GD(

March 21-25, 2022 San Francisco, CA

The Last of Us Part II **Designing the Museum Flashback**

Evan Hill

#GDC22



Ellie: Oh my god, it is a dinosaur!

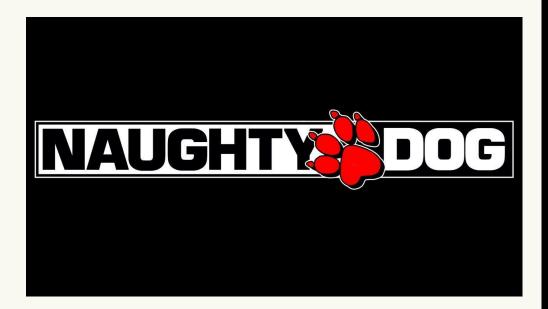


From Concept To Composition Through Production



Who am I?





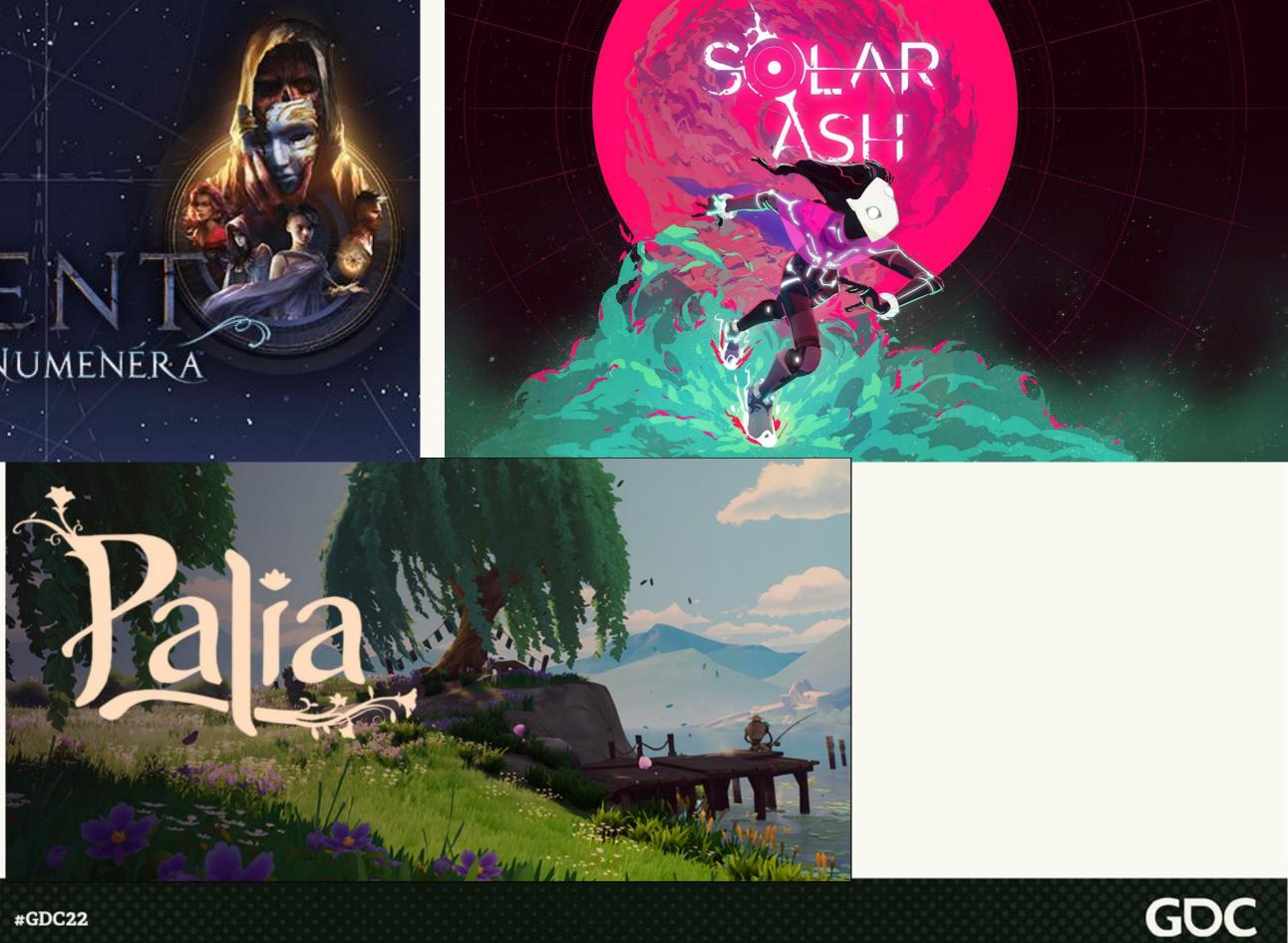








ORMENIE TIDES OF NUMENÉRA







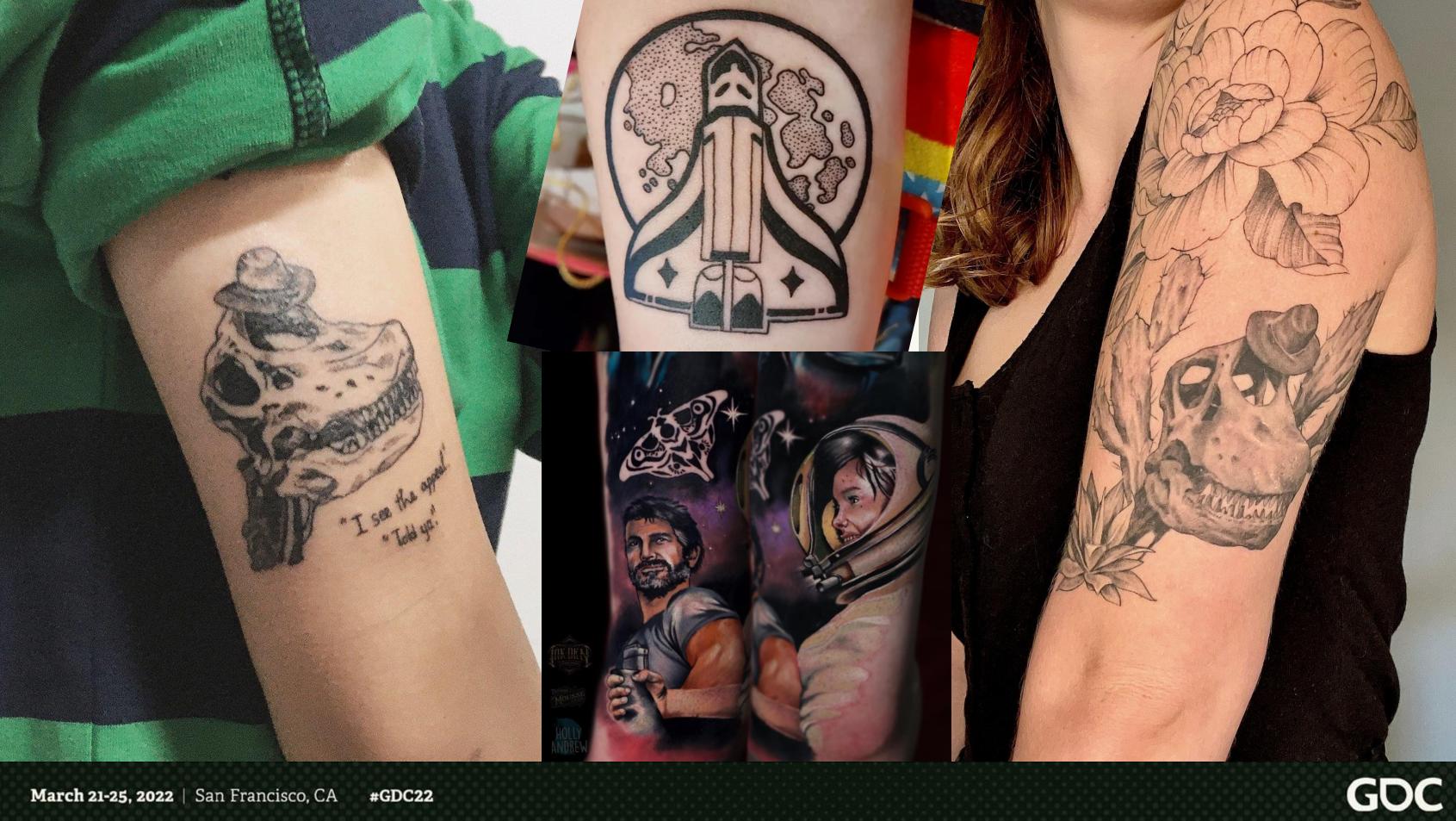




Gene Park Souls 🕗 @GenePark · Jun 21, 2020











This Level That we designed What's it about?



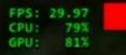


CONCEPT



3 YEARS EARLIER

ellie-flashback-museum-efm-camp-guitar [DEV TASKED] v2793903 main @Mar 12 2020 17:26:00 asset view: live,ehill



You want to spoil your surprise now?



Ellie: Oh my god, it is a dinosaur!

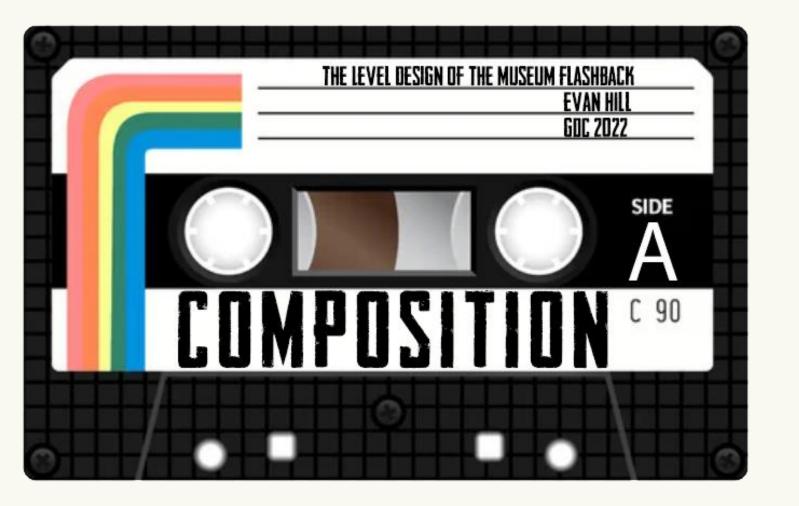








Side A





2/3rd

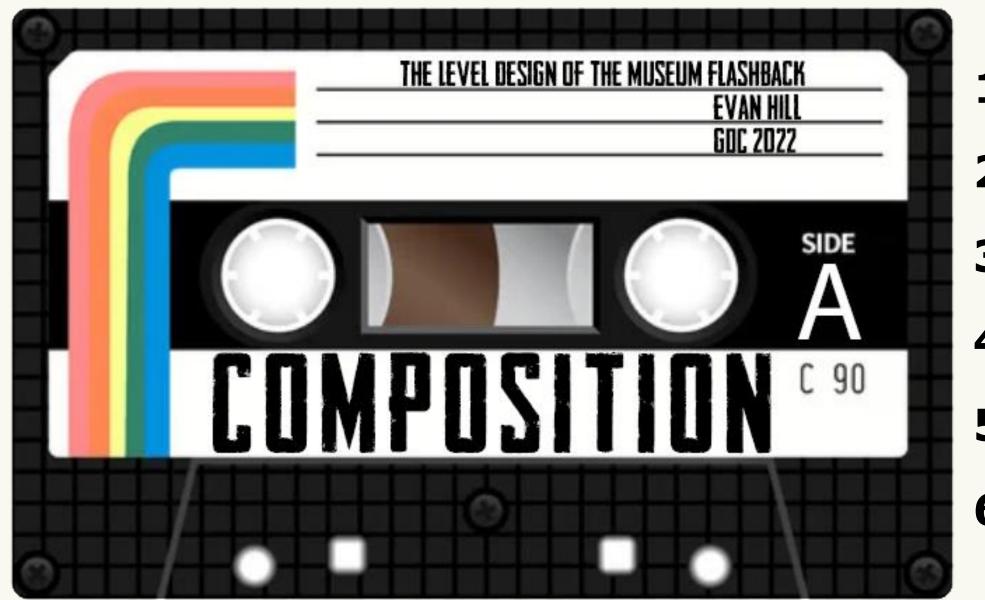








Side A - Composition



5. Space



1. Everything is story 2. Goals & Acts 3. Characters 4. Gameplay 6. Pacing & Process



Side A - Composition



5. Space



1. Everything is story 2. Goals & Acts 3. Characters 4. Gameplay 6. Pacing & Process





Every game is experienced

One second after another





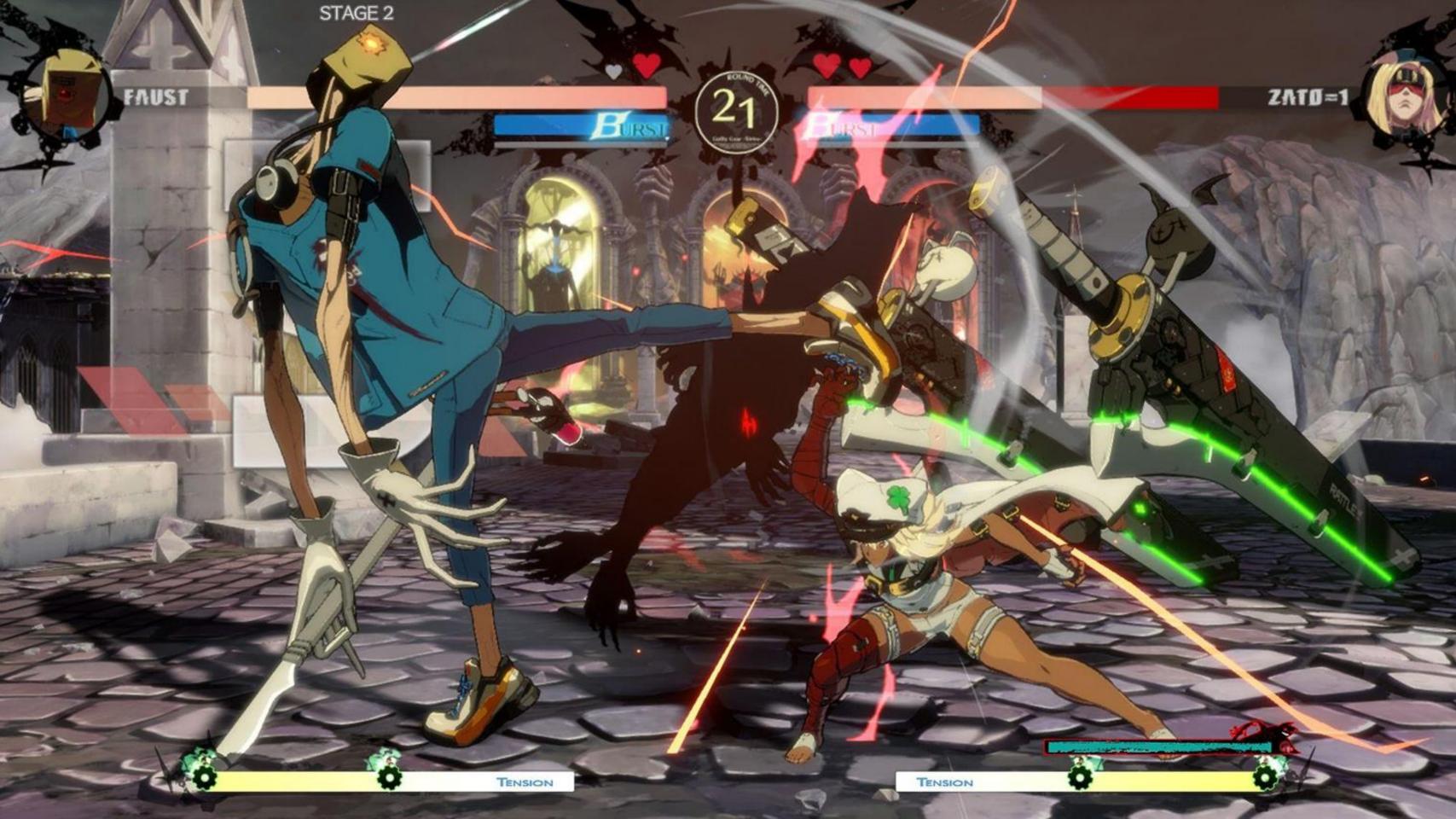
Playing a game is a narrative experience

Even without a set plot













It's not about what games do

It's about how we deal with time









SPORTSOENTE SPORTSOENTE

SPORTSL



How does this Help us?



Track 1 - Everything is story •How Does that help us?

- Interesting moments share the same anatomy
- Centers the player's experience
- Benefits from and directs iteration

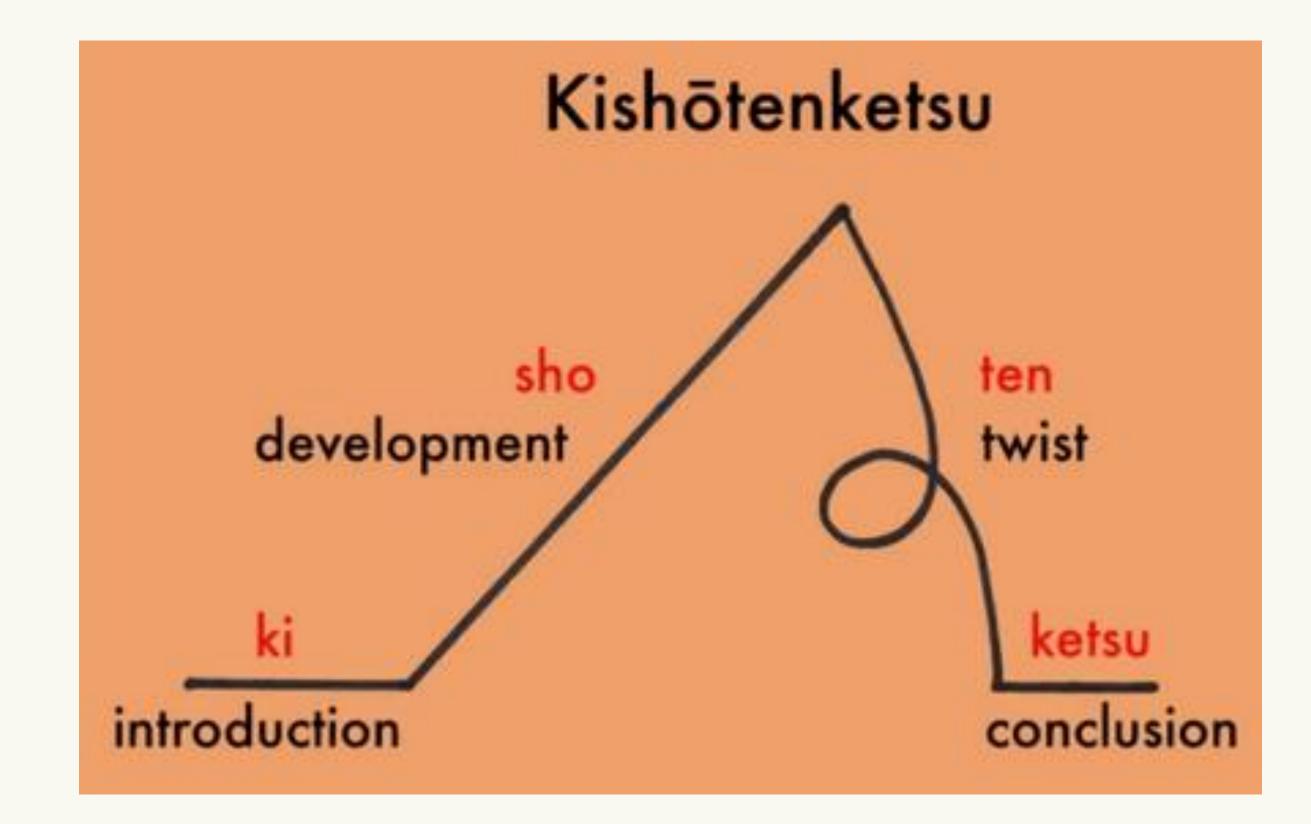




All Interesting moments share an anatomy









C His of been of monte Hurs to proport rough were way all storing part AP Signerations wing Mundan and about id and present into the second שינדיים ומחות שוו כסי Level you to pay and a second of the second A "permerer Red",

- villerie (bodgung sellin mandloor, with lage & alle to stand and setting the stanten Polymone & for a cille of of a confice ofthe multiple there by the distance is the parties to actual as store courses with ANT A ROSAN SI AL Hansen S. parizator JA454 7 merver can mull care the for the sol AT AN Sourabally teruch ka

Altrubation articlar conderally and ne for a first answar when (manial and

Numa A Anison Inda's southant Provide Report methers 10 as and 1 - 1. 0 DX *= 1

the matter me lember change and allow more the my areas and esperiture have vere de libol a petere more the fan come timulton fon and (une mark and a function for come it multice for me is postation of fair of a participation of a man of a government of a government and a fairly

rith rate Allo smill

ance electro a usua

bed vite lips bed

and an again 1 jan

19 1 "Ton Dale

win a dial of im

- :07-9

and reflering frames for anothe puck it presh follow all a

Monopartie Monoffe

manpair

THE GOTTA FRATA FARS

NORO MINTON ANNIA MAR ITAN and how for the foot Numme allowing Man mirilliof A amologanp of wind cala under The will a war from ma after alle and manue months and liene cloft mulle Li lufuquere periphe contrano and prick in siliciali & inativado) Man an or og congue the alle punin file part Principal about a from

AUNS USMONNER.

ful (ul contro c ... H

Nam Nus Manne

March 21-25, 2022 | San Francisco, CA

#GDC22

il mufeula up

of mulculofic

and illes of

Alin

Fundinuly

in profe lice for

have chow which

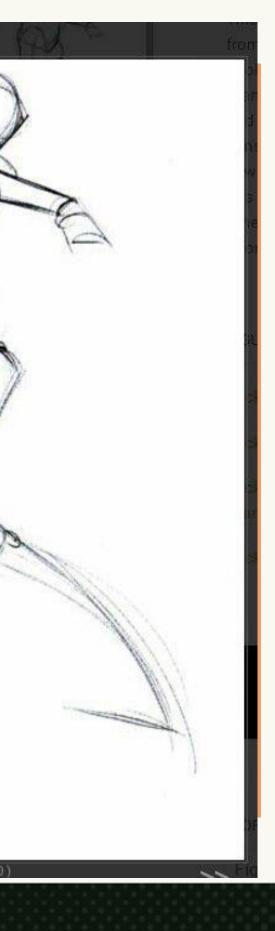
ingestinger ab Stante

well officition the

In rolling 1 Mary 61

nets to be mall and net

מנו אוון כטנו איוון בטנו אווין









1.00

KISHOTENKETSU (起承転結)

1:56 / 5:09

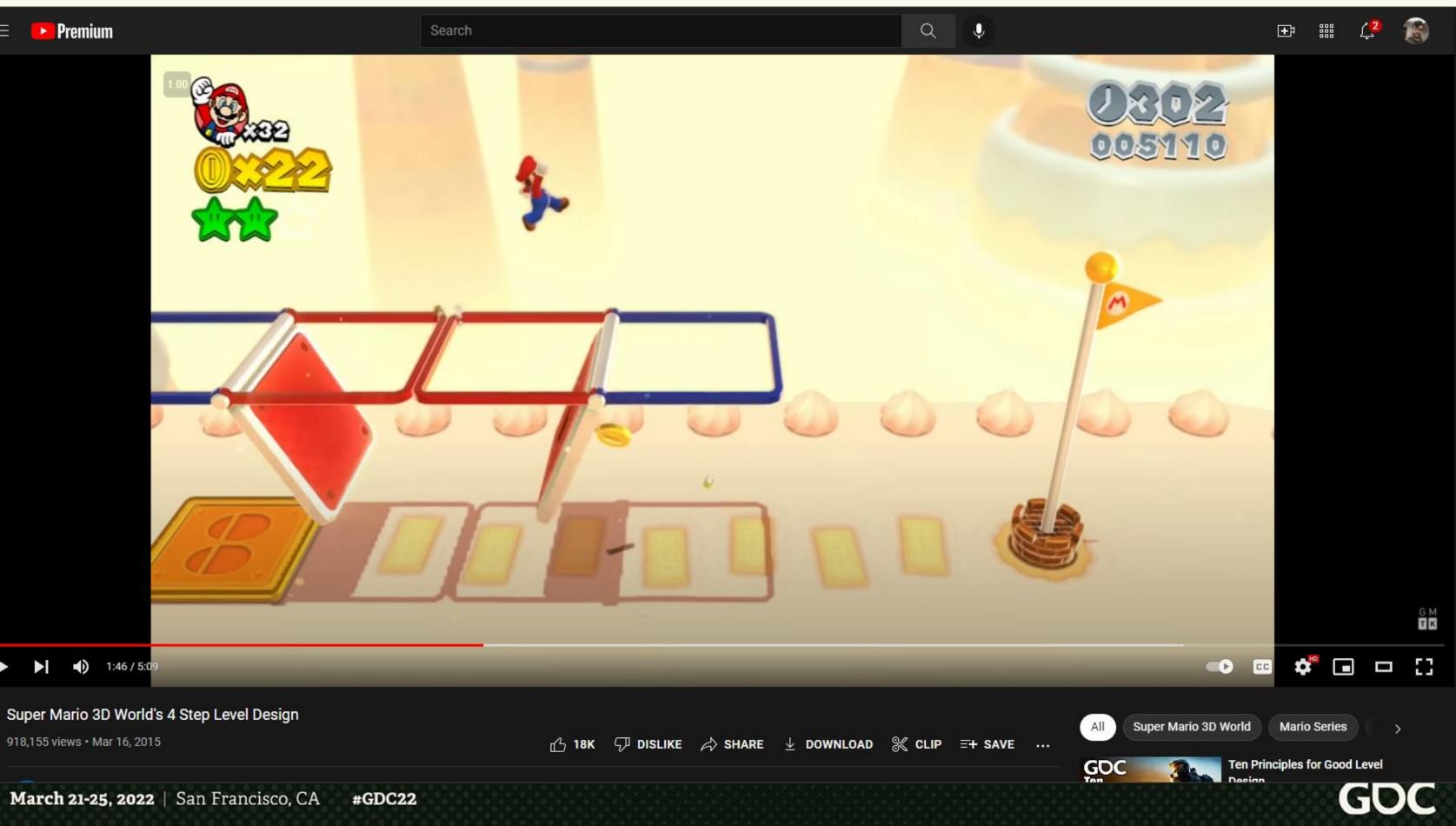
Super Mario 3D World's 4 Step Level Design

918,155 views • Mar 16, 2015

ho 18K ho Dislike ho Share ightarrow Download ightarrow CLIP =+ Save ...

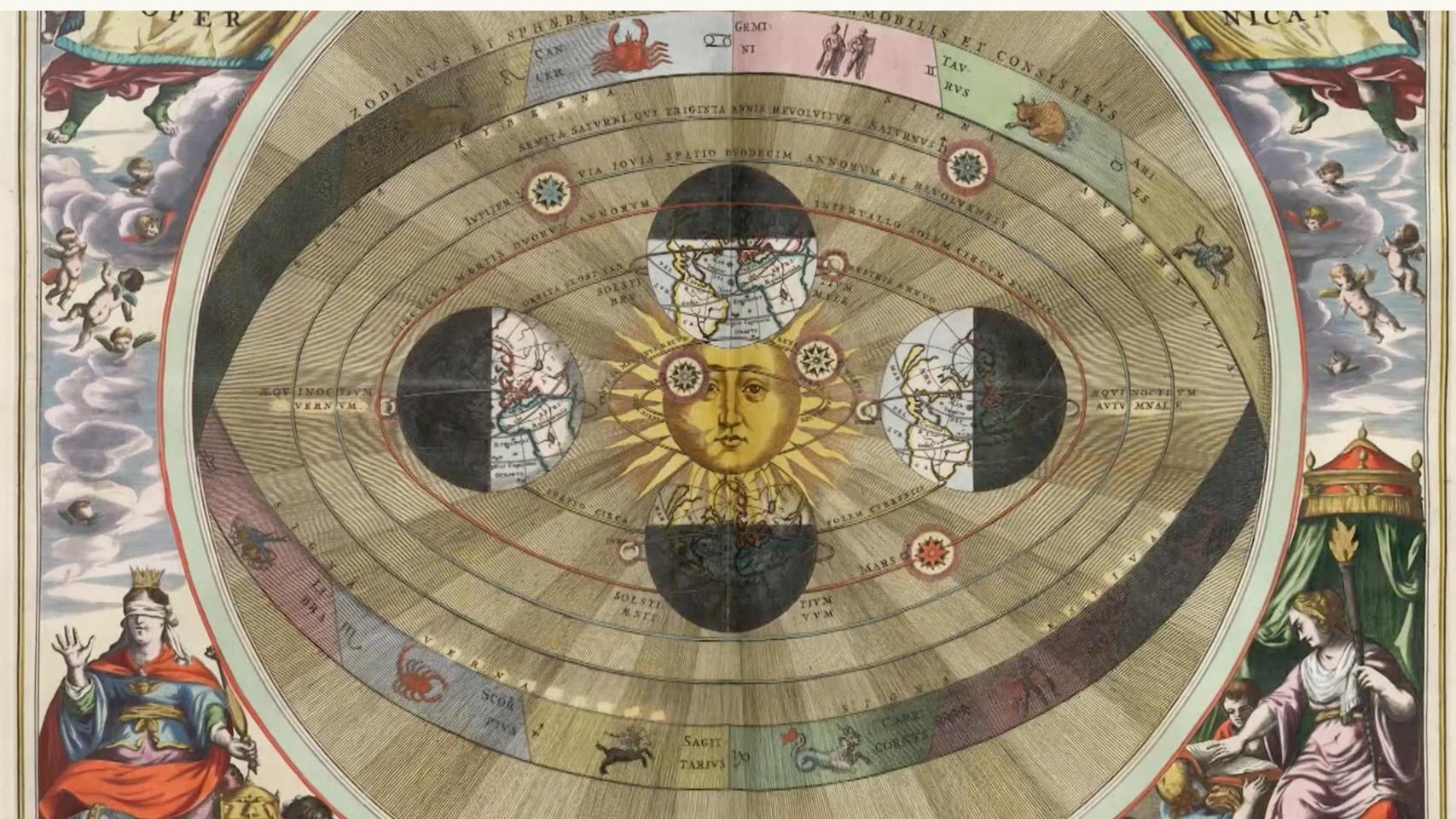






Centers The Player's Experience





Benefits from and directs ITERATION



clocks were striking thirteen, Winston Smith pushed open the glass door of Victory pensions, turned to the right down the passage way and ed the Button of the lift. Nothing happened. He had just pressed a second time when a door at the end of the passage opened, he a smell of boiled greens and old rag mats, and the aged prole the - acted as porter and carstaker thrust out a grey, seamed face and stood for a moment sucking his teeth and watching Winston malignantly. "List ain't working," he announced at last. free of a man "The lifts ain't working. The currents is cu de black being a it orf at the mail It working neither. All currents to be at orf at the math lest of times it working neither. All currents to be did orf the the the ours. Orders!" he barked in military style, and slathed funder during it and the barked in military style, and slathed the during it and the barked in who found to ecoury dure the rath, leaving it and that whether the grievance he evidently Infunction for that week. On flat was seven flight who, + Winita, who the was acainst Hinston, or against the authorities who had cut o no thing mine & had a varices when store his right askle, went day, nesting stored times on to my. On each landing the till theft, winston remembered now. It was part of the economy drive in the pote with the enormous four goed from to will. MP. proparation for late week. The frat was seven filtence up, and Wins up, and Winston, conscious of his thirty-nine years and of the varicose ulcer above his right ankle, rested at each landing to avoid putting himself out of breath. On every landing the same poster was gummed to the wall a huge coloured poster, too large for indoor display. It depicted simply an enormous face, the face of a man of about forty-five, with ruggedly handsome features, thick black hair, a heavy moustache and on



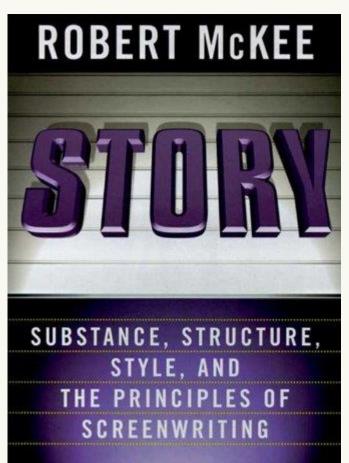
Good writing is rewriting.

March 21-25, 2022 | San Francisco, CA #GDC22

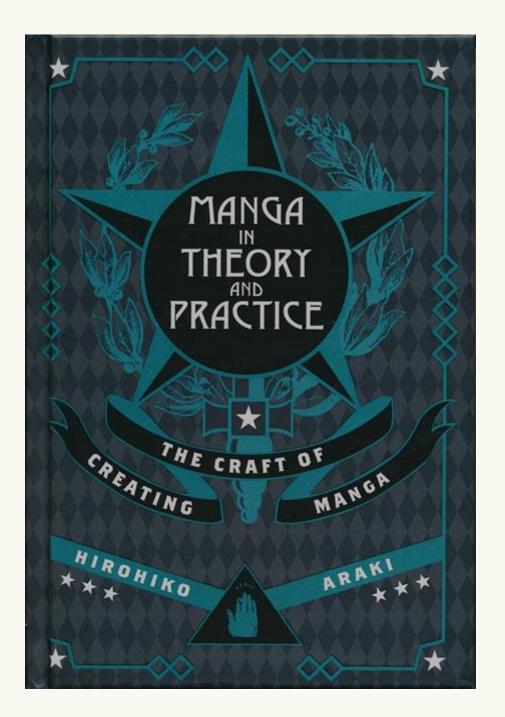
— Truman Capote —

AZQUOTES

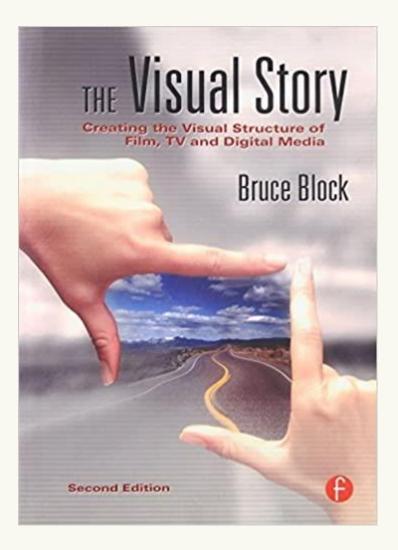




AWARD-WINNING METHODS FROM HOLLYWOOD'S MASTER OF THE CRAFT



THESE WILL BE BACK





Side A - Composition



5. Space



1. Everything is story 2. Goals & Acts 3. Characters 4. Gameplay 6. Pacing & Process





- Show the high point of Ellie and Joel's Relationship
- Reinforce the conflict between them
- •Create a compelling gameplay without combat
- Emotional Impact
- Swimming tutorial





Moments that meet our goals



- Show the high point of Ellie and Joel's Relationship
- Reinforce the conflict between them
- •Create a compelling gameplay without combat
- Emotional Impact
- Swimming tutorial

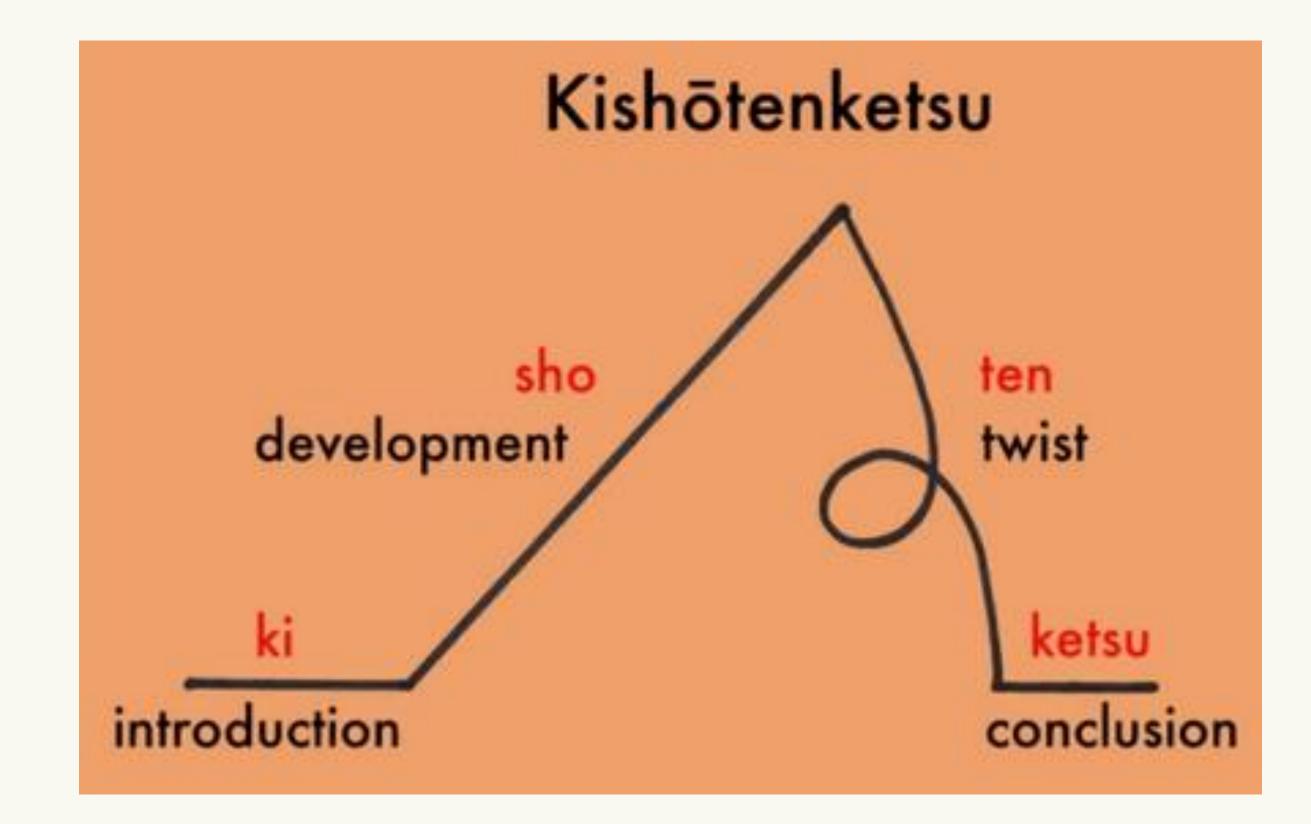


What's the Story?



3 Acts







Hike to the Surprise **Exploring the Museum** Lost in the Annex





Act 1 Hike to the Surprise



3 YEARS EARLIER

ellie-flashback-museum-efm-camp-guitar [DEV TASKED] v2793903 main @Mar 12 2020 17:26:00 asset view: live,ehill

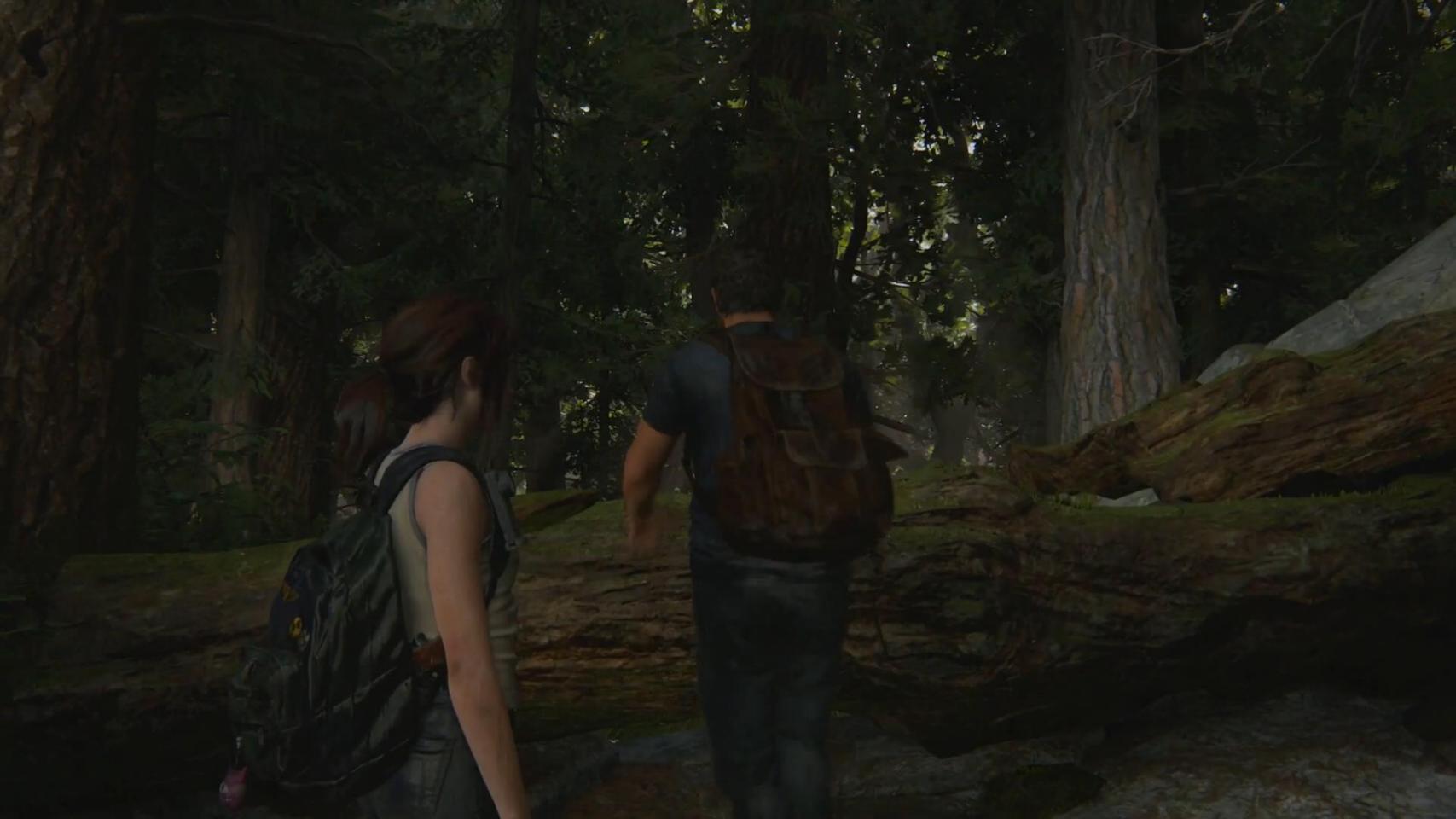
FP	S	2	9		9	7
CP	U			7	9	X
GP	U			8	1	X

I'm gonna start guessing.



"--push the water with your whole arm."







Act 2 Exploring the Museum









(gasps) Did you know this was here?!

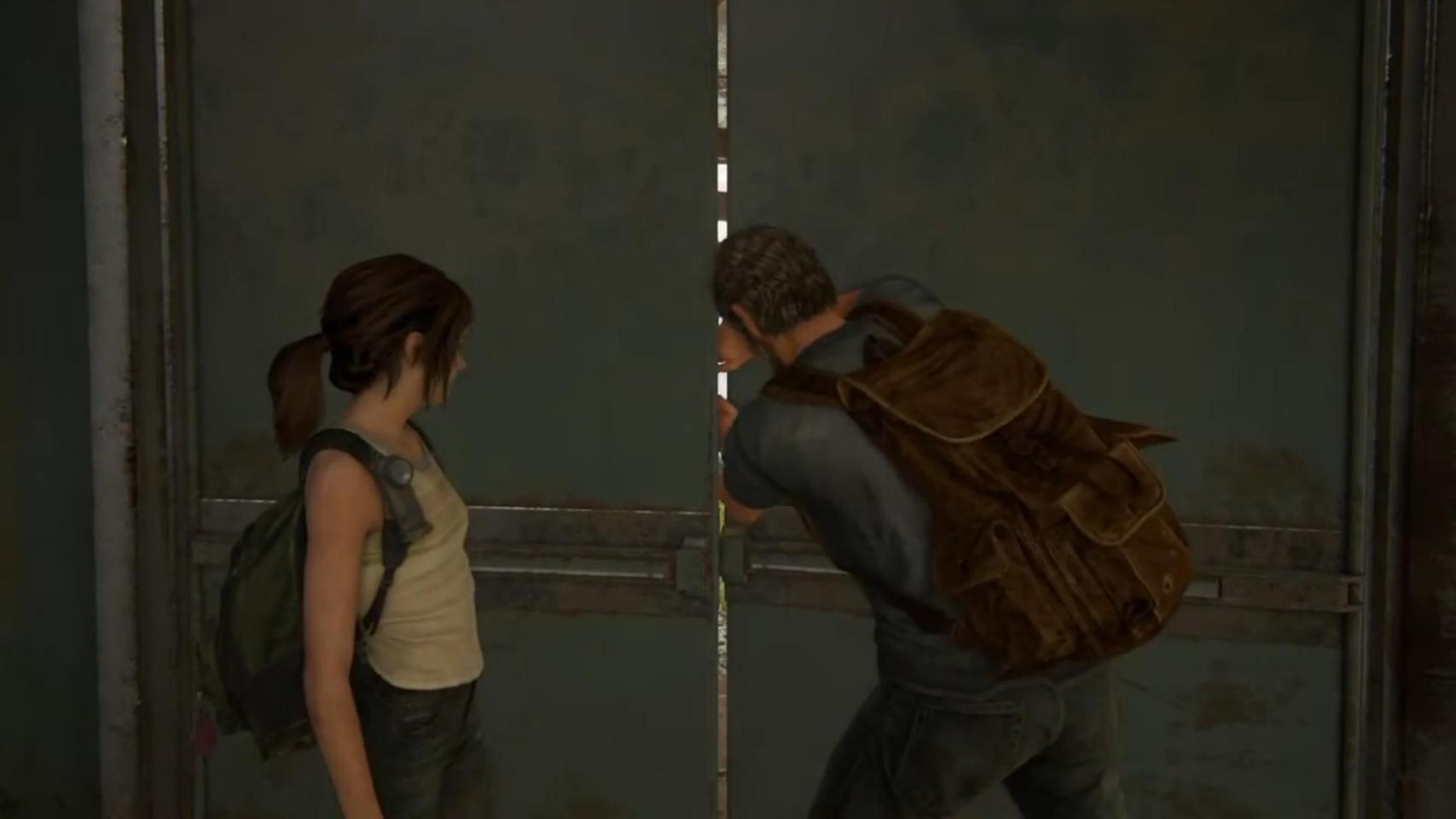












Act 3 Lost in the Annex









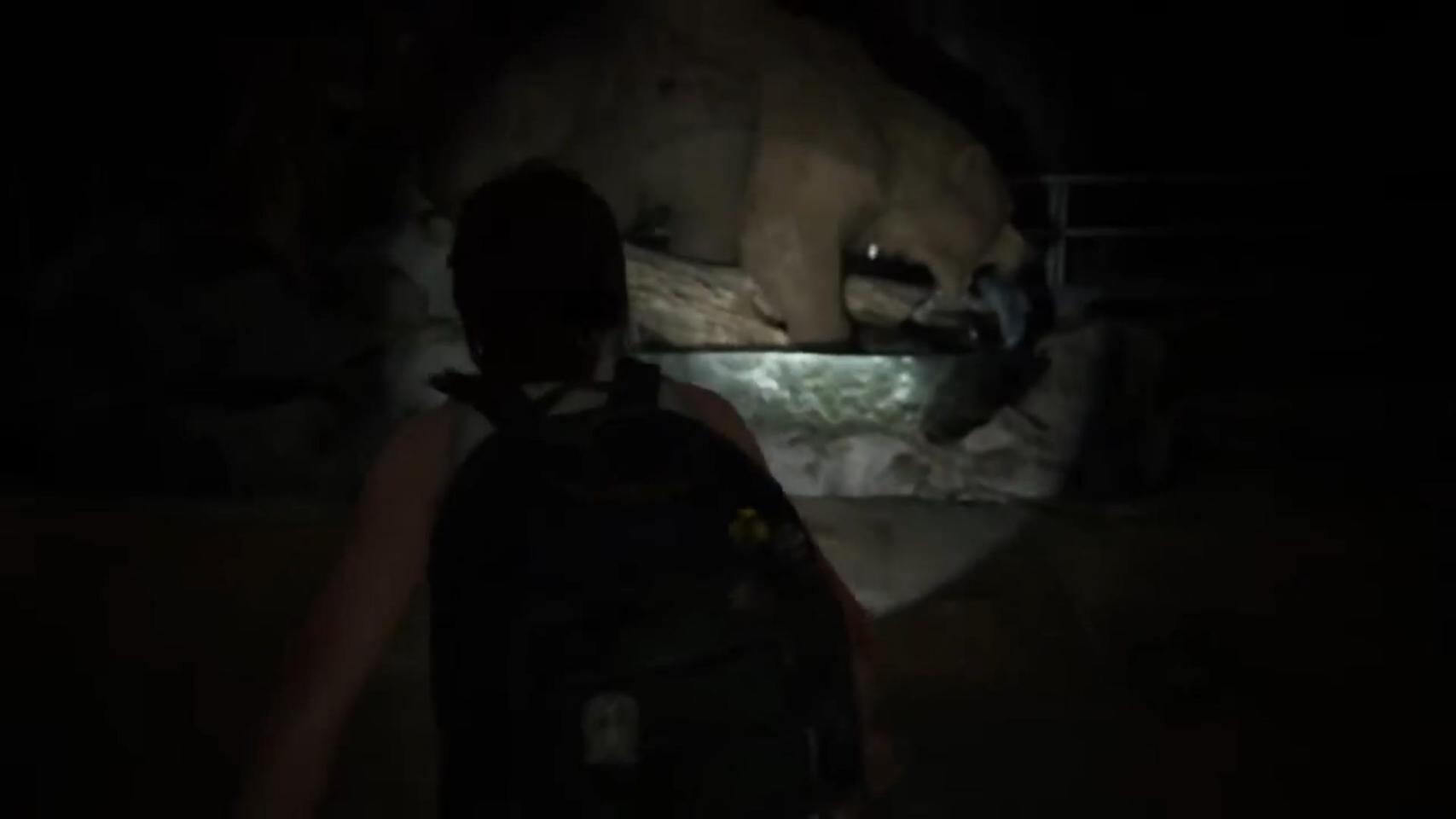




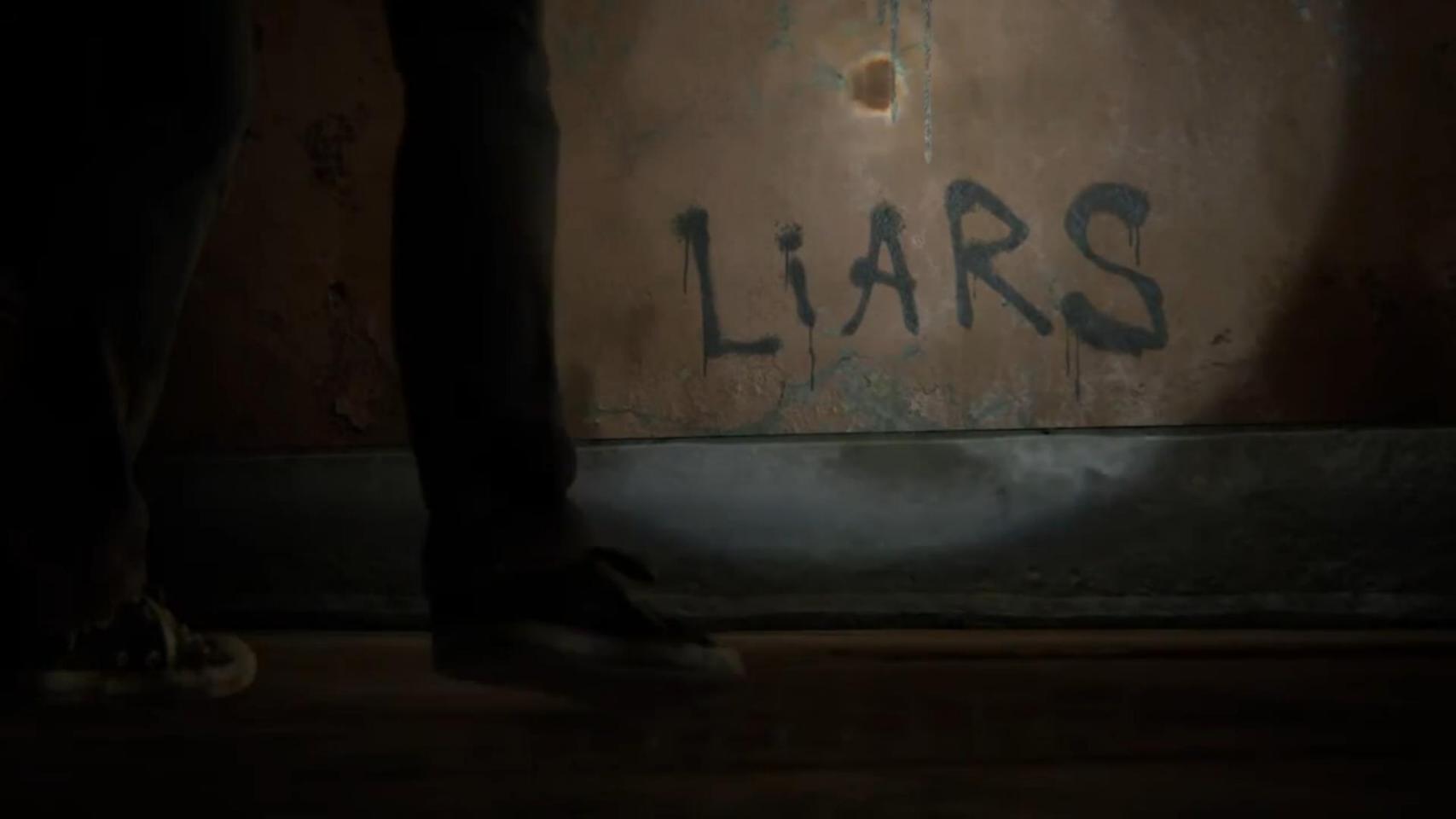














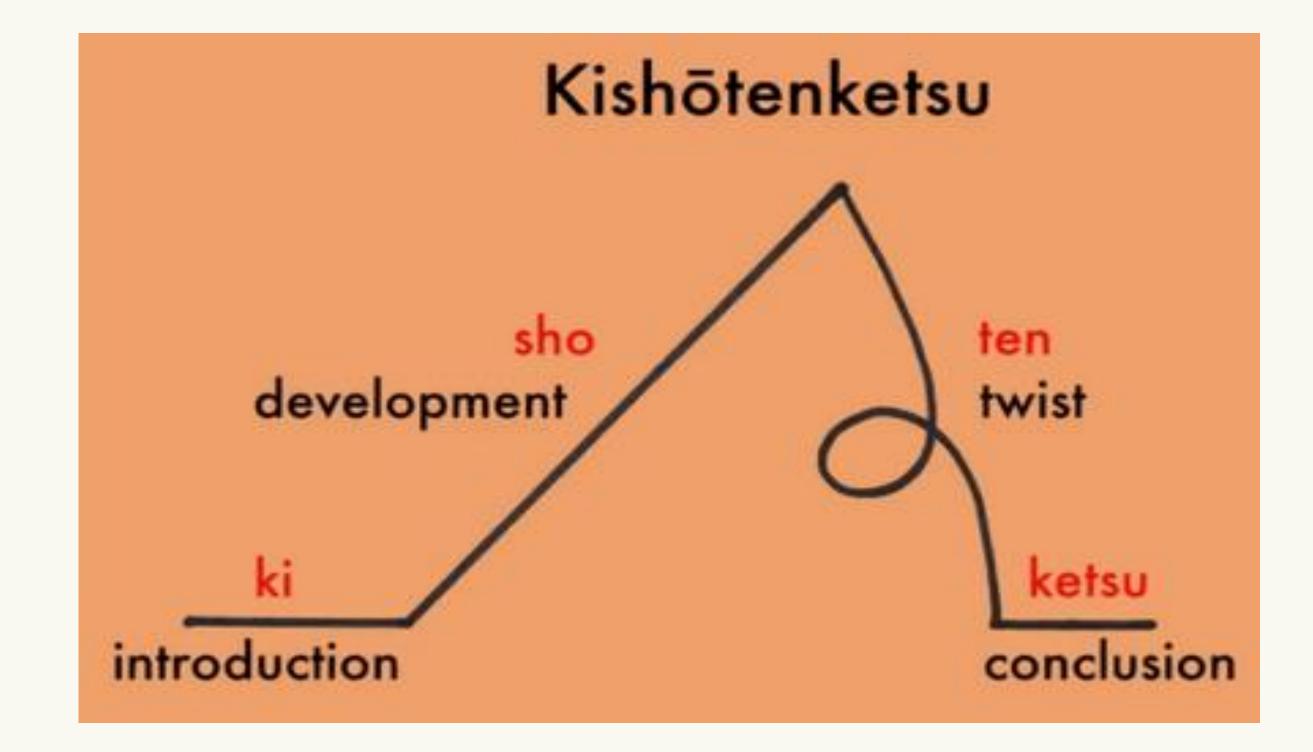






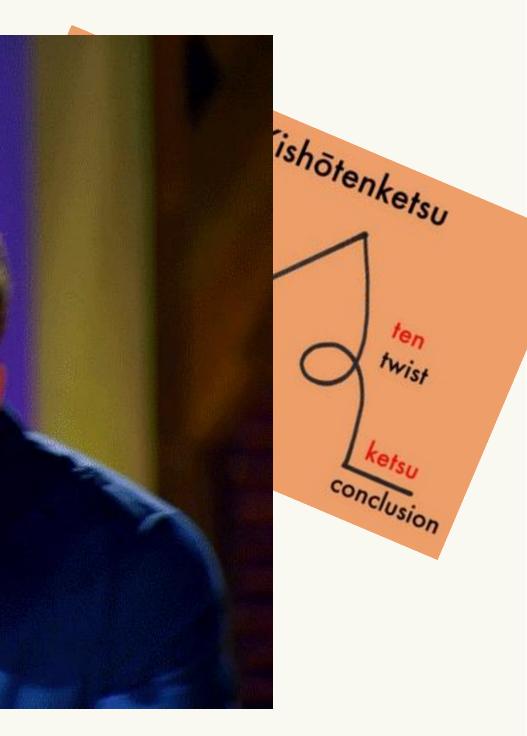








9e, It's delicious int





Track 2 - Goals & Acts

- Show the high point of Ellie and Joel's Relationship
- Reinforce the conflict between them
- Create a compelling gameplay without combat
- Emotional Impact
- Swimming tutorial



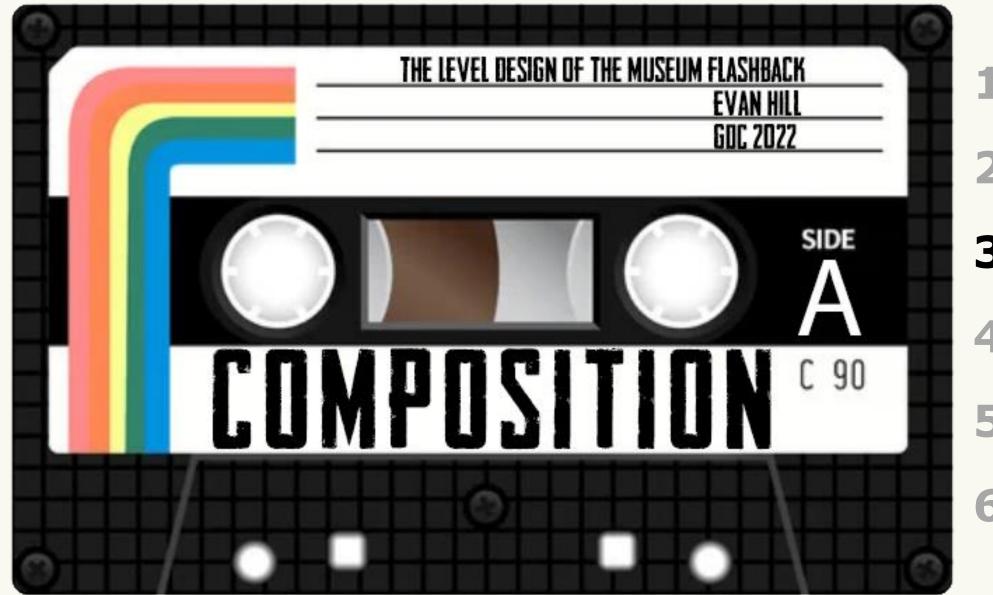
Cool, but...



How did we find and develop these moments?



Side A - Composition



5. Space



1. Everything is story 2. Goals & Acts 3. Characters 4. Gameplay 6. Pacing & Process



Characters drive the story's beats

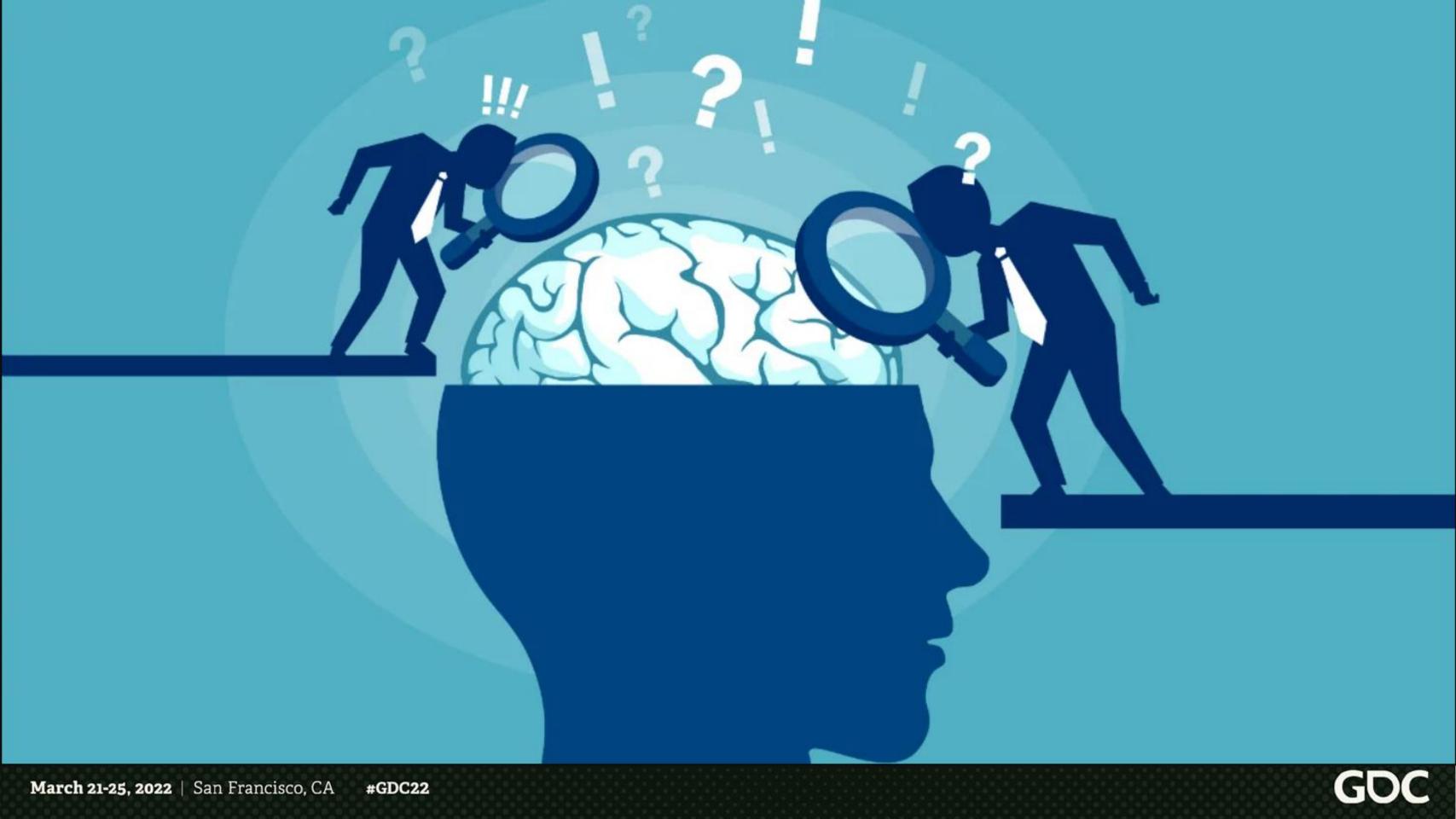


What drives them?



Understanding the people coming along with us





Character History





Who are they And What have they been through?





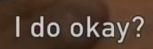
Wants into actions



Joel

- -To live the life he had before he lost Sarah with Ellie (Sarah Loved Museums)
- Ellie
- -The world to progress again (Love of space and science, always looking ahead)







- BUT ALSO, SECRETLY
- Joel
- Hide the truth of what he did at the hospital

- Ellie
- Learn what really happened at to the fireflies





The secret wants come forward and unravel both of their primary ones

-Joel starts loosing Ellie -Ellie fears she missed her chance to matter





Finding the actions And bringing them to life



Acting and Improv

March 21-25, 2022 | San Francisco, CA #GDC22



Please don't let it be a thing.



Naughty Dog has a lot of ex-TheaterKids

March 21-25, 2022 | San Francisco, CA #GDC22

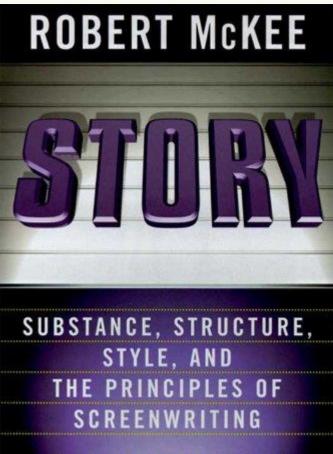


[FOOTAGE NOT FOUND]

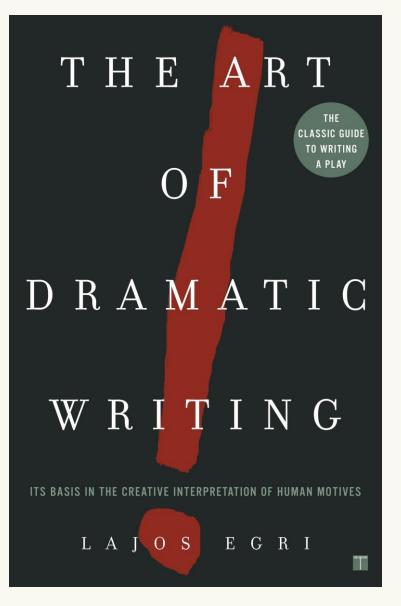
March 21-25, 2022 | San Francisco, CA #GDC22



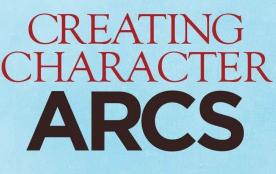




AWARD-WINNING METHODS FROM HOLLYWOOD'S MASTER OF THE CRAFT



March 21-25, 2022 | San Francisco, CA #GDC22



The Masterful Author's Guide to Uniting Story Structure, Plot, and Character Development

K.M. WEILAND



Side A - Composition



5. Space



1. Everything is story 2. Goals & Acts 3. Characters 4. Gameplay 6. Pacing & Process



The Player is an Actor Cast as Ellie





- Agency
 - The player drives Ellie's actions
 - Choices: Decisions, Timing, Tone
 - What, when, why





Emotional Expression

• Opportunities for the players to express what they might think Ellie is feeling

Explore her reactions



• Feedback

Yes anding the player's performance

Give them more to react off of









Hold 🖸 to dive underwater



What are you doing?



I'm climbing a dinosaur!



Look at me! I'm on a motherfuckin' dinosaur!



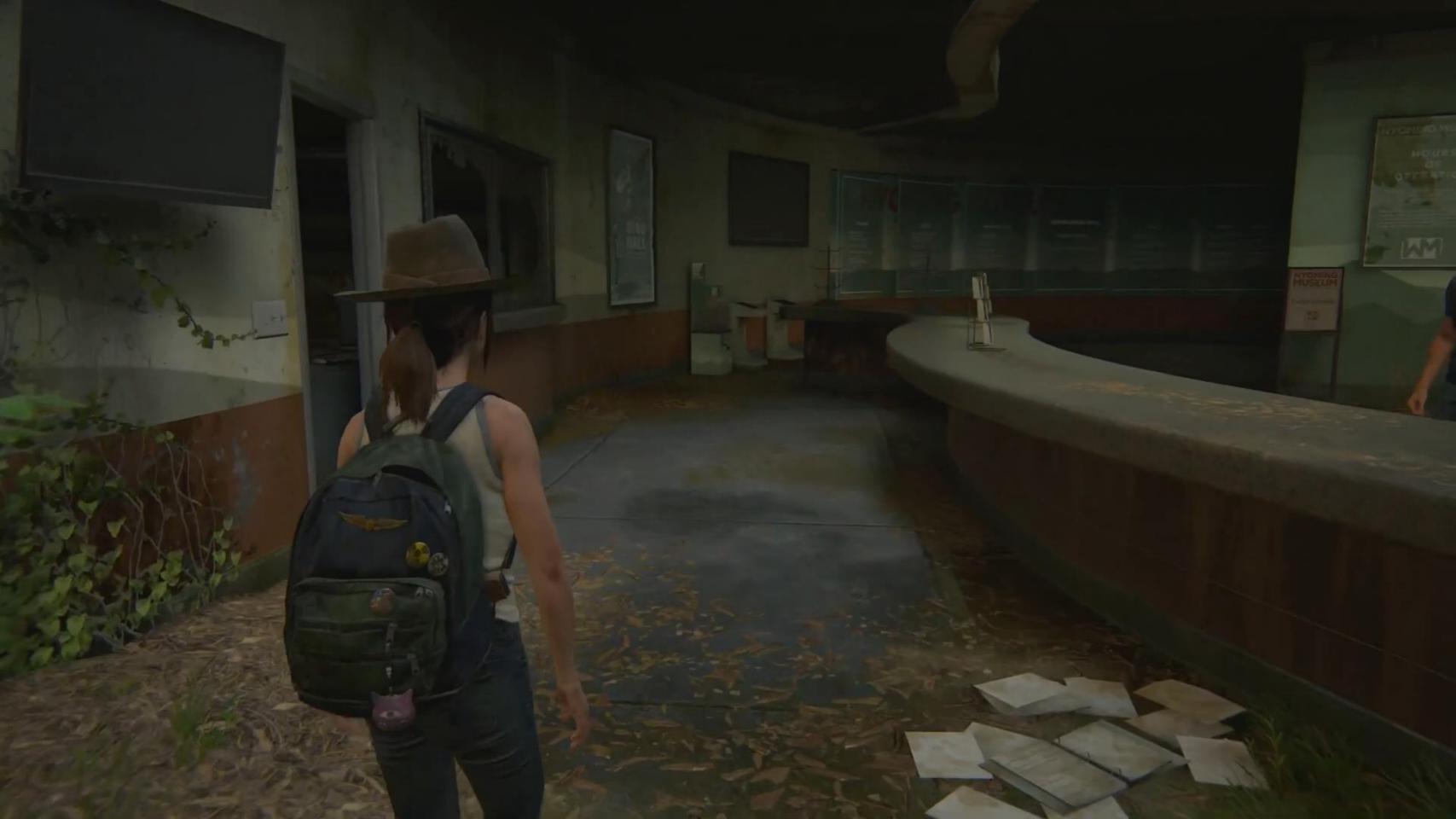
Roarr!

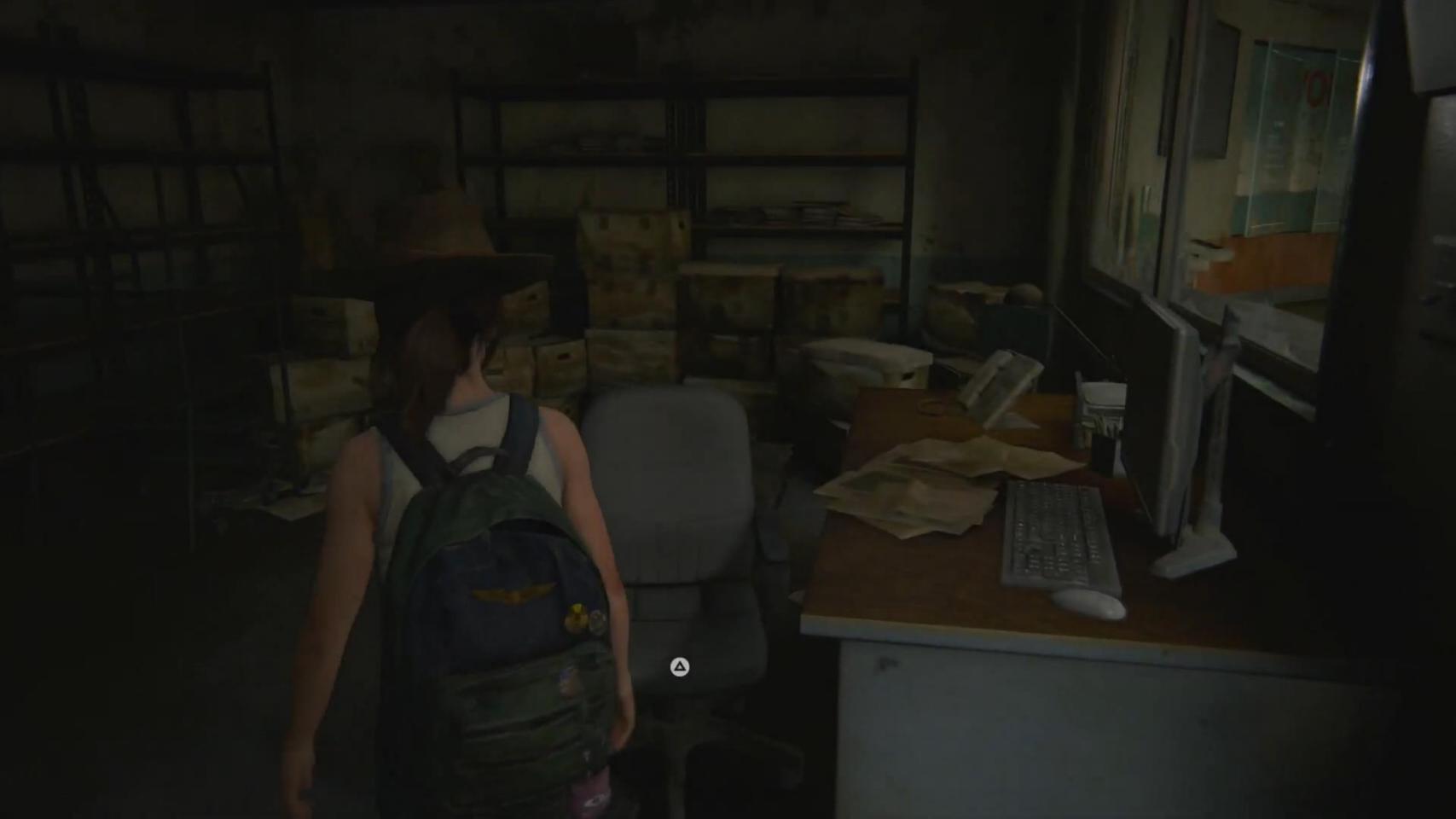




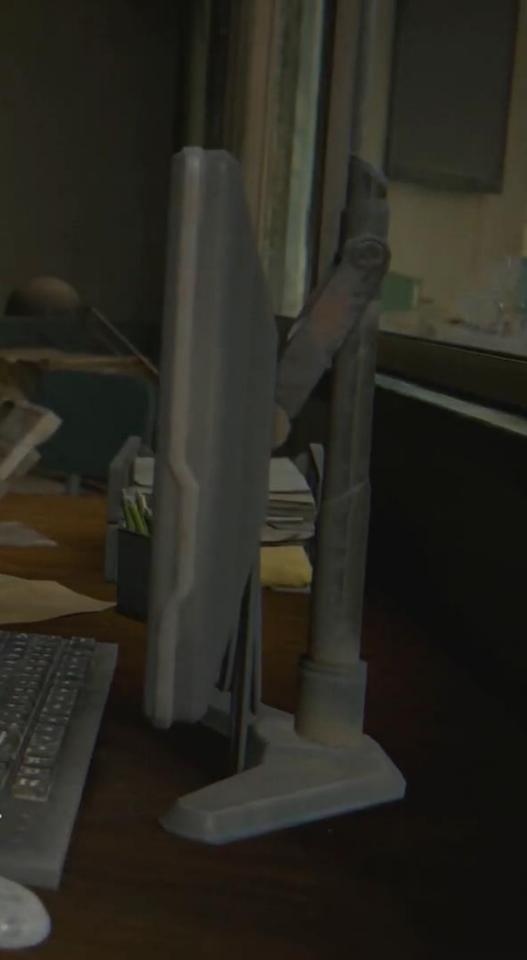
Your loss.







Oh, hello, sorry, the dinosaurs are busy right now.







Is this going to be a thing?





Trophy earned! Looks Good On You



Ra



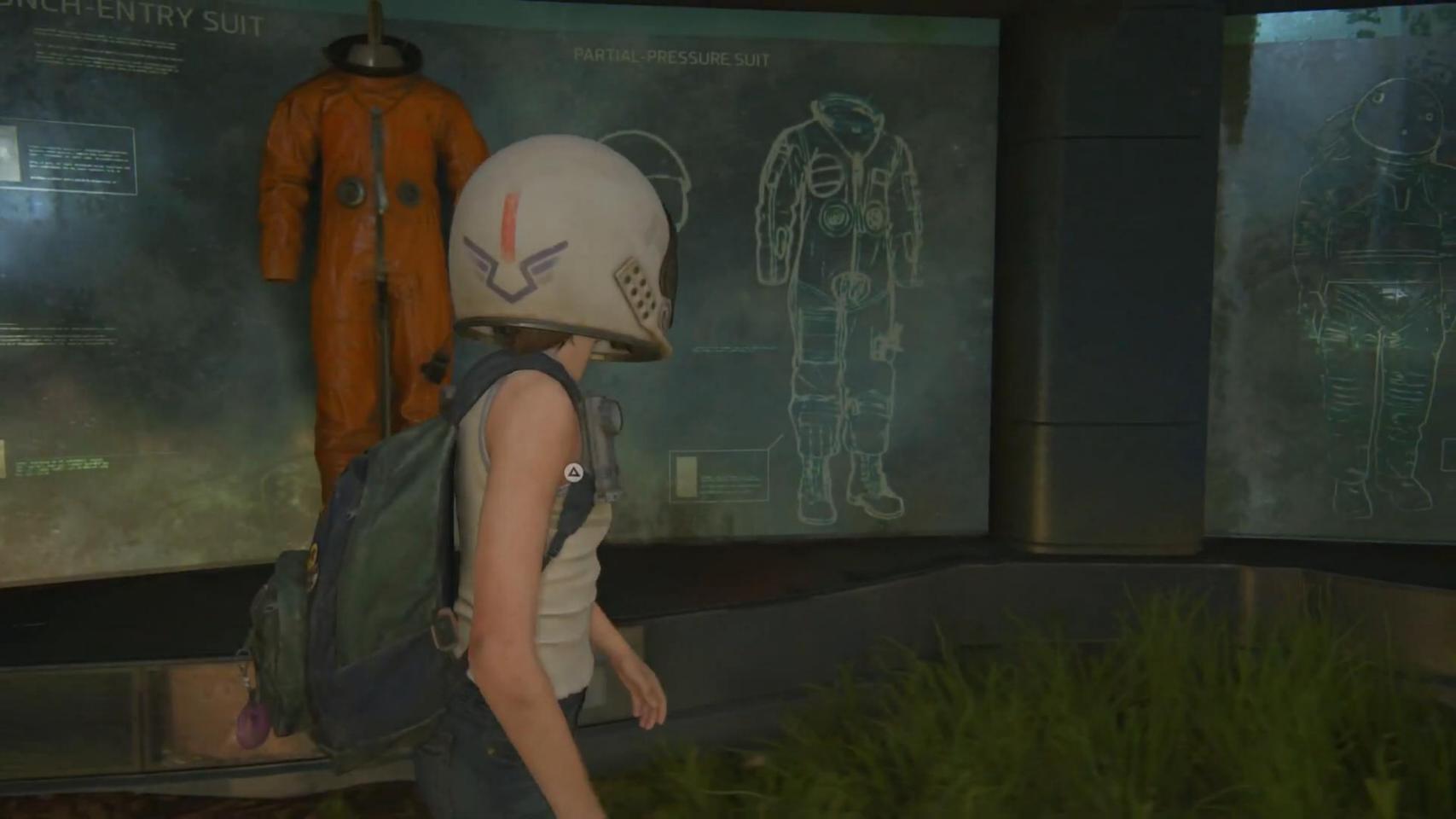




Uhh... did you just have a stroke?

MERCURY VENUSE





Astronauts report it feels good, T-minus twenty-five seconds.





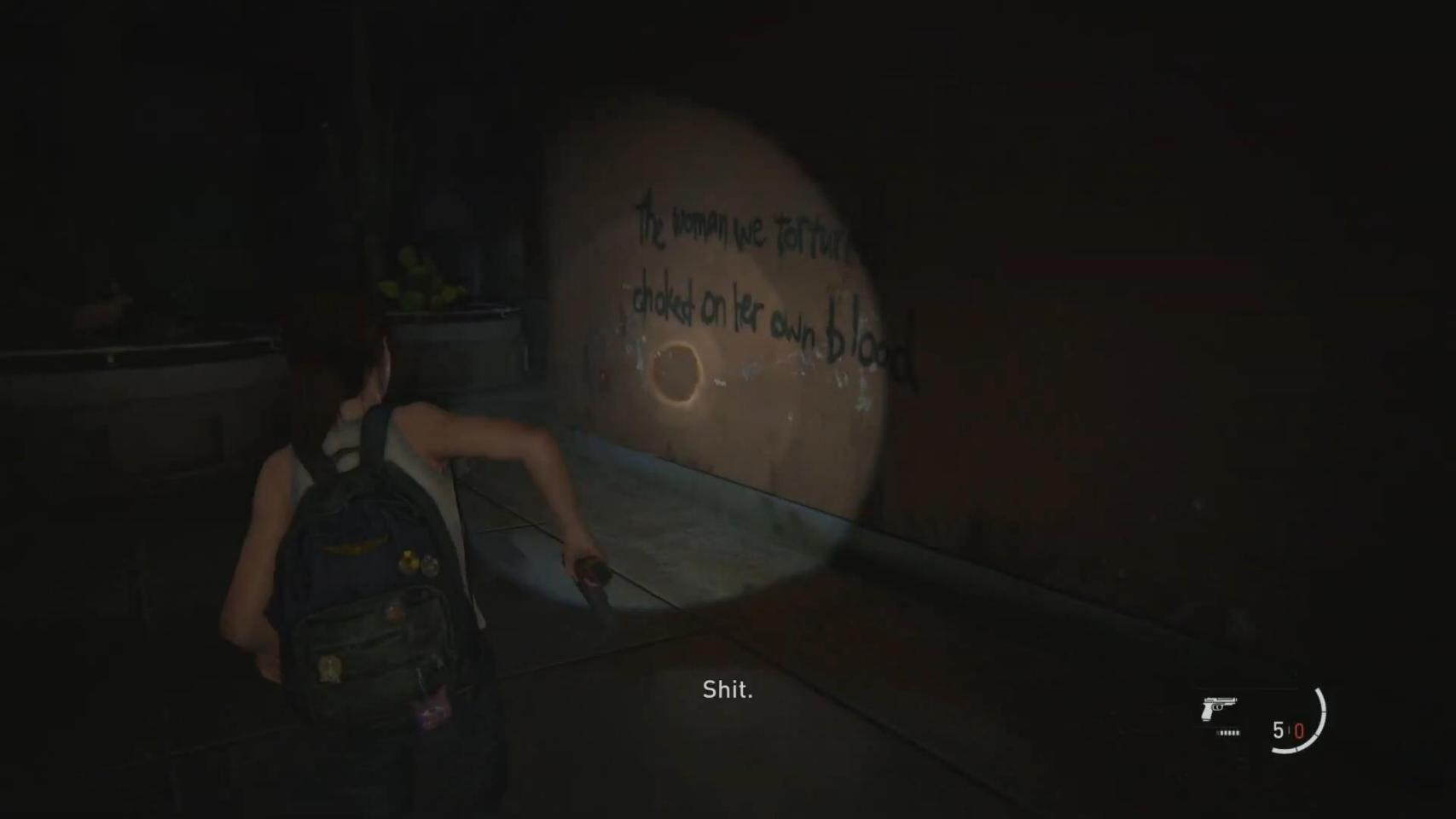
And just how do you plan on getting yourself over there?

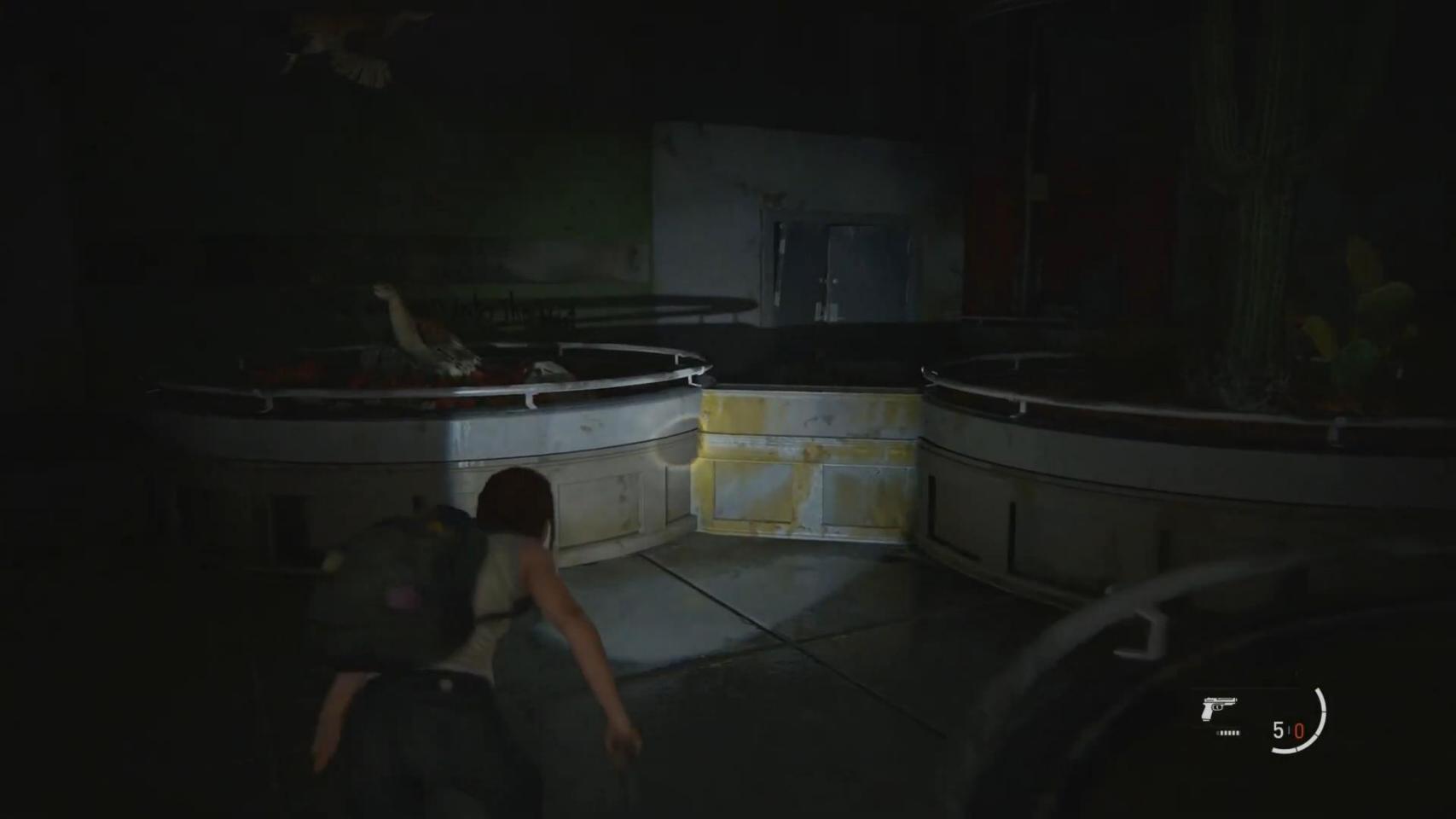
GM

) M











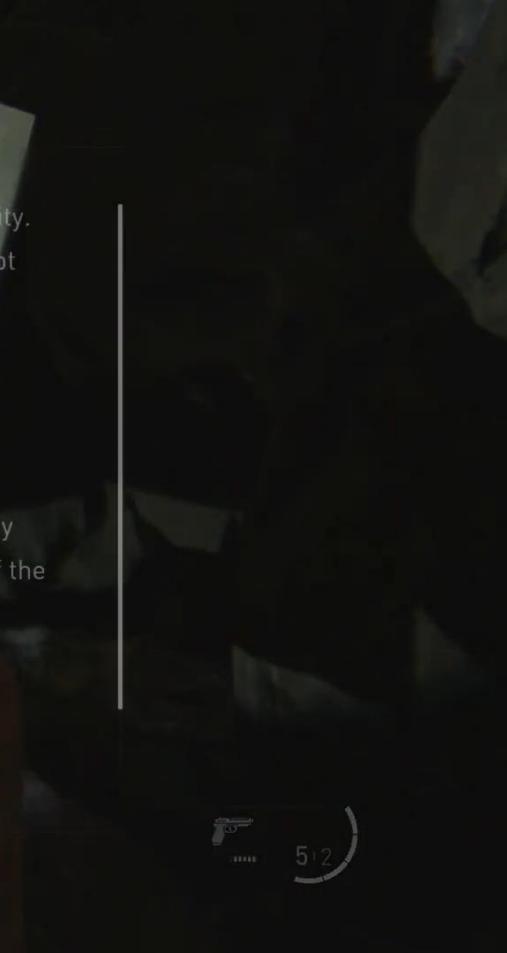
C Read O Put Away O Back We manual de

We wanted to end suffering. We wanted to restore humanity. Each time we sacrificed part of ourselves, our leaders kept saying, "it'll be worth it."

Now we've disbanded. With nothing to show for our sins.

I thought coming here might reignite something. Some purpose. My parents loved bringing me here. It's one of my earliest memories from before the outbreak. Before all of the cruelty and savagery.

Those memories just made me angrier.



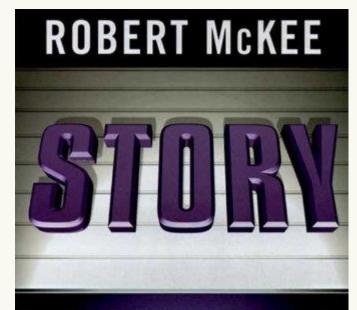
Track 4 - Gameplay

The Player is an Actor Cast as Ellie





Track 4 - Gameplay



SUBSTANCE, STRUCTURE, STYLE, AND THE PRINCIPLES OF SCREENWRITING

AWARD-WINNING METHODS FROM HOLLYWOOD'S MASIER OF THE CRAFT

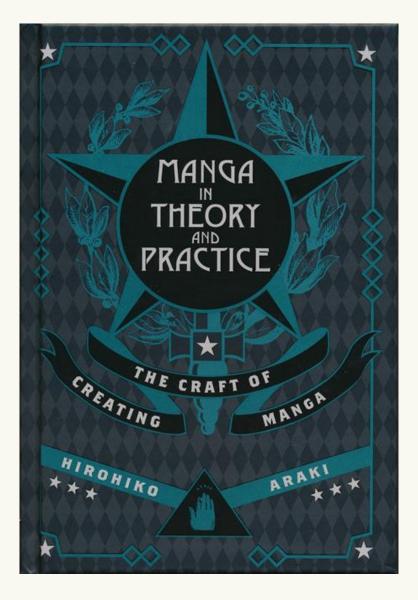
DIRECTING ACTORS

Creating Memorable

Performances for

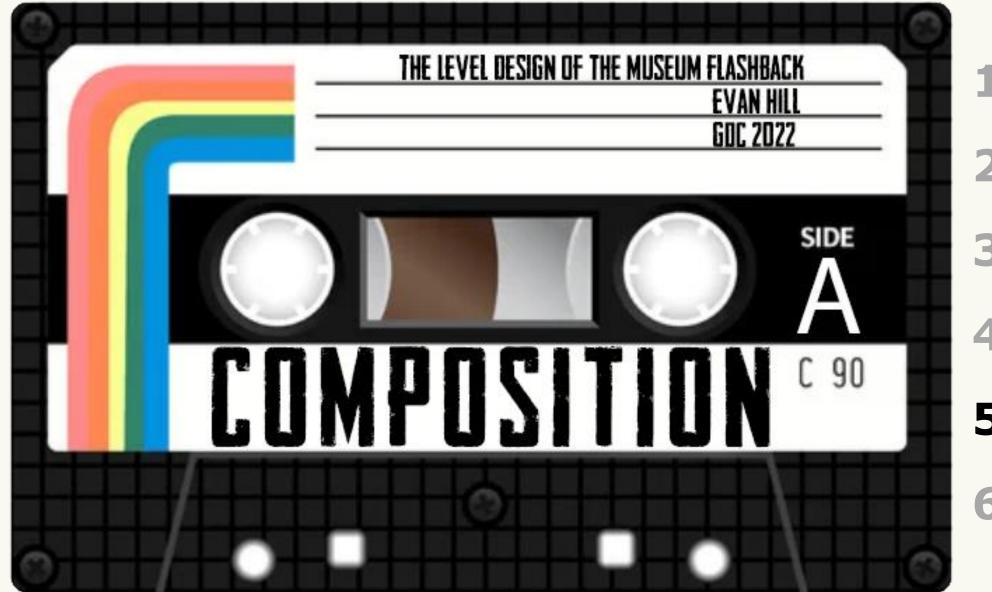
Film and Television

> BY JUDITH WESTON





Side A - Composition



5. Space



1. Everything is story 2. Goals & Acts 3. Characters 4. Gameplay 6. Pacing & Process



Space informs the player of Direction and Mood



It lets them perform Without a script



Clear Information

- Much more than paint the path forward yellow
- Too much information can be bad



Variety

- Aesthetics
- Verticality
- Traversal and Interaction
- Bonus: Memorability of information



Track 5 - Space Mood and Impact

- Impression
- Immersion
- Emotionally focused



I'm gonna start guessing.



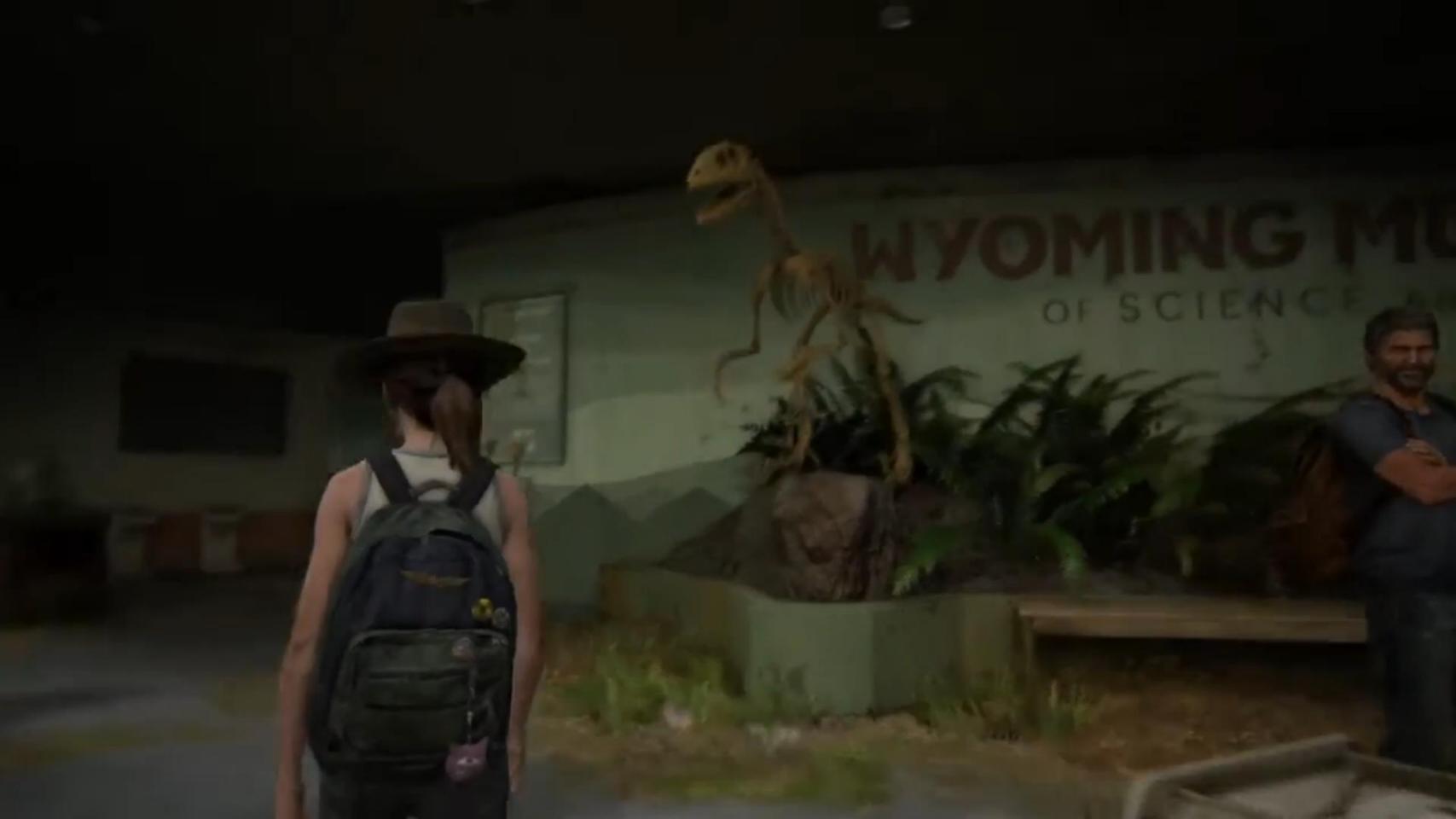


But like... is it a massive comic book collection... no, wait... a new DVD collection?

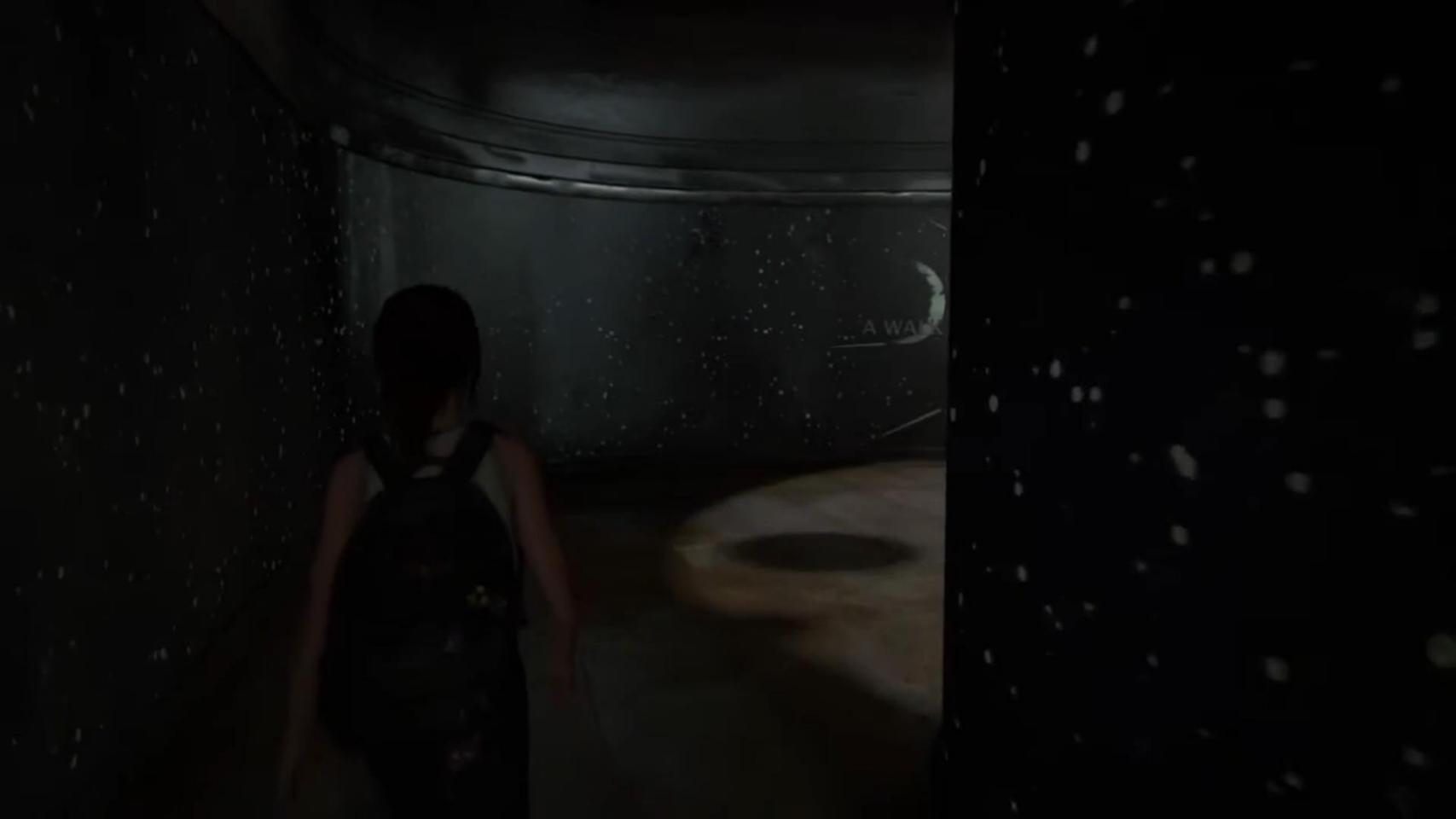














Bwwooh, bwwooh, bwwooh!





And just how do you plan on getting yourself over there?

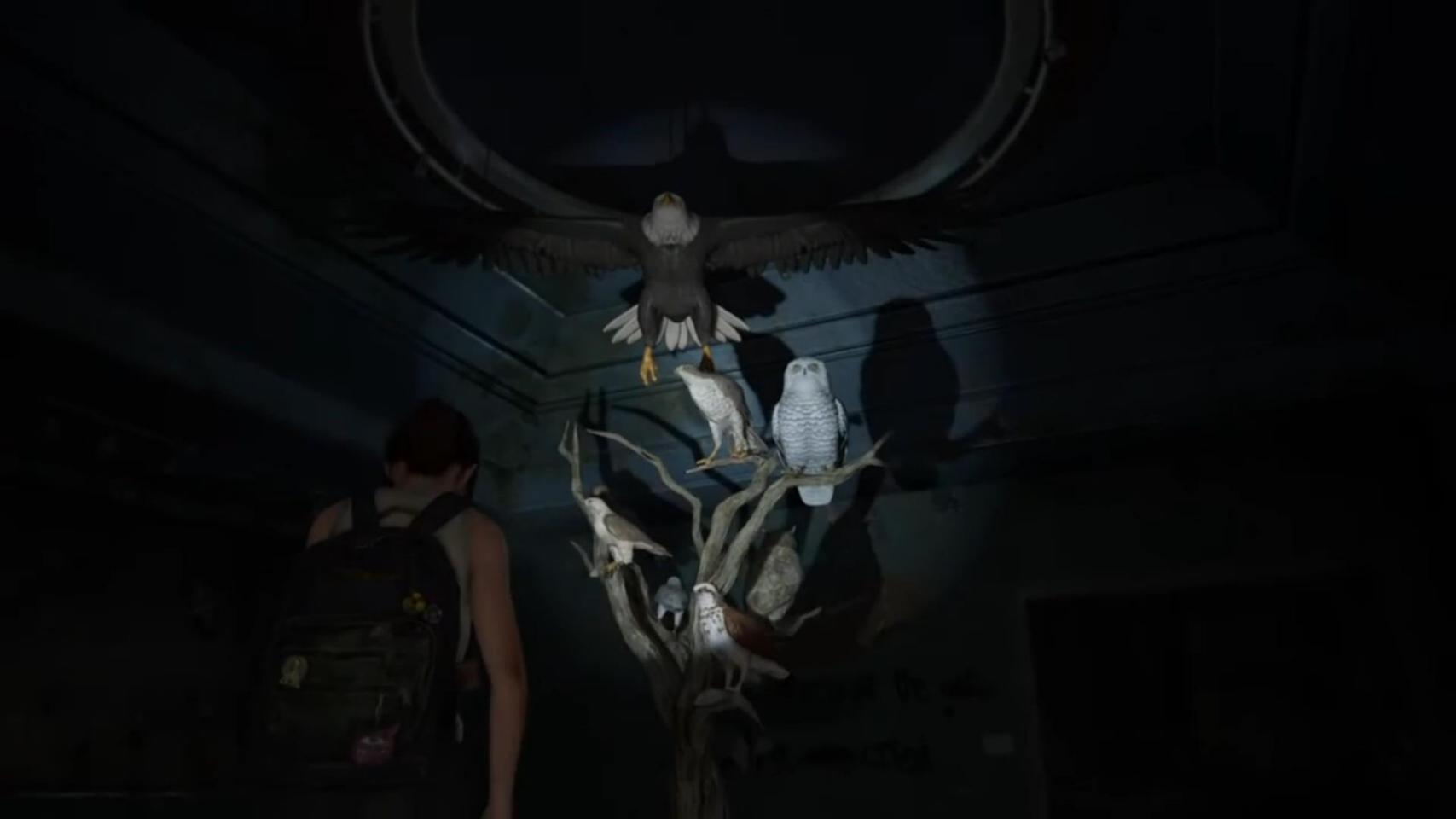
GM

) M



I'll open the door for you.













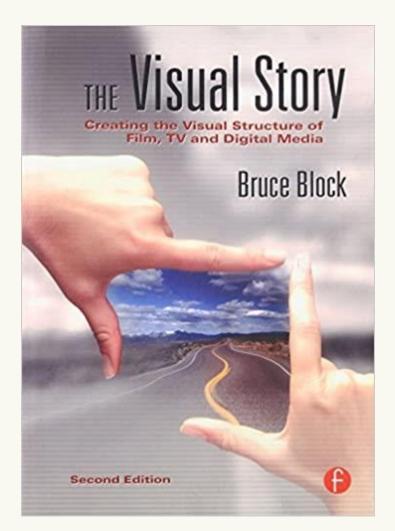


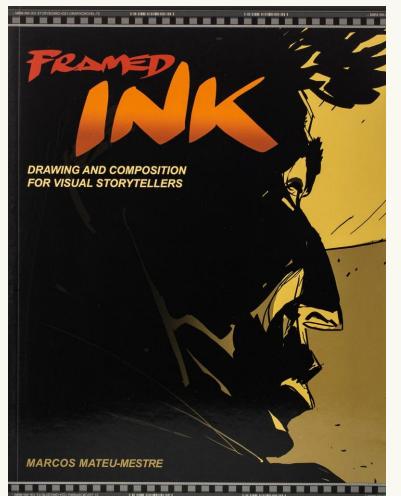
The hell was that?

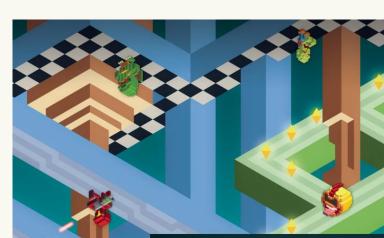


It lets them perform Without a script





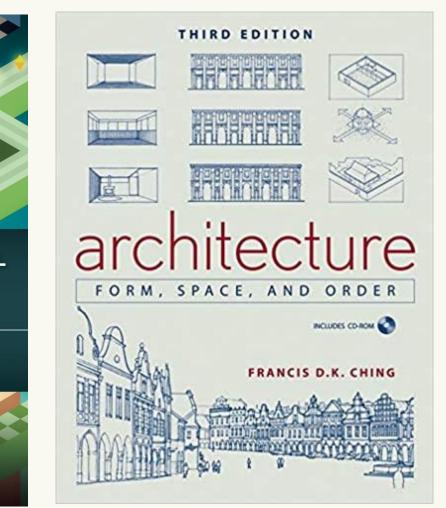




AN ARCHITECTURAL APPROACH TO LEVEL DESIGN

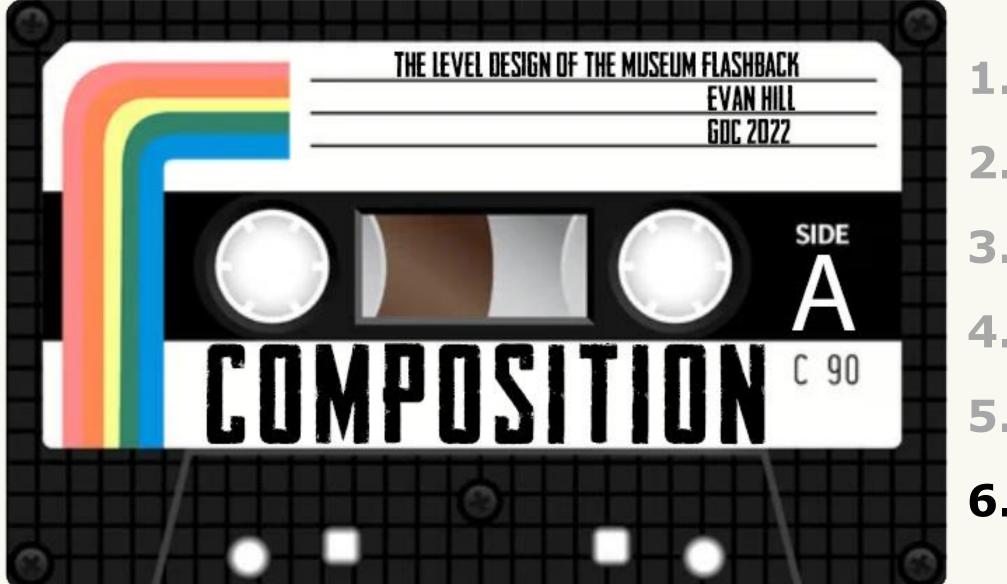
CHRISTOPHER W. TOTTEN

CRC Press Taylor & Francis Group





Side A - Composition



5. Space



1. Everything is story 2. Goals & Acts 3. Characters 4. Gameplay 6. Pacing & Process



How do you find the right rhythm?





Track 1 - Where and Why

Player Tuned Experience

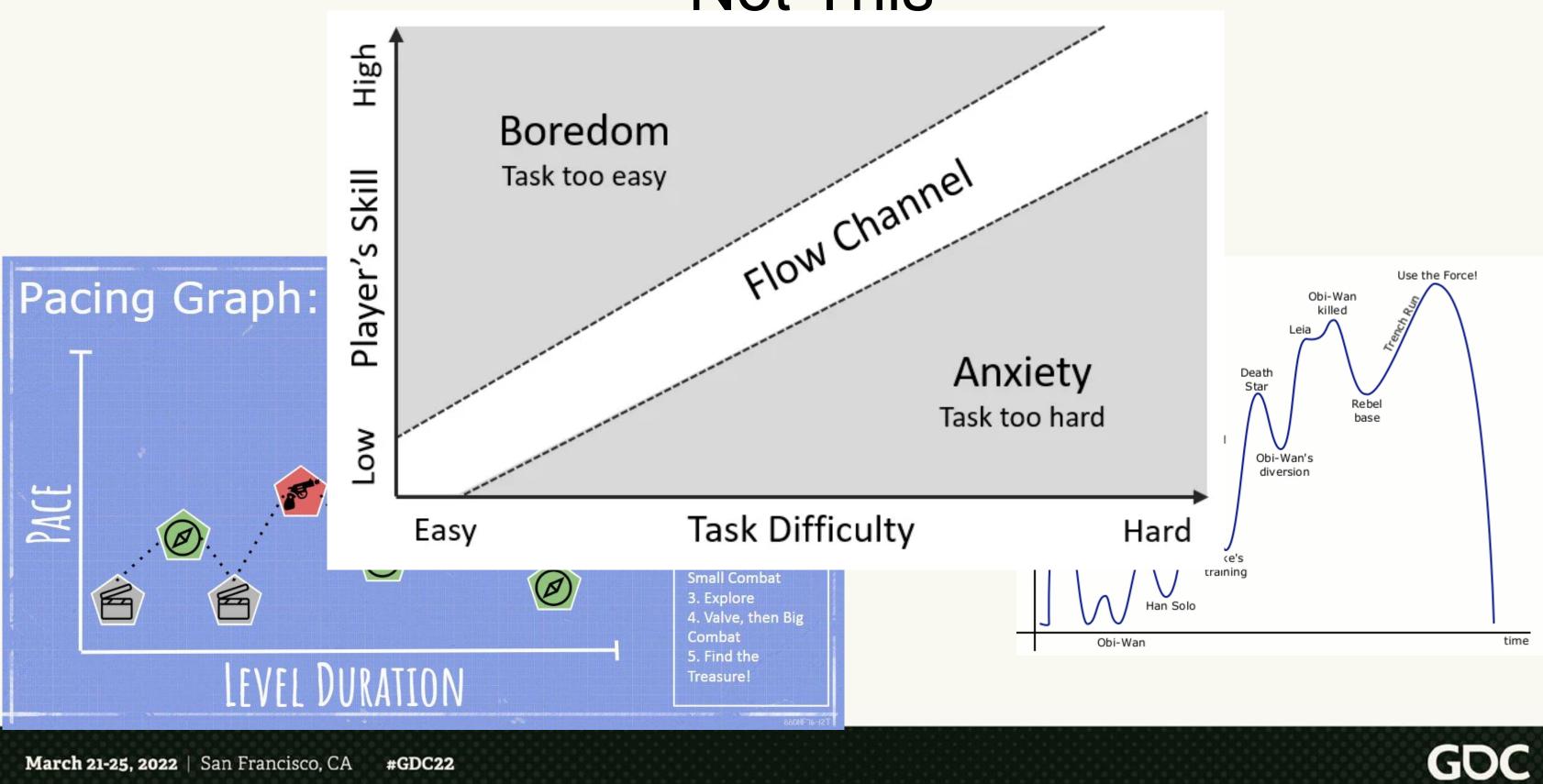


This





Not This



I could do an entire talk on pacing design





AND I DID







Its was yesterday, sorry



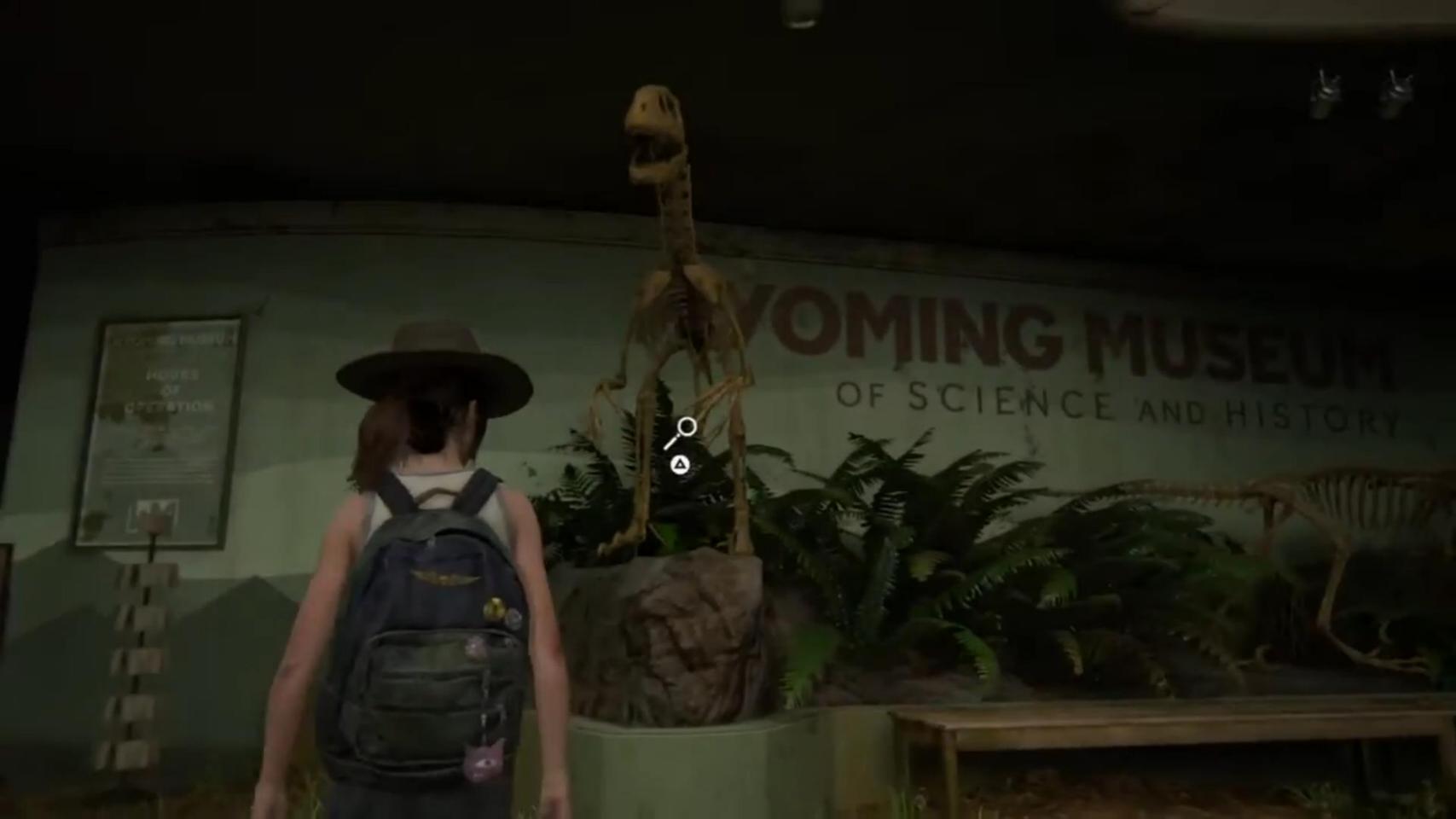


Short Version

- Reward the people who want to linger
- Enable the people that want to rush
- Gave the Player clear Options







Whoa. Look at those talons.

1





Short Version

- Reward the people who want to linger
- Enable the people that want to rush
- Gave the Player clear Options
- Surprise them in the follow through







Trophy earned! Looks Good On You



Ra



I see the appeal.



Living Process





Expect to get it wrong Reflect Keep trying anyway











How do you deal with the struggle of re-doing things?



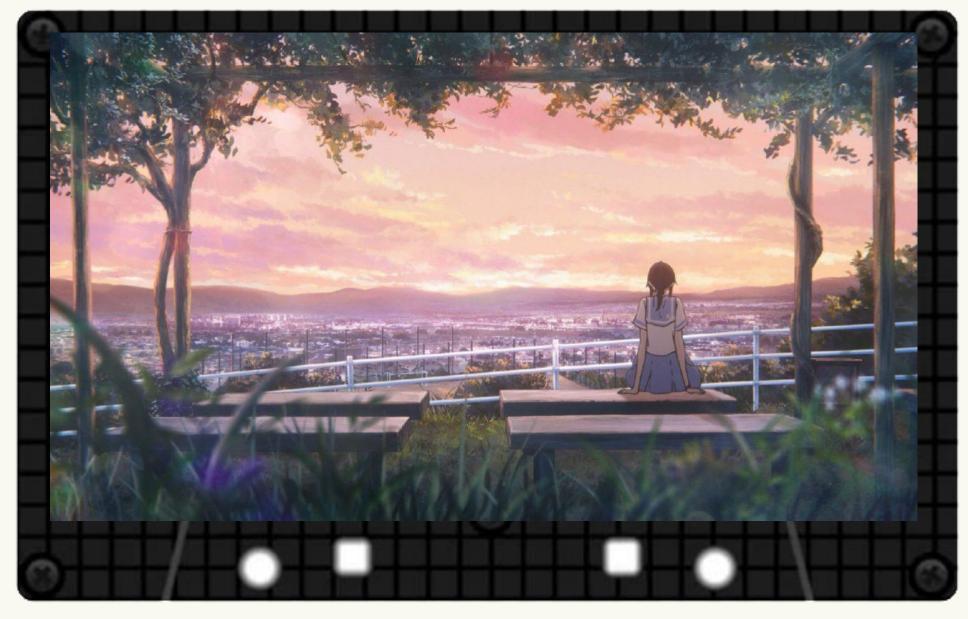


Look for Inspiration





Side A - Composition



4. Game 5. Space

1. Everything is story 2. Go & Beats 3. Characters 6. Pacing & Pr 7. Naoko Yamada





Kyoto Animation

March 21-25, 2022 | San Francisco, CA #GDC22

Liz and the Blue Bird





A Silent Voice

Naoko Yamada × Reiko Yoshida × Futoshi Nishiya

October 20, 2017



The Heike Story

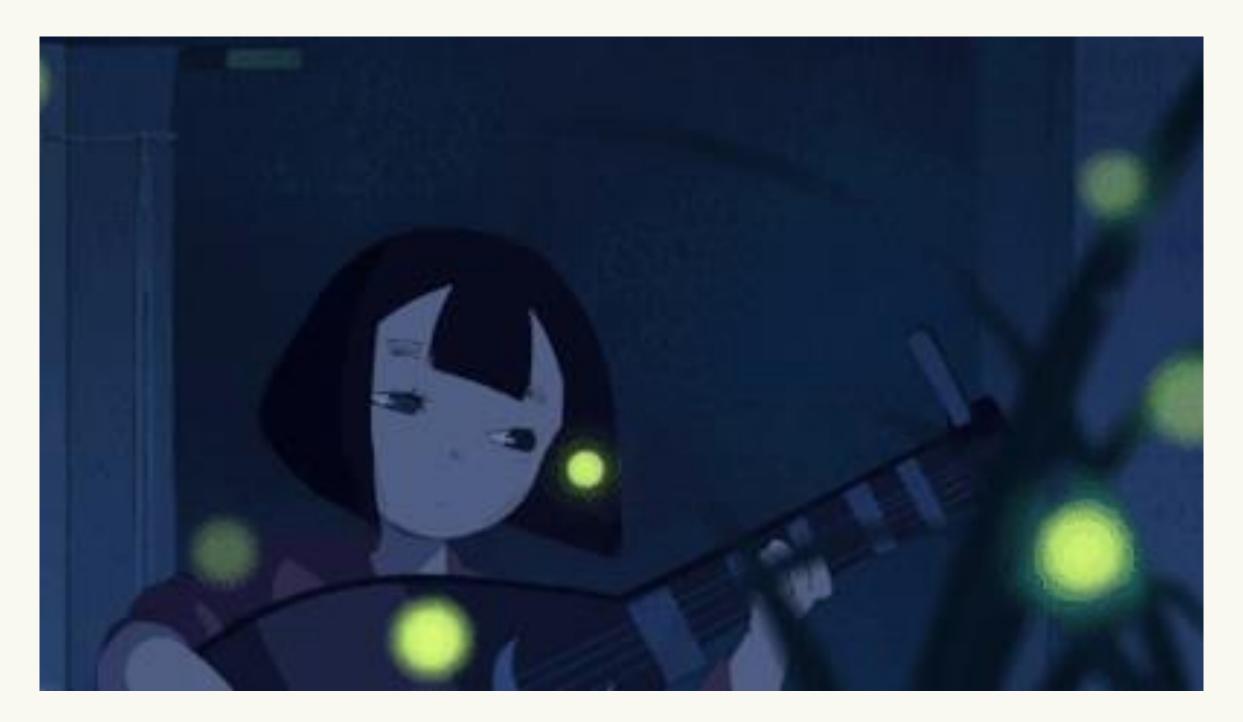




A Master Of Character and **Body Language**







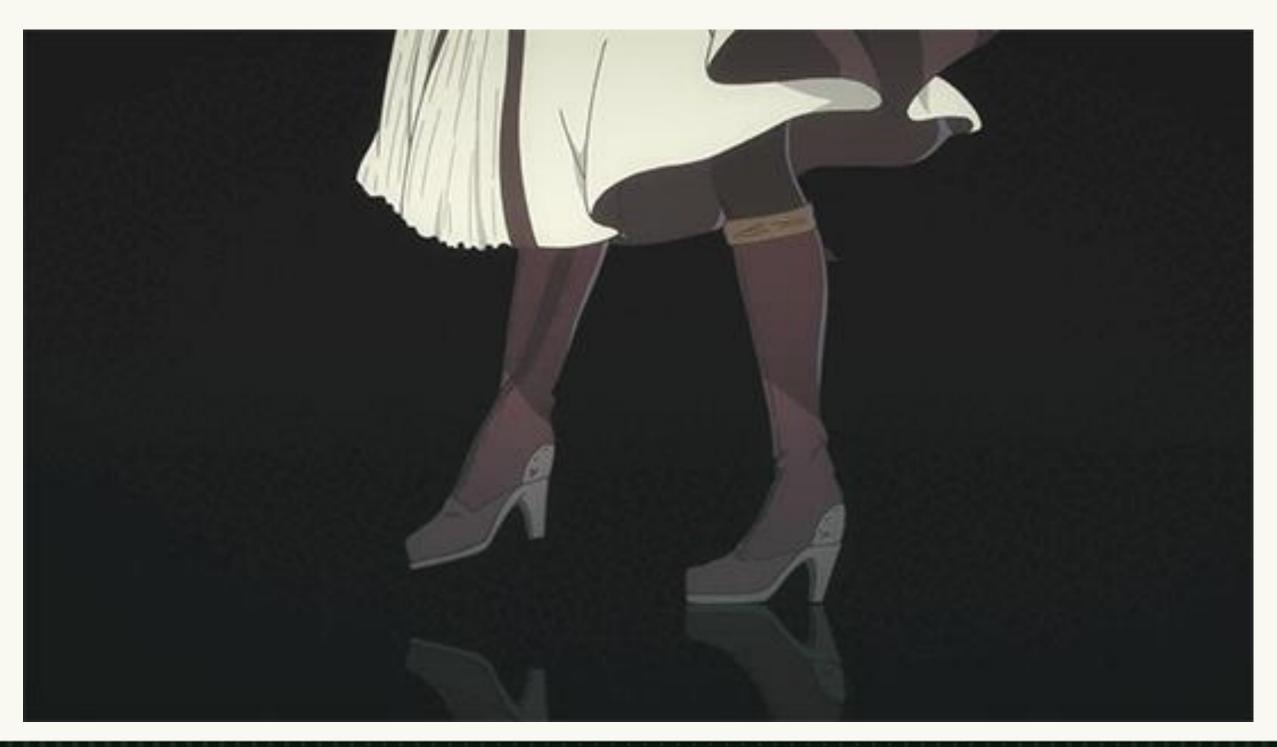




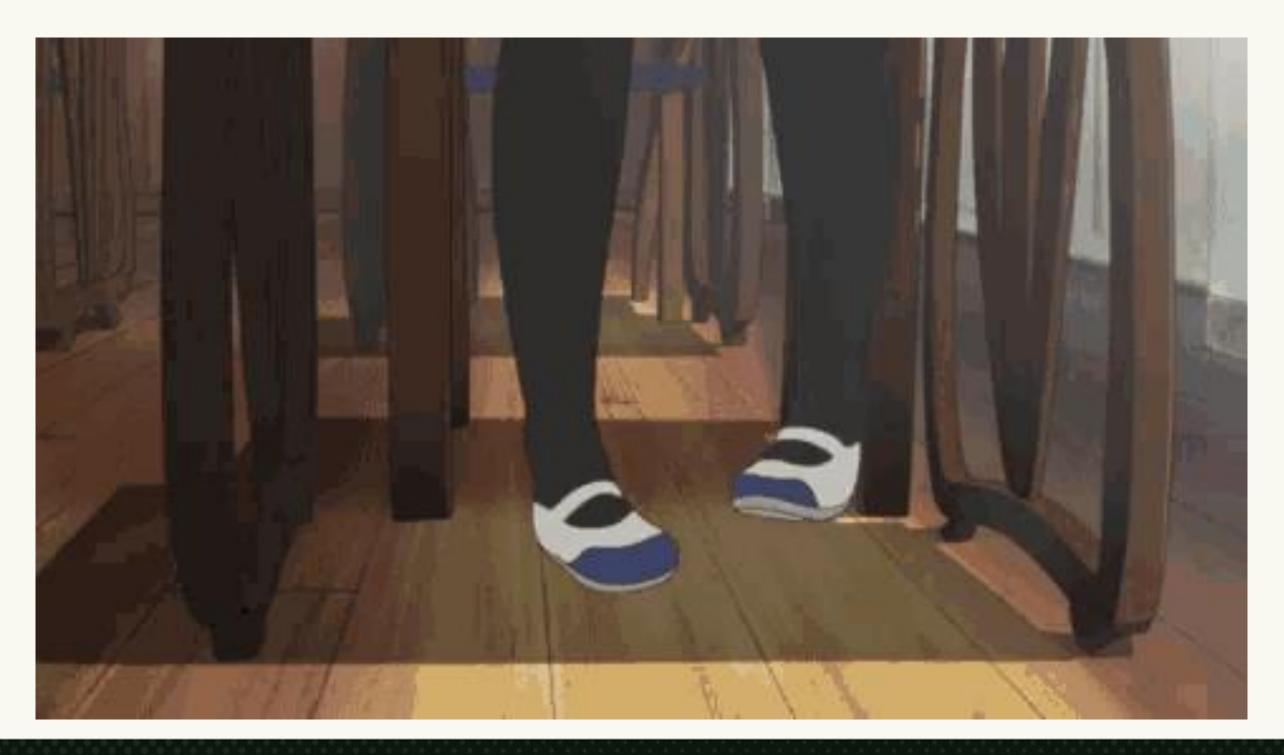














Makes the Mundane Spectacular























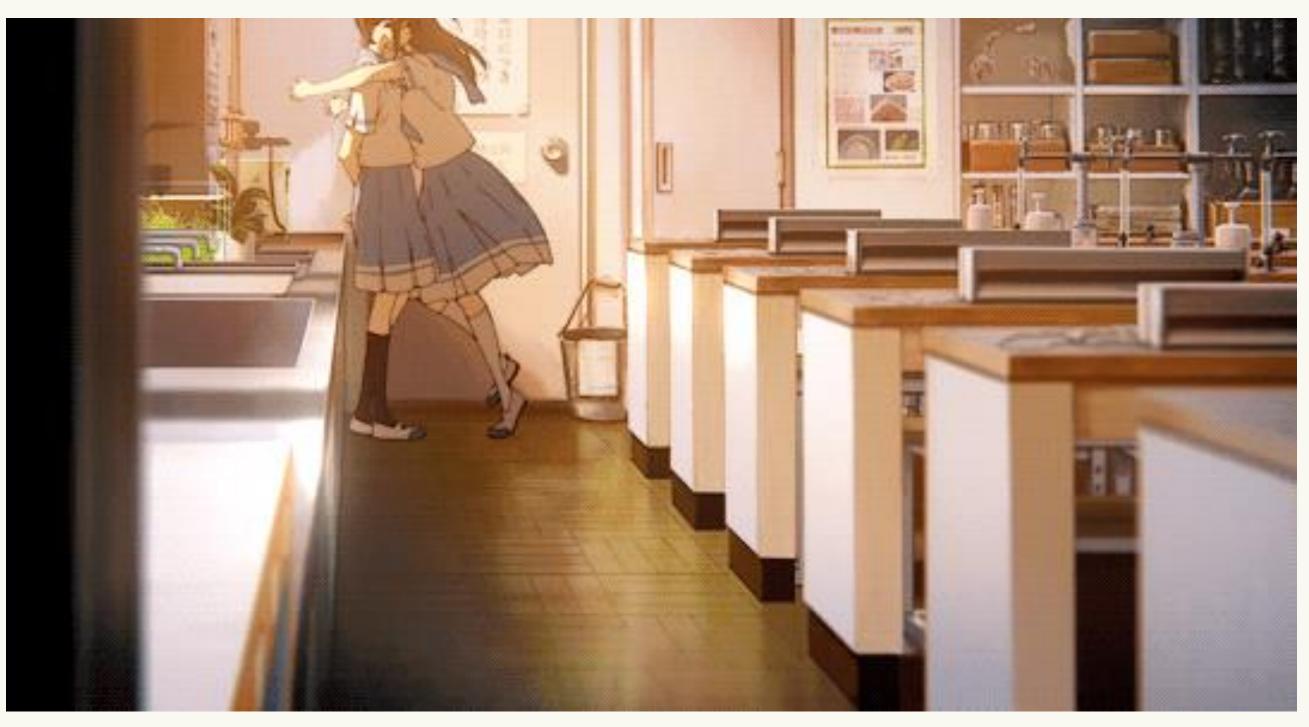
Will Emotionally **DESTORY YOU**















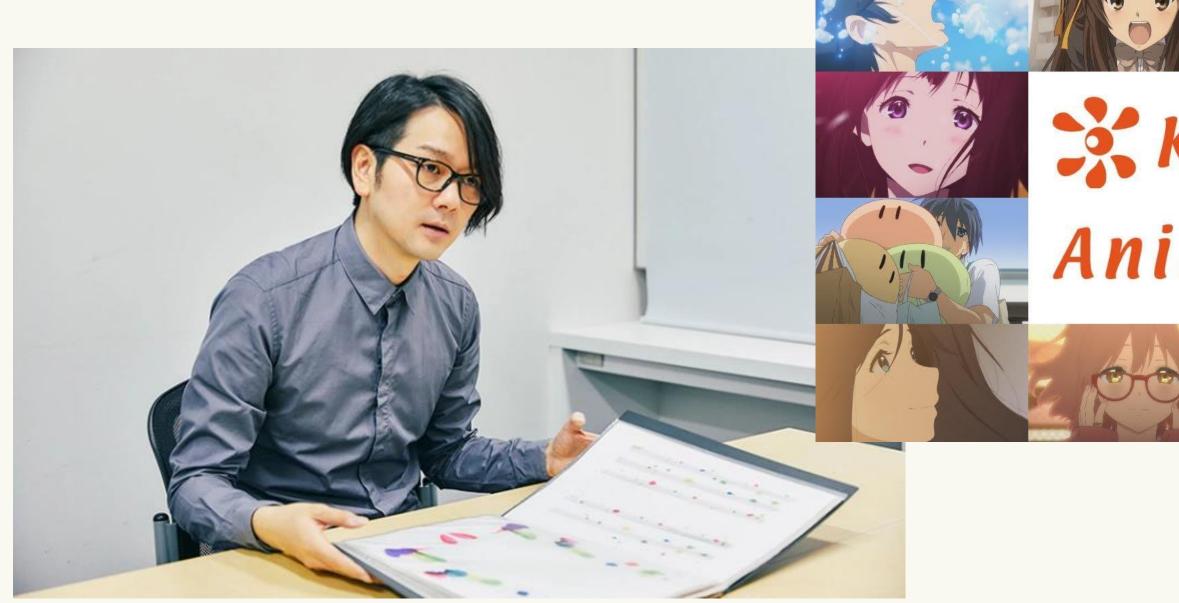






Brings out the best in other Great Artists





March 21-25, 2022 | San Francisco, CA #GDC22

Kyoto Animation







Her Favorite Director

Is my other Favorite Director



JODOROSKY

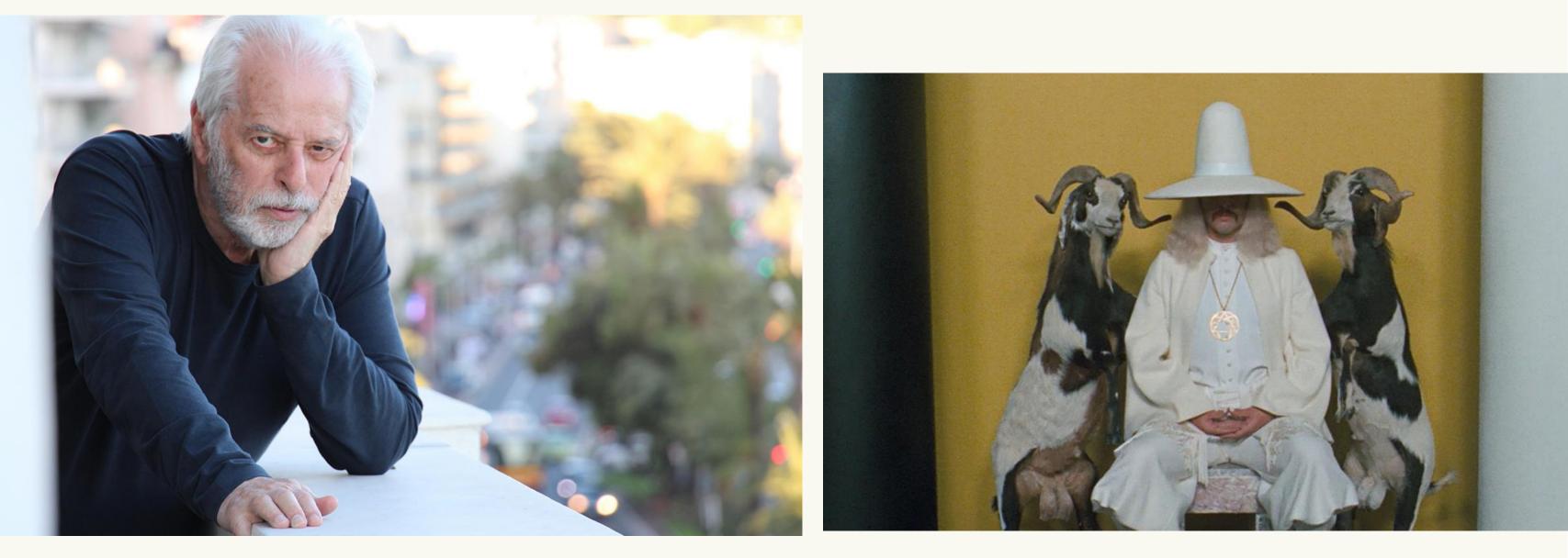




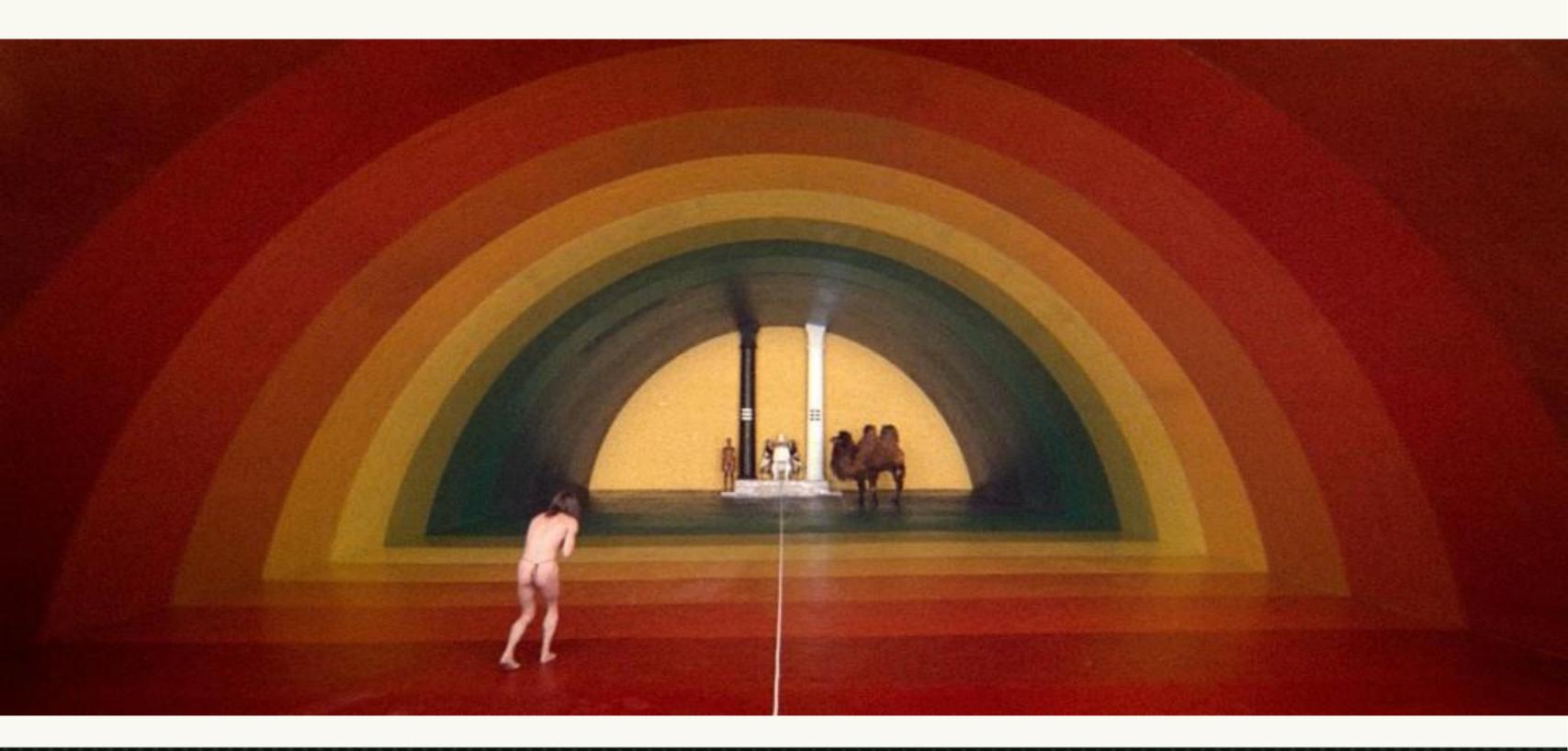




ALSO JODOROSKY









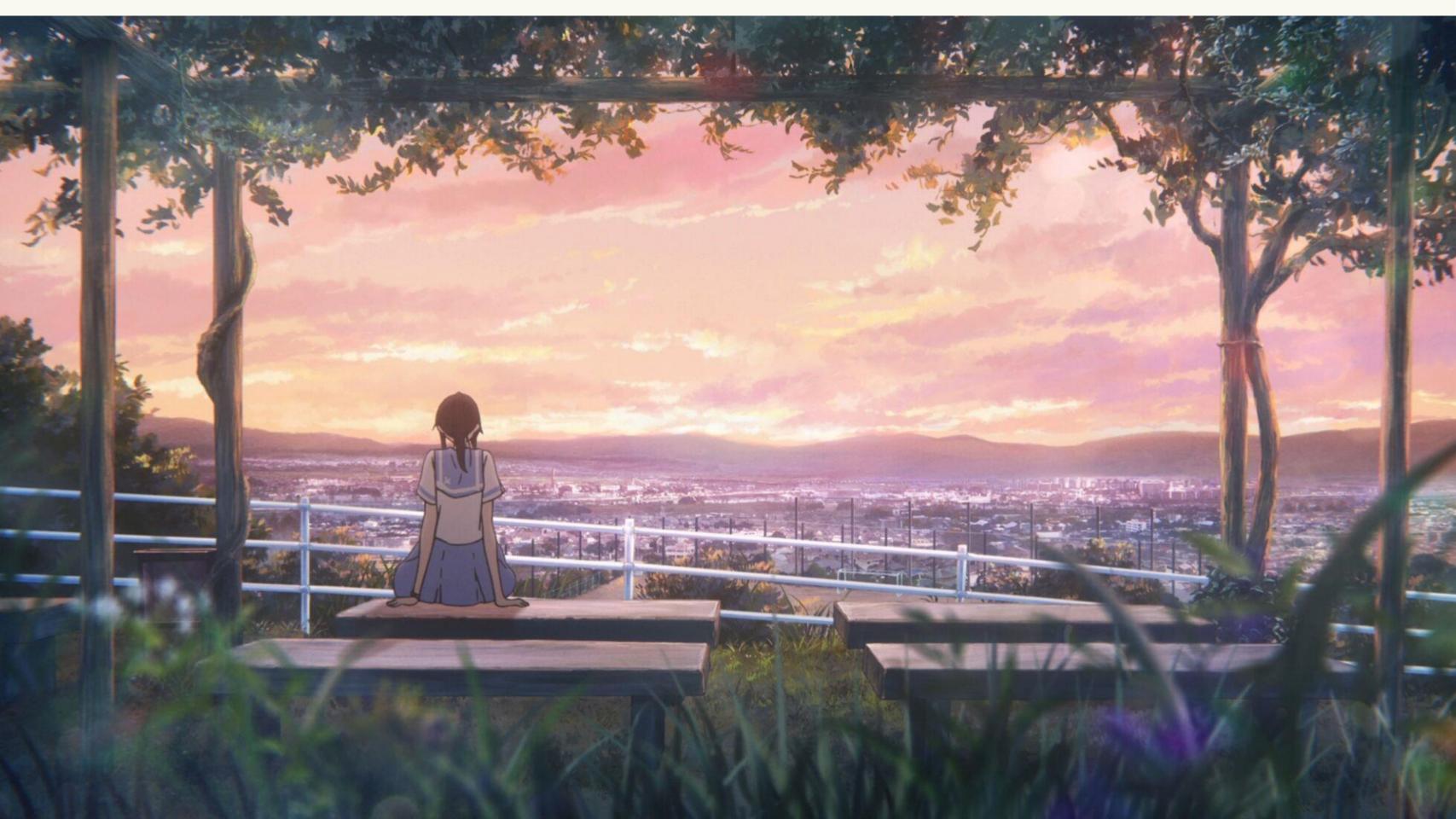




Two Minutes are Up!

March 21-25, 2022 | San Francisco, CA #GDC22

GDC





A Silent Voice

Naoko Yamada × Reiko Yoshida × Futoshi Nishiya

October 20, 2017



The Heike Story





The How Do



Side B - Production





1.Team & Timelines 2. Playable Storyboard 3. Alpha & Playtesting **4. Full Production** 5. Lock & Polish



Side B - Production





1.Team & Timelines 2. Playable Storyboard 3. Alpha & Playtesting **4. Full Production** 5.Lock & Polish



My role

- Official Title: Level Designer
 - First designer on the ground
 - Created layouts and Prototypes
 - Coordinated teams at each stage
 - Owned levels

es age



Teams

- Start Just the LD and Lead
- Prototype 4-6 person strike team
- Alpha and playtesting slow ramp
- Full production all hands on deck





Overview of timelines

 3-5 levels pers Level designer woven over ~2 years



Side B - Production





1.Team & Timelines 2. Playable Storyboard 3. Alpha & Playtesting **4. Full Production** 5.Lock & Polish



Breaking the story

- Read the pitch
- Sit down with the writers and 1 design lead
- Brainstorm
- Break of with design lead and plan first pass
- (1-2 days or less)

esign lead h first pass



3d first design / storyboarding

- Jump straight into Maya
- Get blockmesh in engine
- The Fastest way to test an idea
- Assume they will be thrown away







im still losing my mind at the storyboard for knives out









Ellie: Oh my god, it is a dinosaur!





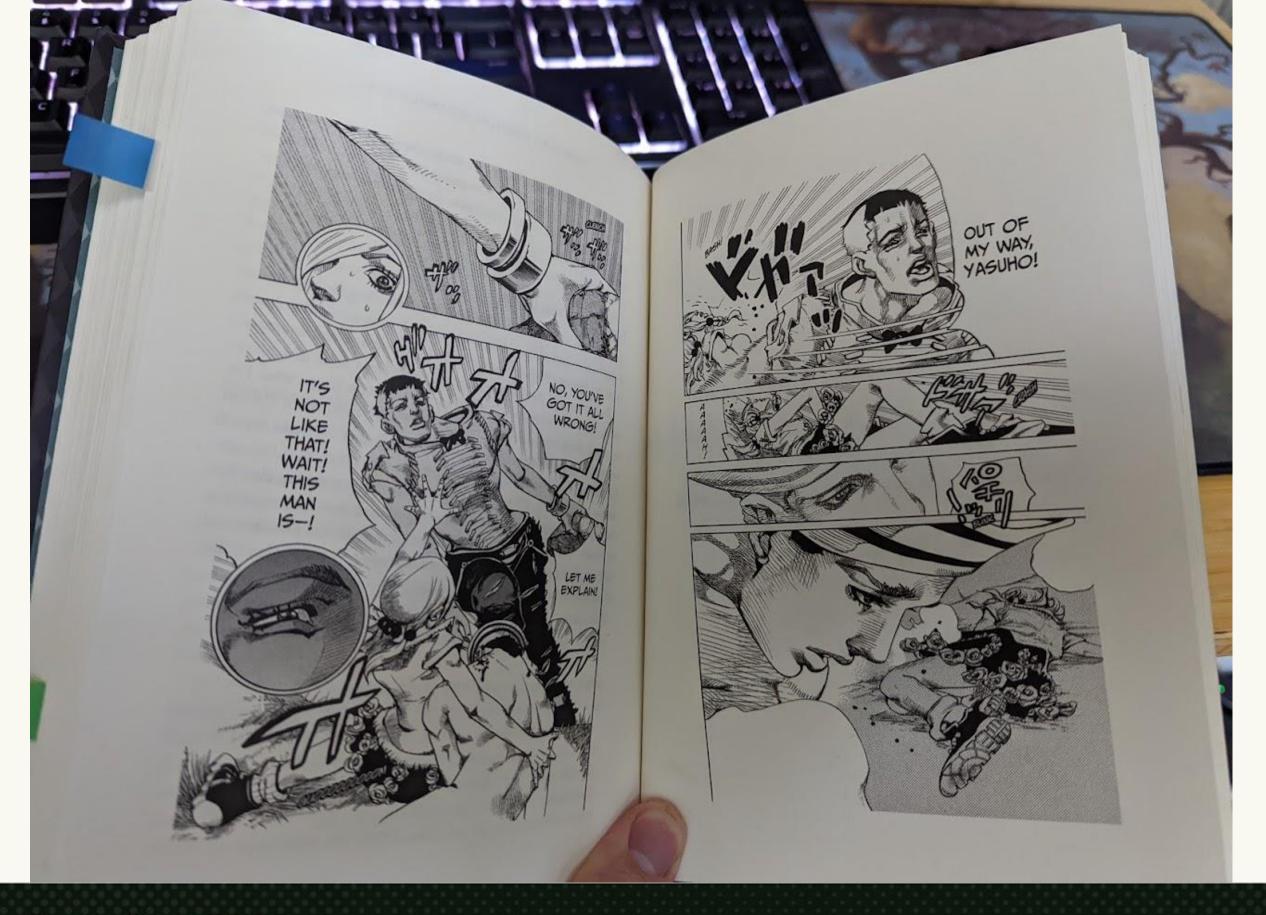








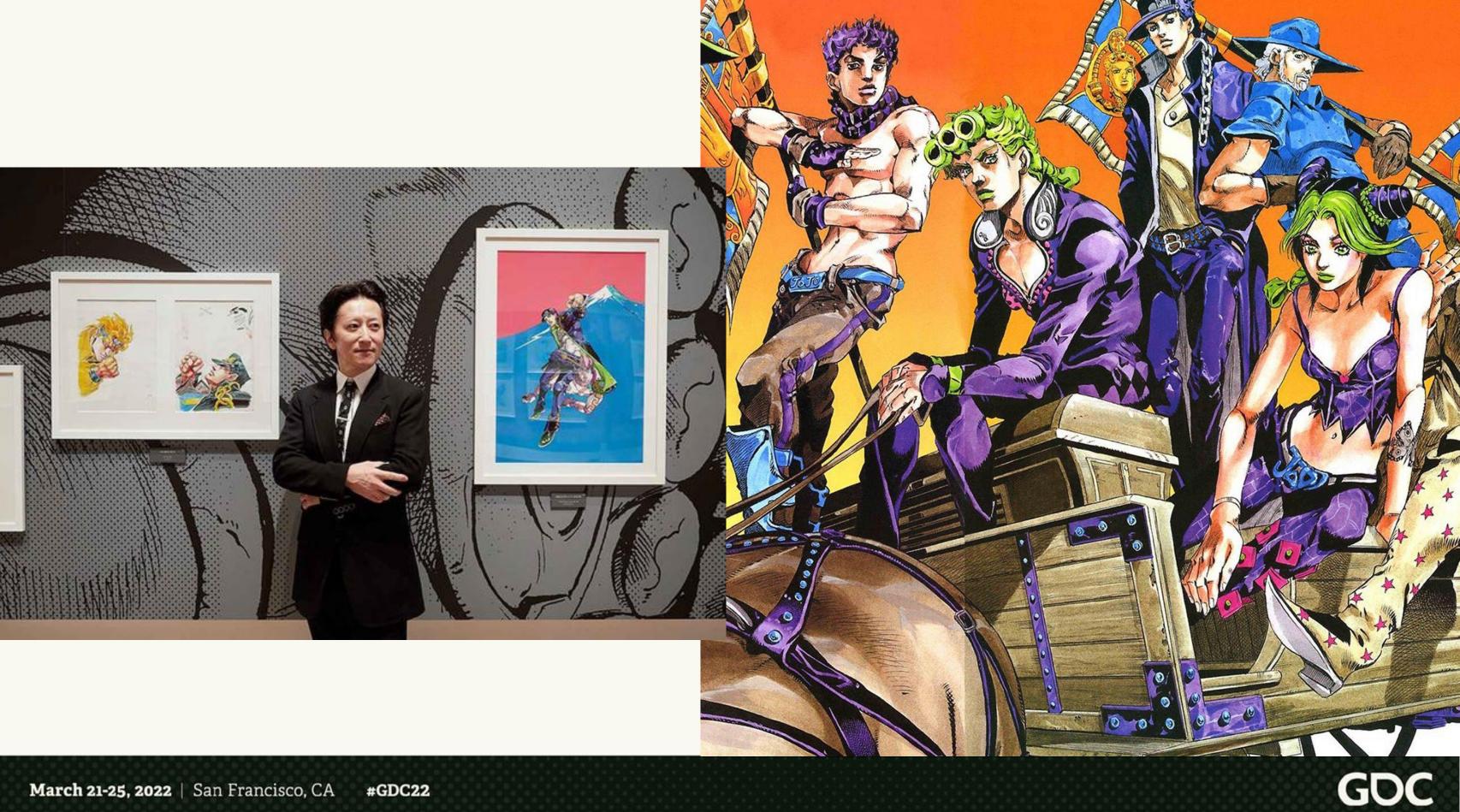












First pitches and improvisation

- Walk through block mesh with leads
- Fill in gaps of animation and dialog with personal performance
 - (ex-Theater Kids)





First pitches and improvisation

[FOOTAGE NOT FOUND]

March 21-25, 2022 | San Francisco, CA #GDC22

GDC

What are you doing?



Is this going to be a thing?



First pitches and improvisation

- Walk through block mesh with leads
- Fill in gaps of animation and dialog with personal performance
 - (ex-TheaterKids)
- Talk about what sucked and what worked
- Throw it out and do it again!



This is a talk about Level Design AND THE POWER OF





Rework until it clicks

- Spend several weeks iterating
 - 4-12 depending on complexity Total not per
- Start of from scratch if needed
- Let it grow and breathe to get a feel for it
- Try radically different flows, beats, and elements



Side B - Production





1.Team & Timelines 2. Playable Storyboard 3. Alpha & Playtesting **4. Full Production** 5.Lock & Polish



Playable Prototype

- Designer Playtests
- Assign Team for Alpha Development
- Work towards first playable







Playtesting Cycle

- Constant External Playtests
 - 10 people, full playthroughs
 - Recorded
 - Each Level Rated 1-5
 - Every 2-3 Weeks



Playtesting Cycle

- YOU WILL SEE HOW BAD YOUR LAYOUT **REALLY IS**
- Watch people get lost
- Not care
- Complain
- And be right





Playtesting Cycle

- 2-3 week iteration cycle
 - All changes must be playable
 - Lots of feedback to work with
 - Studio wide tempo



Dialing In

- More formal reviews with studio leads
- Refine features and scripting
- Prove out with playtest feedback



This is a talk about Level Design AND THE POWER OF





Rework

- Cuts, revisions, and additions
- Use the whole team for input
- Starting from scratch often limited to specific sections
 - "back to layout"



But what happens when it WORKS?



Locking Layout

Level is moved from "prototype" to "Alpha

Now the rest of the team can be brought on



Side B - Production





1.Team & Timelines 2. Playable Storyboard 3. Alpha & Playtesting **4. Full Production** 5.Lock & Polish



Ramping up

- Hand off to other departments
 - Audio, VFX, Mocap, Dialogue, Character, AI, Foreground, Tech Art, Art, Animation, Cinematics, QA, etc.
- Collaborate
- Feedback and direction
- Shift time to other levels and Scripting



Coordinating the team

- Scheduling Meetings
- Relaying Information
- Managing task load and deadlines



Reviews

- Director Note Videos
 - Multi hour recorded meetings, where every comment would be turned into a task
- Very rare to call for full reworks



Tools

- Face to face communication
- Legal Pads
- Skype for Business
- Email
- Jira



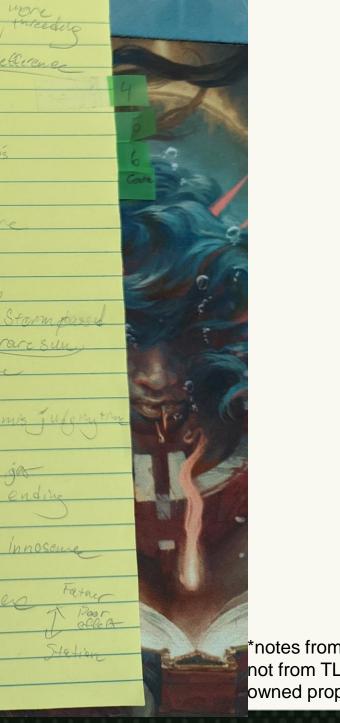






	SIEL
	Main -
k:	Cassis is toxing to avoid sleep
	well enticulation sets of Betwyel, will, todily contrice 4
	Mathews
	"Not Dreaming" & Kickass opening subter
0	a most too much s
Ð	Need ostabilisment of place Studion tice
	remark on featuree of Building
	establish disaray - Spark merry christings
	while tearing dave lights
Sha	Cassis on hour 75 - 3
	String lights > Structural risk
(2)k'	looking for Kid -> Braver Lap
1-2) Sho	Traps -> patient -> More dissarray
¢	Focus on the poor a bit in direction
Sha	1 11 acla carting > > 11 Proke Threadh 100
	Witness - Calm Vs Cass - Concern/curiosity
	Ly witness wind first
\$ 510	74 nours (intentional?)
7 20	Cass à nightmorez
	C- Carlotto Care V Dit
T	Found him -> Can't talk while slep deprind
Ten	
o lent	ters as s to many the proster abreak on (a
Ketsu ?	preverts loan sour and s
	Corplater -> caring for Cags -> tension nachel 5
Ri	Ten hours to stay awake before Mat
	A A A A A A A A A A A A A A A A A A A
Sho	Cass -> Cottle - Microsley Checkon Someth

52-4 Ki - Matt Large trip - Butterfly velterence 4 L hints at plue bird attack More on the conflict of Vii/Louis 0 9 trouble communicative Door reveal so 7.6 0 Same interaction from love, gestur refusin oradismise More motivation for Character roter hores, Shared problem, weather I Storm to Call out in Catatoria Z rare sus Tere since of time weeks, 0 Otherraport with Matthews tonsion in timine sil agai a all mit water from the Punela on on door a bit clearce Thread child head mental 0 wounds, vit ass! & the pinding of see \$ 6 abuse / Fatalism Determenance/ 5



*notes from a personal project not from TLOU2 or any Sony owned property



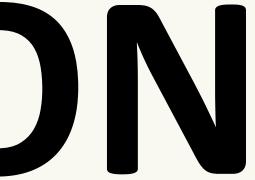
Gold Fibre 12 on 2 nosis Men 5VQD a SCOVED 20112 ac ssind Contra Intergran

March 21-25, 2022 | San Franciso

*notes from a personal project not from TLOU2 or any Sony owned property



TERATION





Then the Hard Part





Side B - Production





1.Team & Timelines 2. Playable Storyboard 3. Alpha & Playtesting **4. Full Production** 5. Lock & Polish



Locks

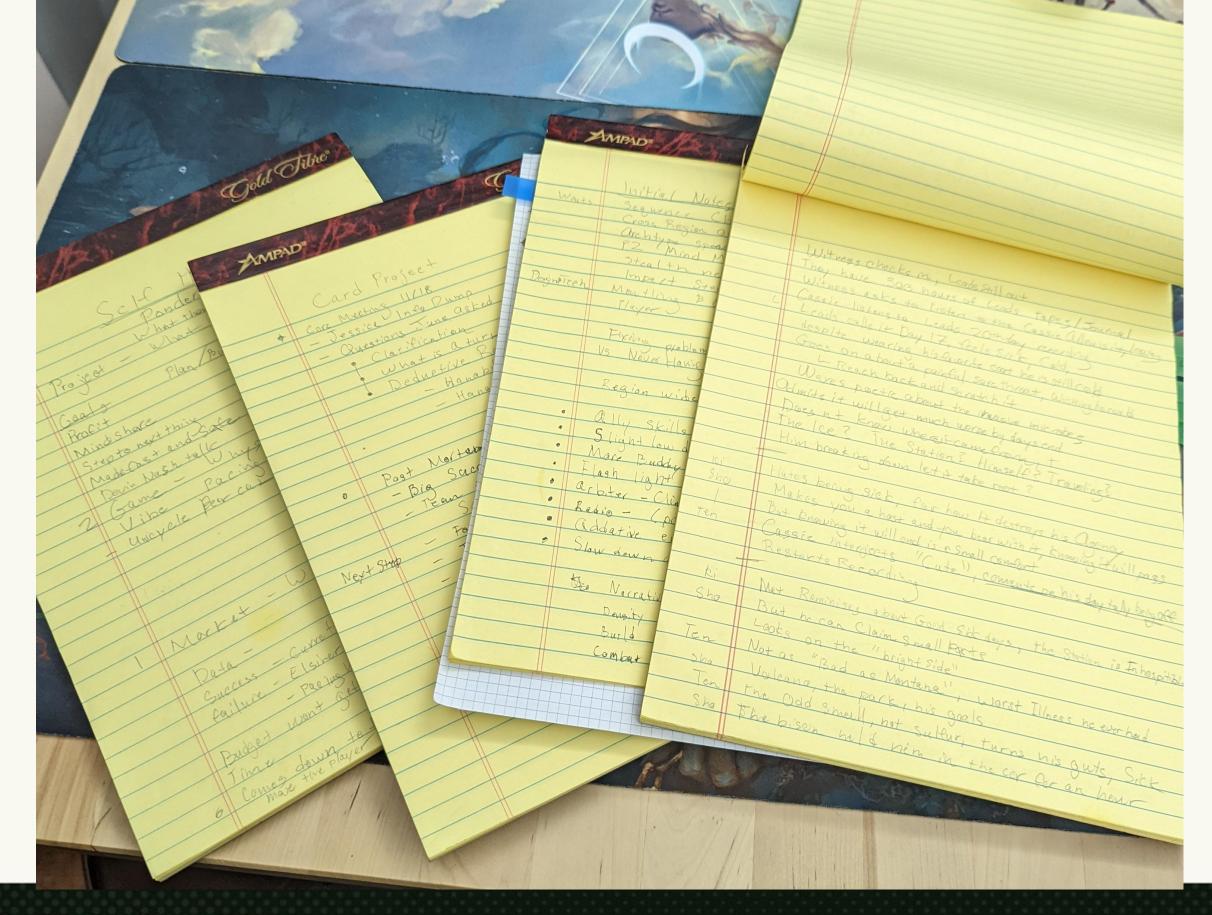
- Each department gets assigned level deadlines
- No more major changes
- Push it from janky mess to Naughty Dog Quality



Polish

- Every detail matters
- Review and Playtest cycles continue















Polish

- Every detail matters
- Review and Playtest cycles continue
- Additional Scripting and Bug Fixing
- Responsible for making sure things gets done



THE TEAM DOES IT





March 21-25, 2022 | San Francisco, CA #GDC22



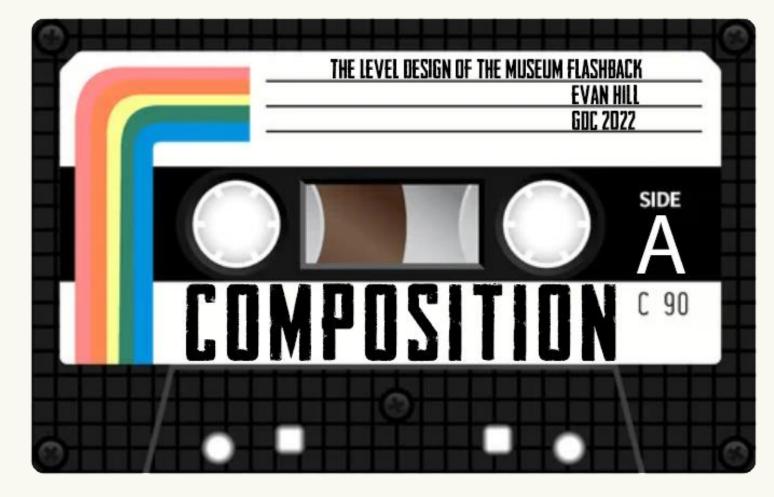


CAPTURED FROM PS4 PRO

6, 5, 4, 3, 2, 1, 0. All engine running.



Side A





6 Tracks

March 21-25, 2022 | San Francisco, CA #GDC22

Side B

5 Tracks





Take Aways

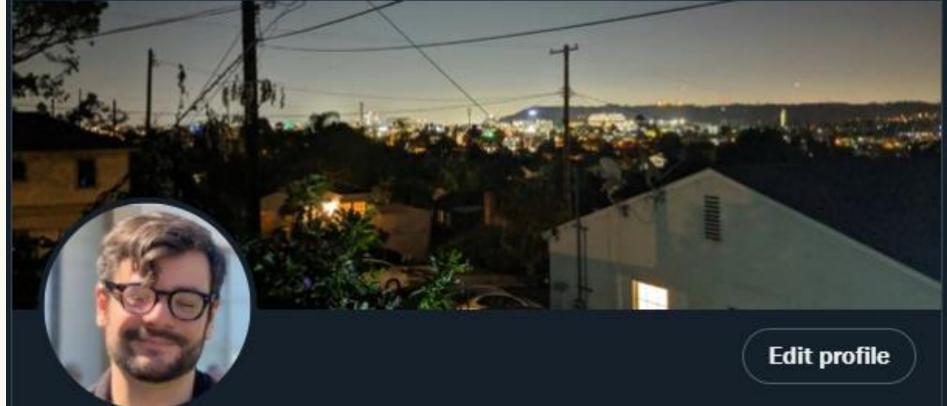
- Find useful frameworks
- Use them to guide iteration
- Start as rough and fast as you can
- Fail
- Look for Inspiration
- Use it to iterate more
- Try not to stop till its great
- Rely on your team!



Follow Me

Twitter: @ehillgamedesign

Website: ehilldesign.com



Evan Hill ừ Hats. On. Dinosaurs. @EHillGameDesign

Senior Area Designer @Obsidian Prev #TheLastOfUsPartII. @playpalia. Occasional Teacher at @Gnomon_School. Translate bio

1,438 Following 2,469 Followers

Tweets

Tweets & replies

Media

Likes



Follow Me

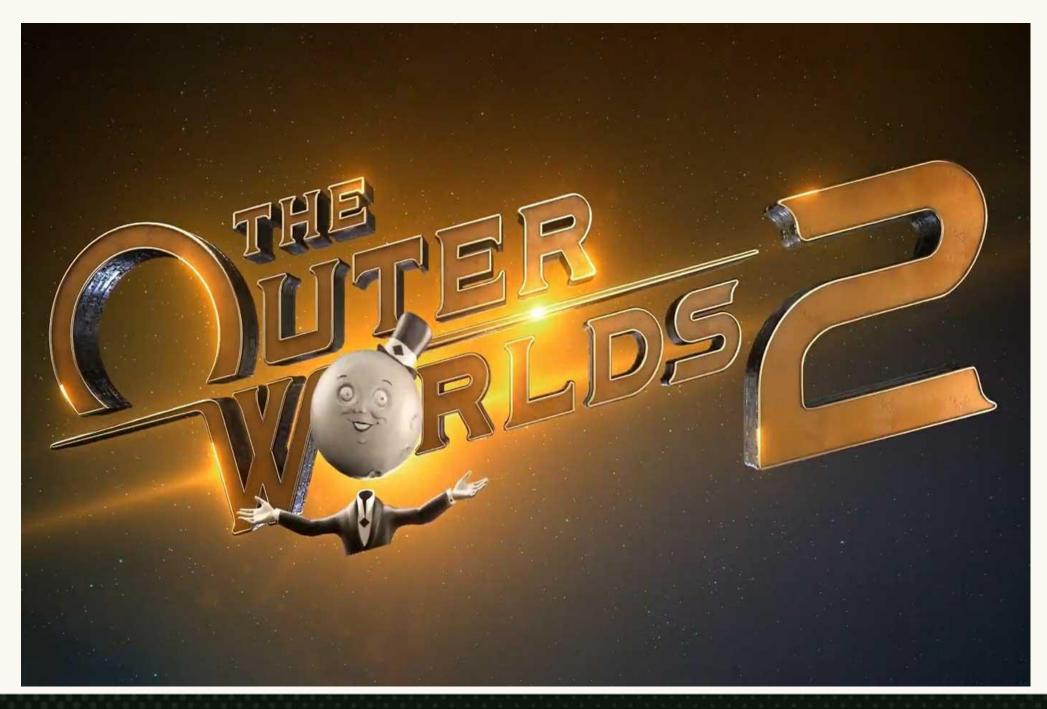


March 21-25, 2022 | San Francisco, CA #GDC22





Follow Me





Resources

- Book List:
 - Manga in Theory and Practice by Hiro Hiko Araki
 - Story by Robert Mckee
 - The Art of Dramatic Writing by Largos Engri
 - Writing Character Arcs by K. M. Weiland
 - Form Space and Order by Francis DK Ching
 - The Visual Story by Bruce Block
 - Framed Ink by Marcos Mateu-Mestre
 - **Directing Actors** by Judith Weston
 - An Architectural Approach to Level Design by Christopher W. Totten
 - Understanding Comics by Scott Mccloud



Watch Liz and the Blue Bird

A Silent Voice The Movie

Naoko Yamada × Reiko Yoshida × Futoshi Nishiya

October 20, 2017





The Heike Story



TIME LEFT FOR QUESTIONS?

March 21-25, 2022 | San Francisco, CA #GDC22



Resources

- Book List:
 - Manga in Theory and Practice by Hiro Hiko Araki
 - Story by Robert Mckee
 - The Art of Dramatic Writing by Largos Engri
 - Writing Character Arcs by K. M. Weiland
 - Form Space and Order by Francis DK Ching
 - The Visual Story by Bruce Block
 - Framed Ink by Marcos Mateu-Mestre
 - **Directing Actors** by Judith Weston
 - An Architectural Approach to Level Design by Christopher W. Totten
 - Understanding Comics by Scott Mccloud

Twitter: @ehillC



@ehillGameDesign

