



Adventures in Triple I (III) Audio: Yoku's Island Express



Tom Bible
Audio Director
Submersion Audio



Jesse Harlin
Music Supervisor
Submersion Audio

GAME DEVELOPERS CONFERENCE

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Tom Bible – SUBMERSION **AUDIO**

STAR WARS THE FORCE UNLEASHED



STAR WARS
THE FORCE
UNLEASHED



Jesse Harlin – SUBMERSION AUDIO



Who this talk is for

- Indie and Junior Audio Professionals
- Nosey Senior Audio Professionals

What we'll be talking about

- Interacting with Indies
- Creative Considerations
- Technical Tribulations

You don't know Yoku?

“Yoku’s Island Express is an open-world, 2.5D metroidvania pinball game where you play as the ball set on a tropical island that happens to have a Cthulhulian elder god problem.”

- A real game in 2018

WINNER
BEST GAMES TO PLAY OF 2018
GAMESPOT

WINNER
THE 10 BEST PC GAMES OF 2018
PC WORLD

WINNER
12 BEST GAMES OF 2018
US GAMER

WINNER
BEST GAMES TO PLAY OF 2018
GAMESPOT

WINNER
20 BEST GAMES OF 2018
THE GUARDIAN

WINNER
BEST GAMES OF 2018
FANDOM

NOMINEE
BEST PLATFORMER
IGN

NOMINEE
BEST DEBUT INDIE GAME
THE GAME AWARDS 2018

WINNER
10 BRILLIANT GAMES YOU MIGHT HAVE MISSED IN 2018
LAD BIBLE



Yoku's
Island Express

YoKommments

34th Best PS4 Game of 2018 on Metacritic

53rd Most discussed Switch game of 2018

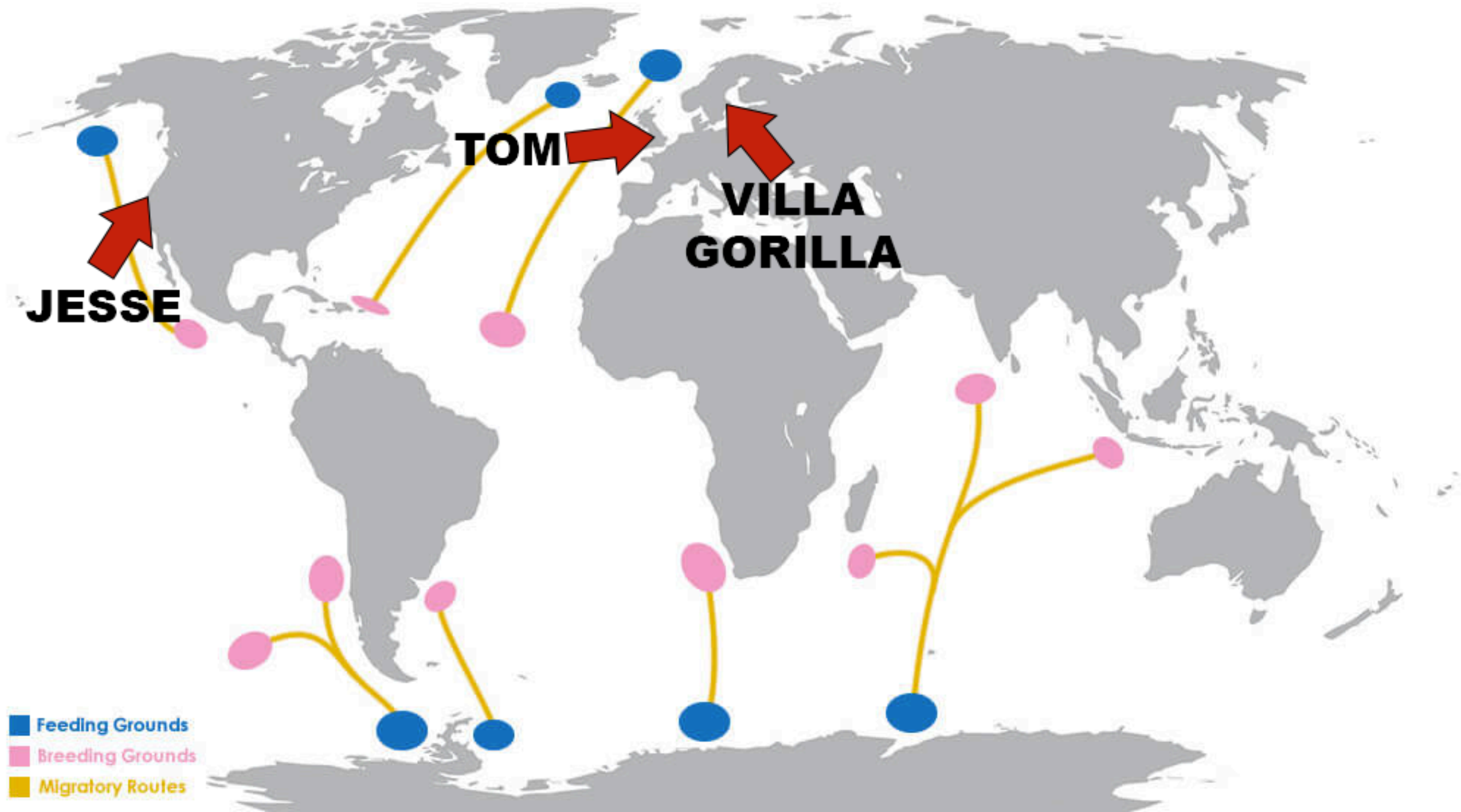
@Marudeusz "I got it on discount, and still regret it."



Interacting with Indies

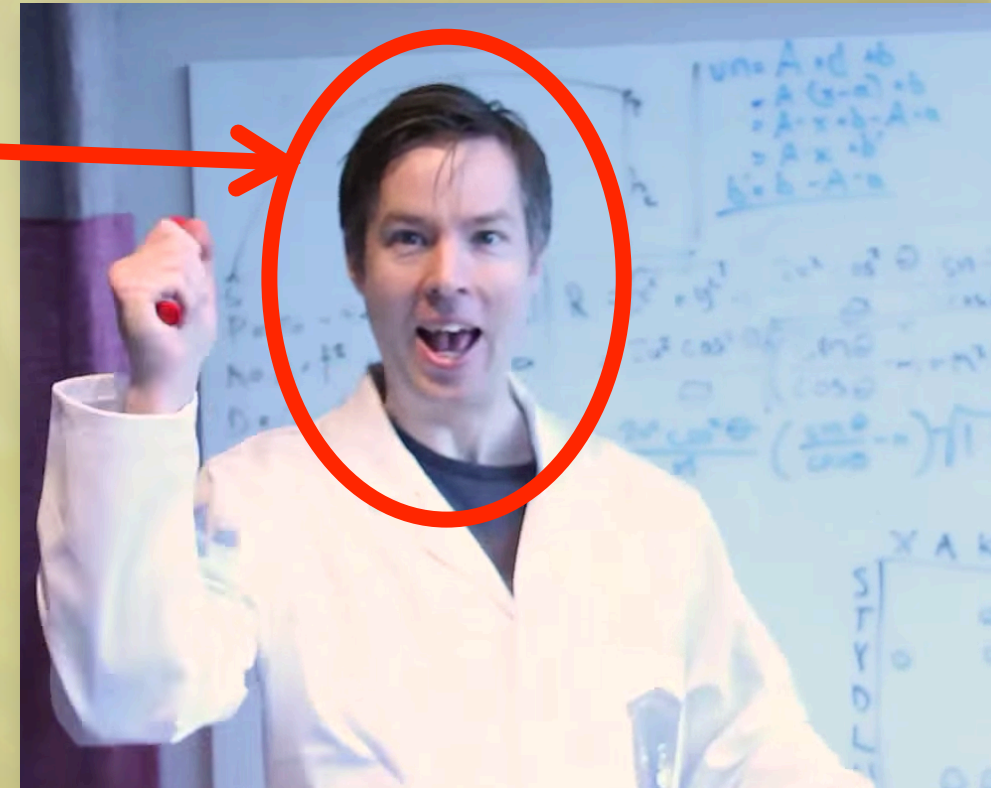
YOKU'S ISLAND EXPRESS DEV TEAM LOCATIONS

~~Migratory Routes of the Blue Whale~~



Getting Signed Up

- Worked with Jens at LucasArts
- Deal confirmed over e-mail
- Flat fee with sales-related bonus
- Made a case for more resources & Wwise
- 1 year project
- 3 years total



Working with Indies

- Relationships > Money
 - *Don't talk about money in the first meeting*
- Build understanding of client, project and expectations
- Budget and Scope
- Get things in writing – Use a contract
- Don't rely on royalties!
- Don't forget about marketing materials

Pre-Production–Same as AAA

- The most important phase for audio!
- Build every system
- Test and refine every workflow
- Take all the risks
- Do creative experimentation
- Do audio pre-pro in project pre-pro
- Involve audio in prototyping phase

Communication

- Weekly Skype calls
- Google sheets tracking doc
- Clarity on **goals, obstacles** and **progress**

Low		Pass an RTPC to VFX sounds based on scale			I need to be able to change the sounds for bigger and smaller vix (Probably cut	
Low		Intro cinematic fade stepping	Sound Design	Quick	When the intro is ending, the sound is not being updated quickly enough and sounds like it's	
		May Launch trailer	Trailer			
High		Tag rails for sound (the ones that don't look like metal rails)		Integration		
Med	spring_hidden_hotspring	Eel speech		Implement	I'd like the Eel to have only one speech sound per line	A second Eel vocal plays
Med		Beeline flower machine full/unlock			Use unlock flipper sound	hud_Flipper_unlock_med
Med	lighthouse	Talking to mouse offsets sneeze timing	Code			
Med		Reverb positioning	To verify		Objects should play reverb based on their location within the audio zones, not sound listener	
Med		Yoku Impact needs to be passed phy_ImpactSpeed	To verify			
Med		Moku festival track should stop after saving Moku + Moan	Implementation	Main		
High		Master levels	Wwise		Currently around -19 / -19	
High		Check for Switch overloads	Wwise		One near Willo	
High		Purchase flipper fail	Sound Design			
High		Skvader sound	Sound Design			
Low		Tune boulder physics sounds	Wwise	Physics		
Low	peak spacemonk	Spaceship exhaust engine room	Implementation	Main		
Low		Fix festival bad sound area	Implementation			
Low		Tune menu move sound	Sound Design	Main		



Creative Considerations



Creative Audio Vision

- **Audio Pillars** (Short creative summary)
 - Full of **Character & Charm**
 - **Responsive** Pinball Feel
 - **Organic, Relaxing & Exotic** exploration
- **References** (YouTube videos)
 - Establish a common sound design language
- **Prototype Video**
 - 1-2 minute gameplay video with “final” sound
- **Technical Features & Specs**
 - 2D open world audio
 - Physics audio
 - Tools

Jungle 1 – Mushroom Beach

Adventure, Fun, beauty, Sunny near the Ocean

Used at:

- Mushroom Beach
- Tall Totem Tower
- Great Falls



Music Map

- **Emotional Road Map**
 - **What** does the dev want you to **feel**
 - **Where** does music need to **change**
- **Detailed Blueprint For Music Dev**
 - **Granular guide** to every cue I'll write
 - **Signoff from devs** means no surprises
- **Roadmap for Music QA**
 - **Guide** to implementation
 - **I'm not on my own** looking for bugs



Classic Pinball

The UX of Pinball audio

- Make short play time exciting
- Visceral immediate feedback
- Rewarding
- Help player know what to do





Yoku Pinball

- Organic + relaxing
= softer, less transient physics
- Longer calmer play times
= less intense rewards
- Rewards use only C and G
to avoid dissonance with music

Character Voices



Posterodactyl

Tha





Sound Design

- Immediate, organic
- Field recording
- Synth programming

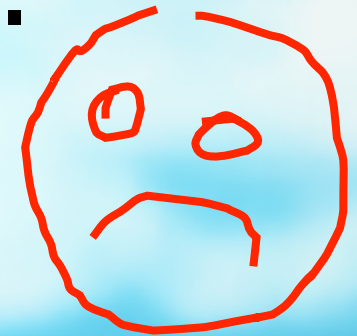


Musical Motivation

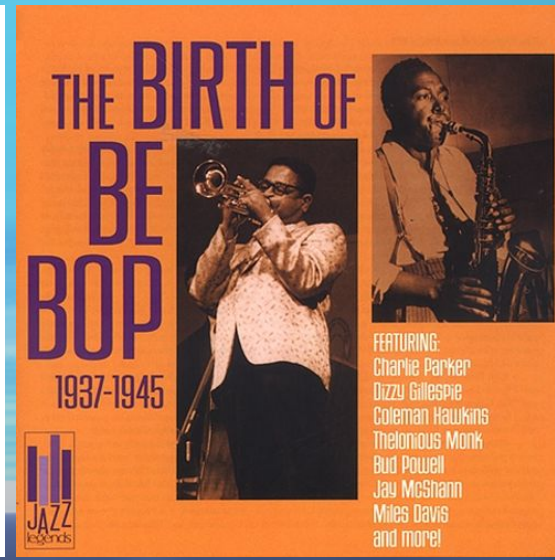
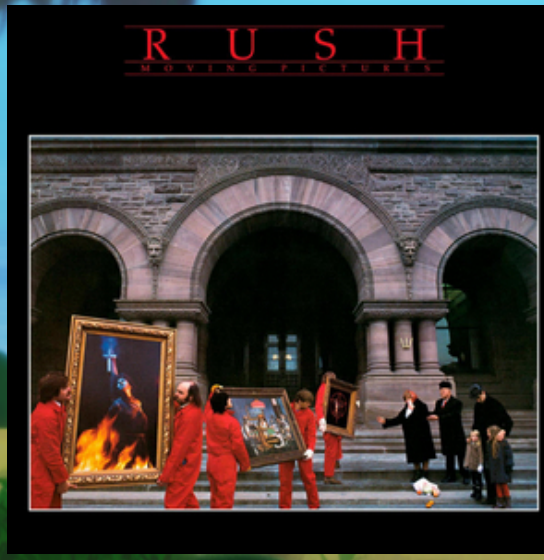
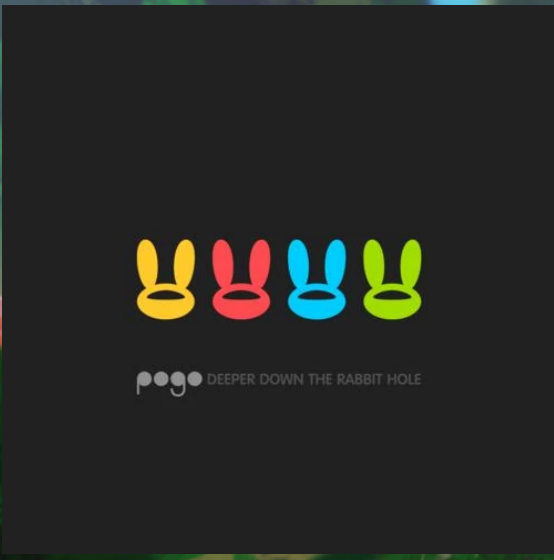
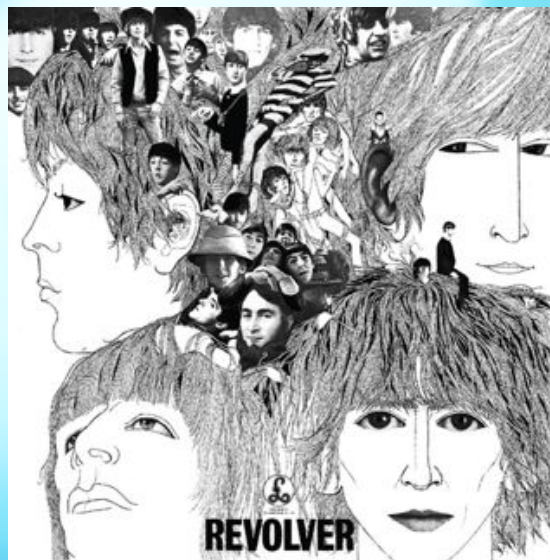
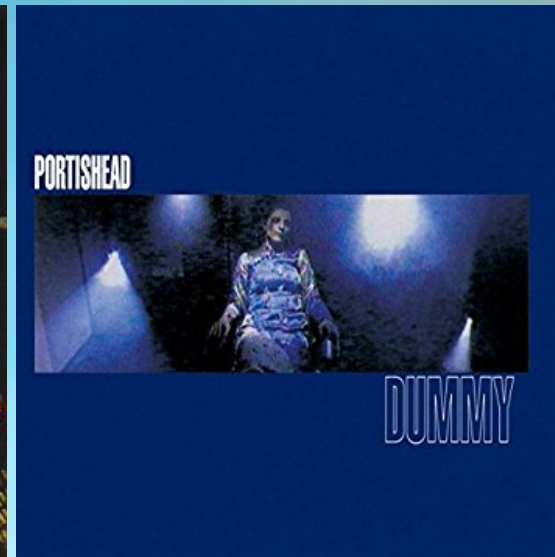
- Complete Creative Freedom
- "Just do whatever you want."
- Super awesome!!1!!!1one!

Musical Motivation

- Complete Creative Freedom
- "Just do whatever you want."
- ~~Super awesome!!!!!!~~ zone!
- Terrifying and confusing
- Not how AAA works
- Where do you even start?



What Music Made Me ME?



Yoku's Musical Goals

Easy:

- Service the game (duh.)
- Make Villa Gorilla happy (double duh.)

Harder:

- Push the Dichotomy of Opposites
- Find the boundary where I've gone too far and walk it back

The Dichotomy of Opposites

- What's the opposite of ukulele?
How about beat boxing and turntablism?
- What's the opposite of 80s synths?
How about Tuvan throat singing?


Yoku's Musical Goals

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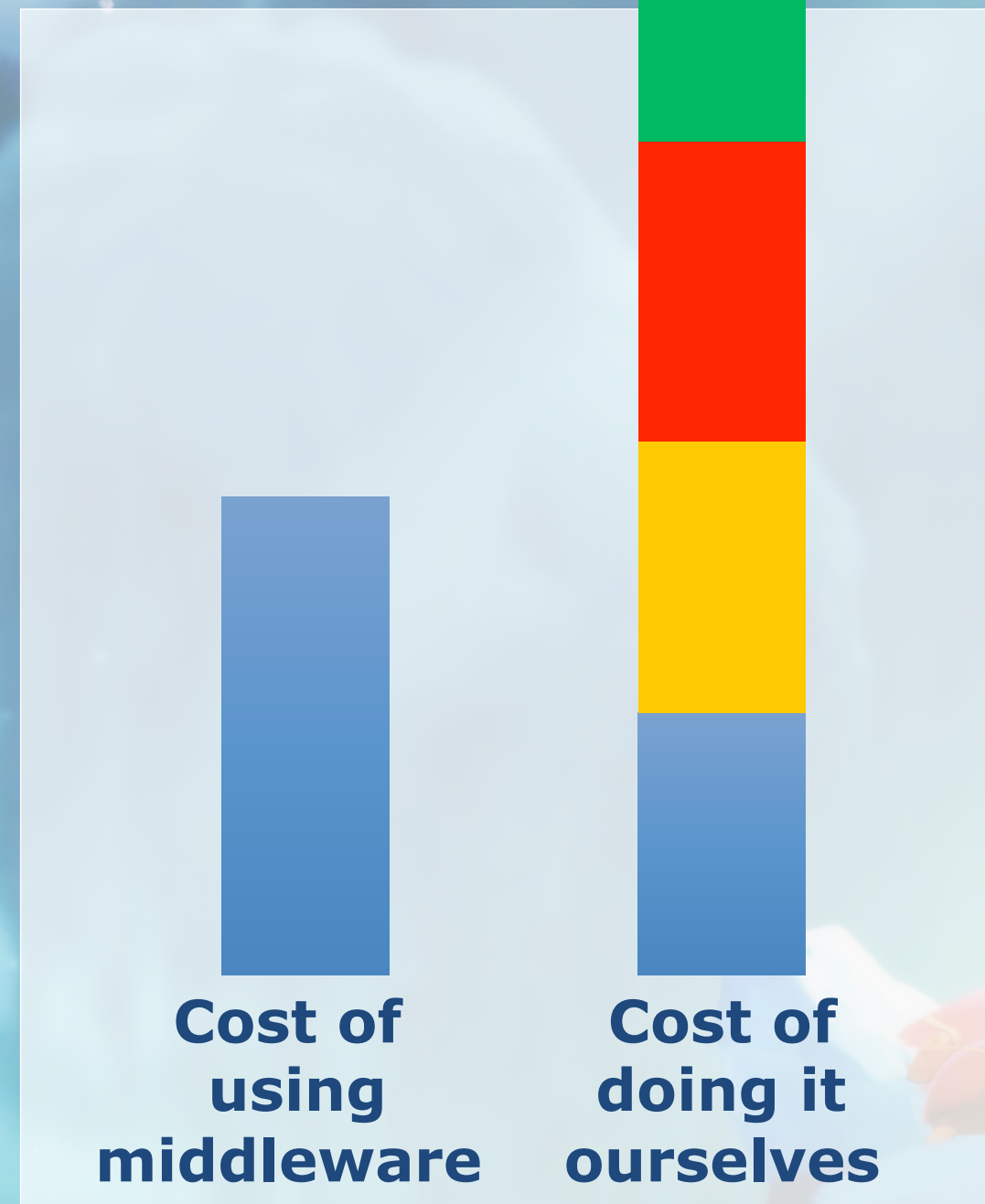


Technical Tribulations

Middleware

Making a case for middleware

- Feature lists
- Cost
- Debugging
- Iteration time
- Scaling
- Independence of audio workflow



Music Where?

- Interactivity granularity?
- High Concepts
 - Music that adapts as you solve puzzles
 - Music that layers in the central village as you complete segments of the game
 - Boss music that changes tonality when you score a hit
- Low Time
 - Working on 5 projects simultaneously
 - Worked too hard/ended up in the hospital
 - Had to hire help



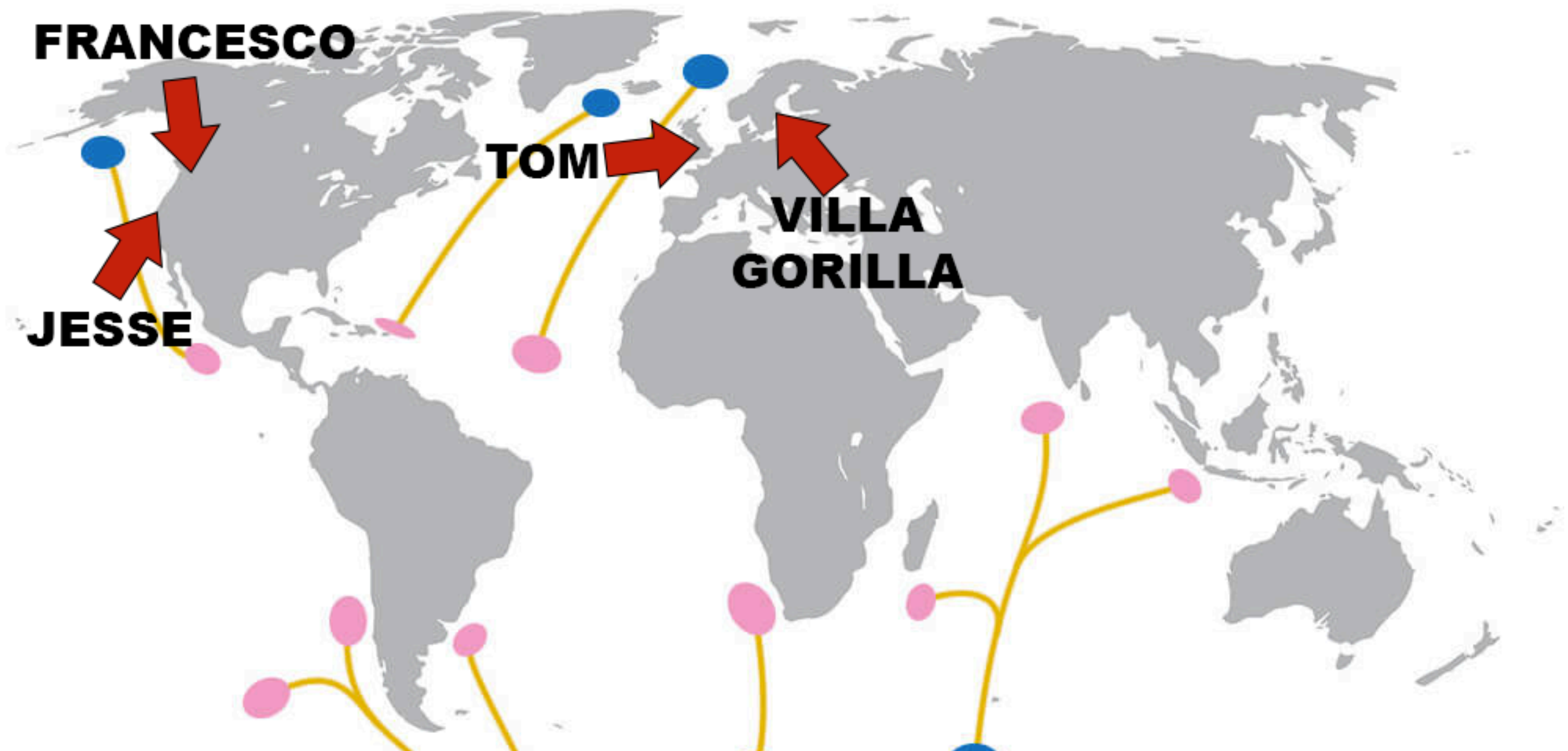
Music Where?

- Budget for live players
- Wild diversity of live instruments
 - Banjo
 - Fretless Bass
 - Ocarina
 - Harmonica
 - Male & Female Vocalists
 - Trombone, Alto & Tenor Sax
- Solution: Materia Collective



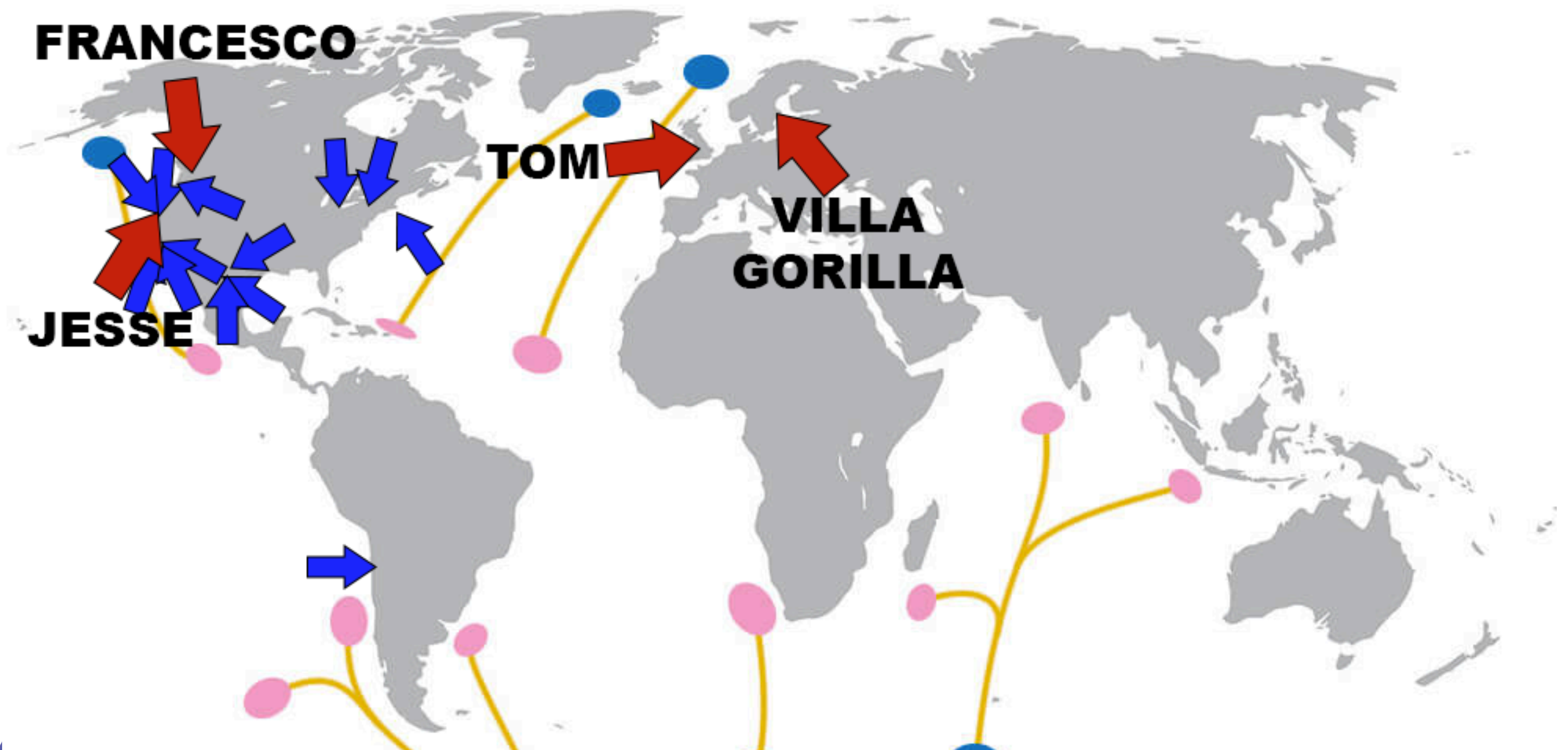
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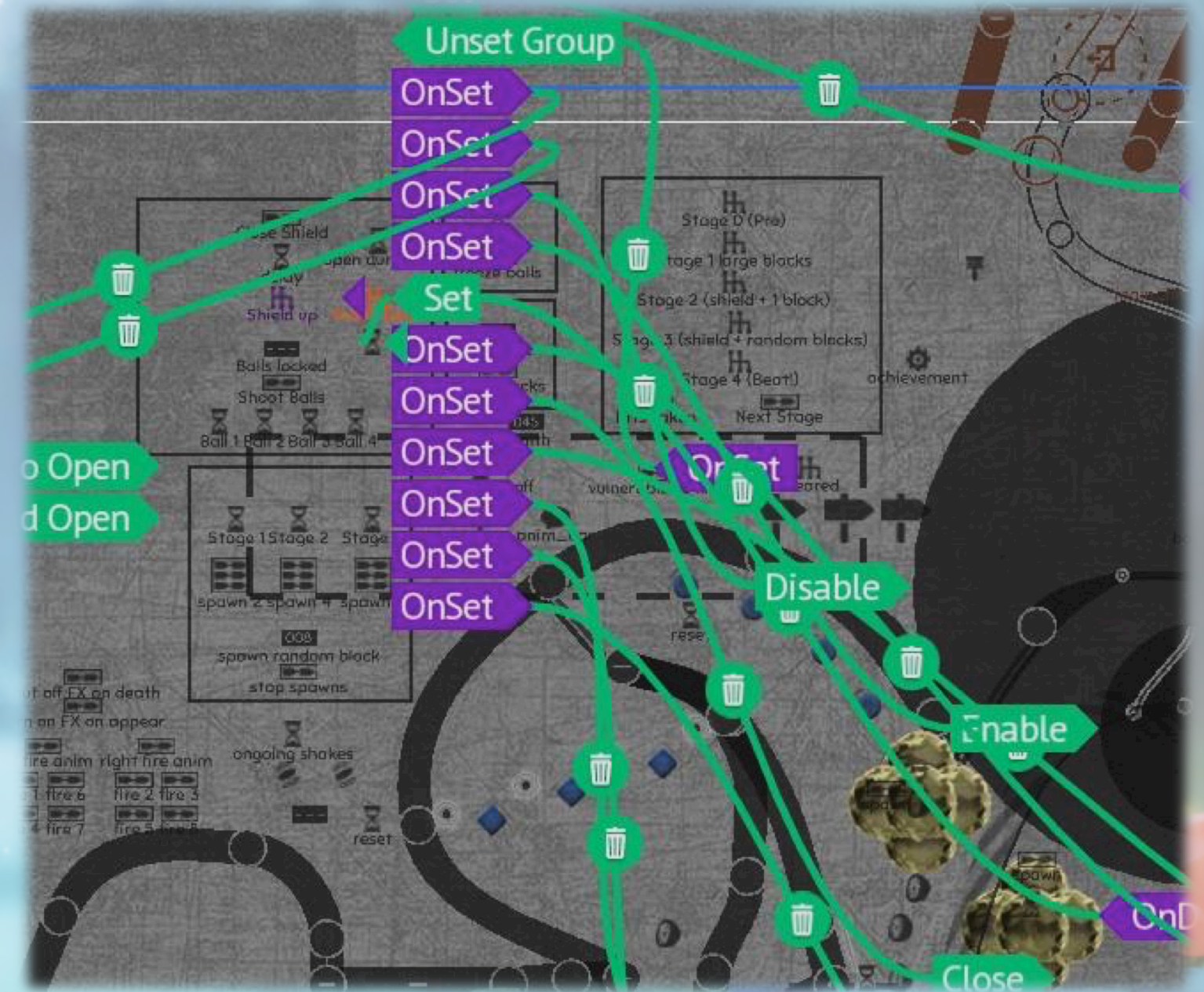
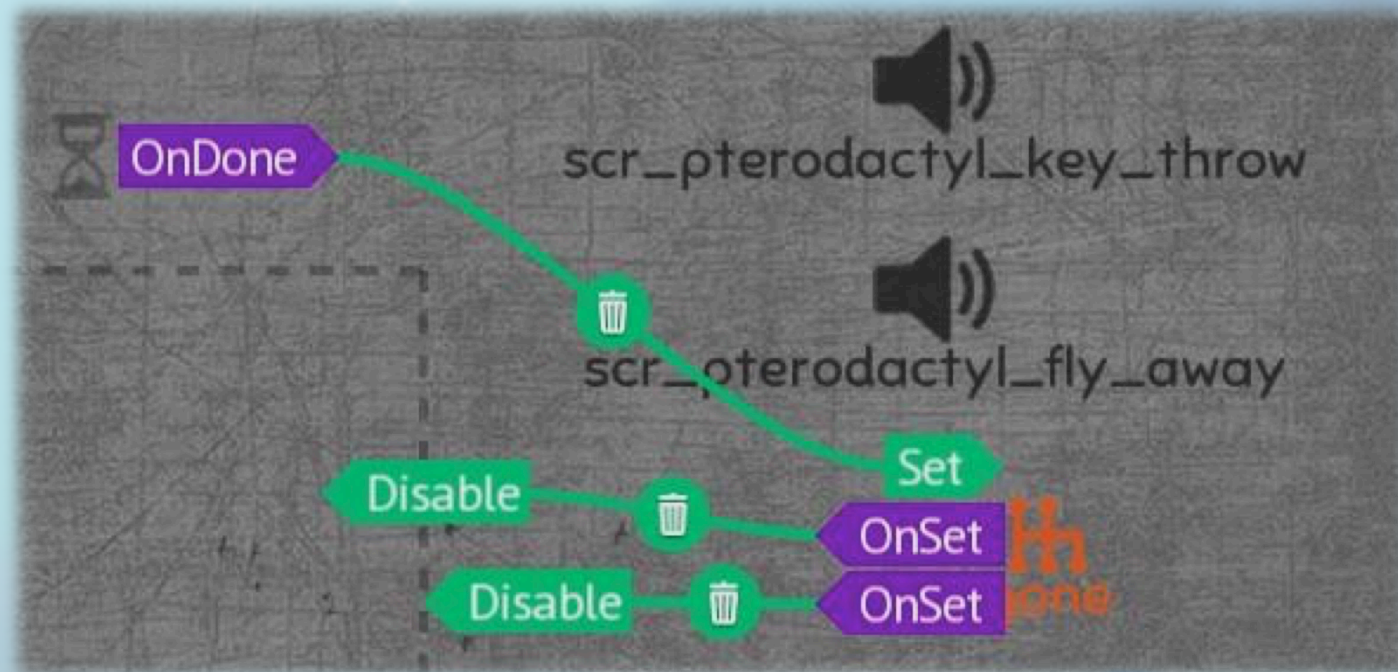
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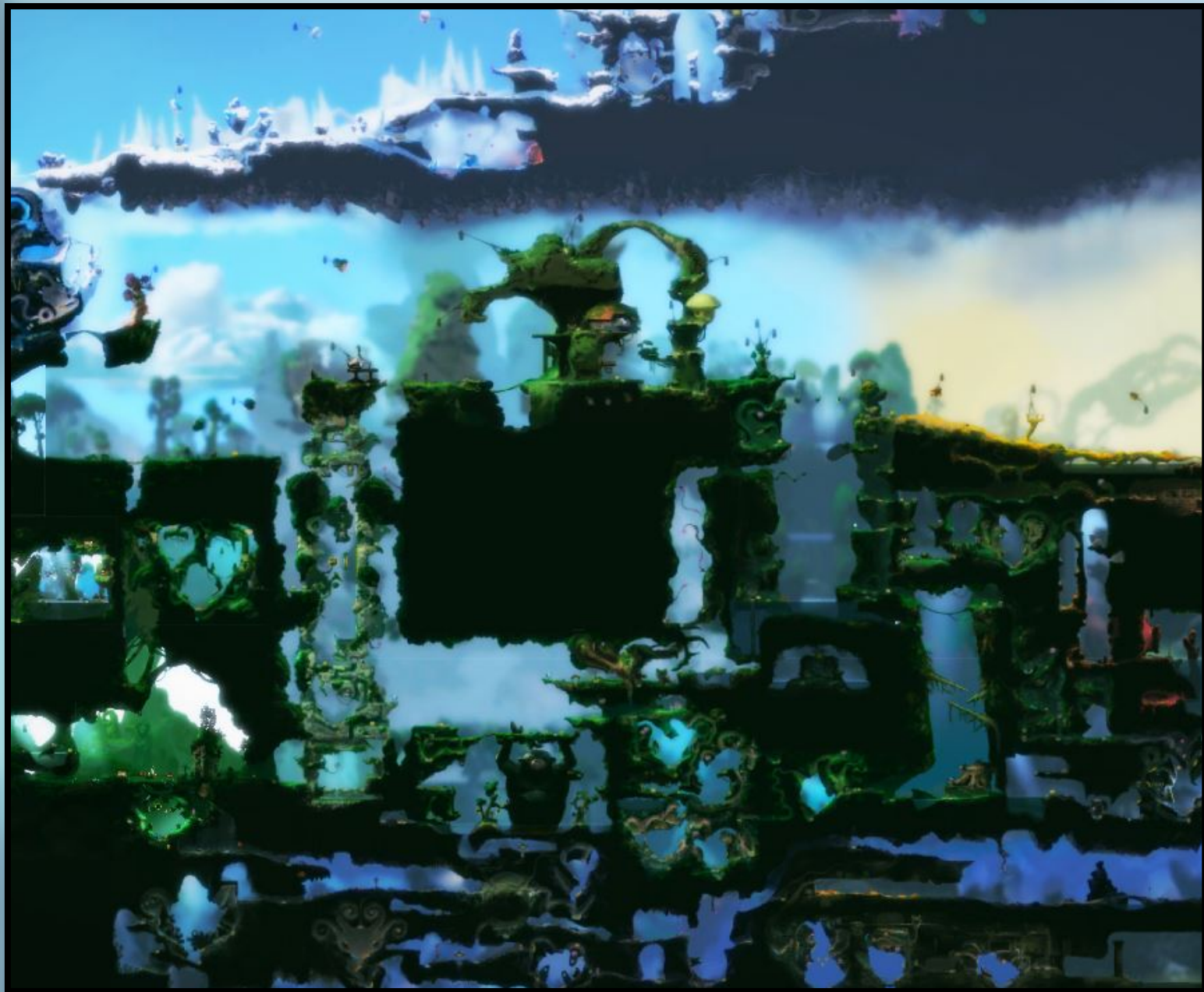


Underware

- Purpose built engine and editor
- Live editor mode
- Really quick iteration
- Faster Iteration = Greater Quality



Technical Problems

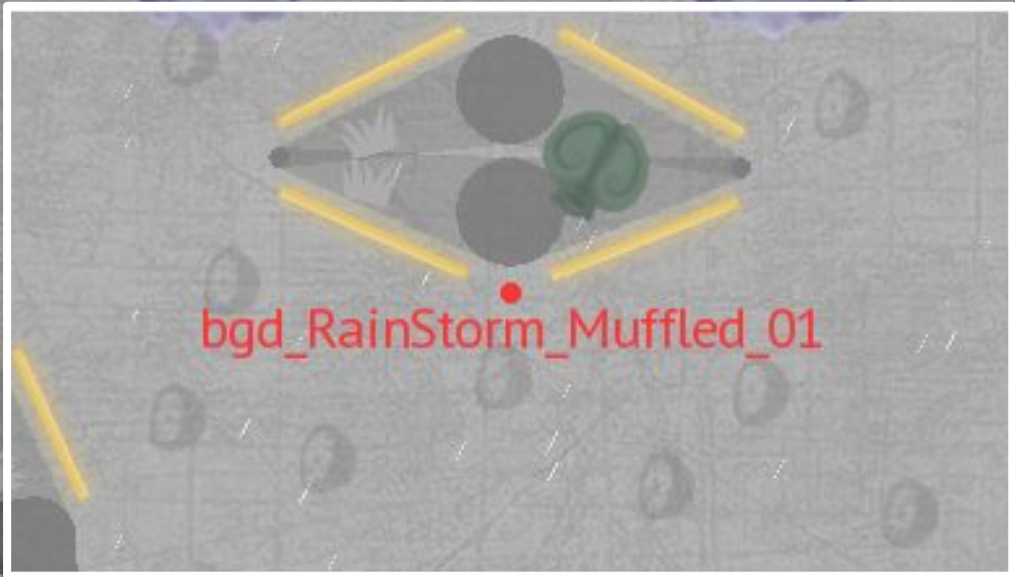


- Too many loops!
- Multi-sounds
- Open-world zoom-able map
- Listener Rectangle





Phy Speed: 0
Phy SpeedAngular: 0
Phy RotationAmount:
Camera Scale: 2.08
Room Stone Big: 0
Room Stone Med: 0
Room Stone Small: 0
Room Wood Med: 0
Indoor: 0
Phys Material: grass
Phy ImpactSpeed: 56.1
Music: xmx_jungle3_5
Registered Objects: 89
Active Objects: 39
Global events:
xmx_Start



2191
phy_rol_MainBall

Key Technology Questions

- How fast is the iteration speed?
- How will this work with 1000's of assets?
- How does it affect asset creation?
- How easy is it to debug?
- What risks will it introduce?
- How easy flexible is it for special cases?
- What's the bang for buck?



Music Tech Goals

- "Make it good enough for a GDC talk." - Tom
- That was the goal. It didn't work. Here we are anyway.
- Too many simultaneous layers and streams nuked the engine.
- Music is based in macro level locations
 - Much more basic than I wanted
 - How do you spin that as a positive?
- PR: "Music is handled like a throwback shout-out to the classic NES games I grew up loving."
- Had to hang my hat on the creative element of the score and not the tech element

Summary

- Build relationships & gain understanding before talking \$\$\$
- Take all the risks in pre-production
- Have all the systems working in pre-pro
- Maintain regular communication
- Live instruments & field recording are awesome
- Indie projects often don't have AAA infrastructure
 - No QA, PR, Marketing
 - No institutional limitations – No NDA

Thank You!



tom@submersionaudio.com
@tombibleaudio



jesse@submersionaudio.com
@oogew

SUBMERSION AUDIO

www.submersionaudio.com