your target audience and discover the knowledge and skills they already have

Get to know their interest and their struggles.

Is it viable?

Your ideas might be very cool, but they might not make a viable product

Hobby projects can do anything, but an actual product needs consumers



Focus

What are your players
supposed to feel

What type of mechanics fit
your design best

With what other mechanics
should this interact

Abstraction

If it seem good to you, then it's
too much for anyone else

Cover for the knowledge that
players don't have, while still
providing the same experience

Find less cumbersome ways to
represent the same idea



Abstraction: Examples for Inventory & Encumbrance

Treasure Hunting

Only track valuable treasure

Must be placed in a RE style grid, find the best way to take the most loot

All else is basic equipment and isn't tracked

Combat

Only track equipped items

Items have slots and a weight class

Different stages of encumbrance, each allowing for different fighting styles

Survival & Exploration

Track basic survival resources (food, water, etc.) by the amount of days you'll be safe

Each resource affects the other

Adventurer's bag that can be used x amount of times to get any needed item



Simplify

Don't hide the forest behind
your trees

Make your design as simple as
possible, and then then a
whole lot more

Is there any part of your design
that doesn't strengthen the
narrative, remove it

Are all the numbers as small and
whole as possible

How often does your mechanic
trigger, can you make it less often

Do all players need to use this
mechanic or can it be delegated
to a single player



Most important...

PLAYTEST



Provide Variety

Spread your net wide, you'll be amazed at your reach

Your core design covers your target audience, your variations cover their friends

Increased accessibility

Potential to reuse previously scrapped mechanics

Greatly expand the amount of people you can reach



The end

— Happy gaming! —



Resources & Inspiration: Video Games

Dark Souls I, II & III | From Software

- Encumbrance
- Combat Difficulty
- Humanity & Health

Darkest Dungeon | Red Hook Studios

- Stress & Afflictions
- Value of a Hero
- Position Based Moves & Corpses

Breath of the Wild | Nintendo

- Weapon durability
- Equipment Upgrades

Hollow Knight | Team Cherry

- World Mapping
- Hostile Shade



Resources & Inspiration: Pen & Paper RPGs

D&D 5th ed. | Wizards of the Coast

- Death Saves
- Spells & Spell Slots
- Advantage & Disadvantage

Stars Without Number | K. Crawford

- Faction Turn
- Player Roles
- Space Travel

Pathfinder 2nd ed. | Paizo

- Bulk & Load
- Wounded Condition

Blades in the Dark | One Seven Design

- Coin
- Stress & Harm

