

Tech Art
Daniel van Leeuwen



World Setup

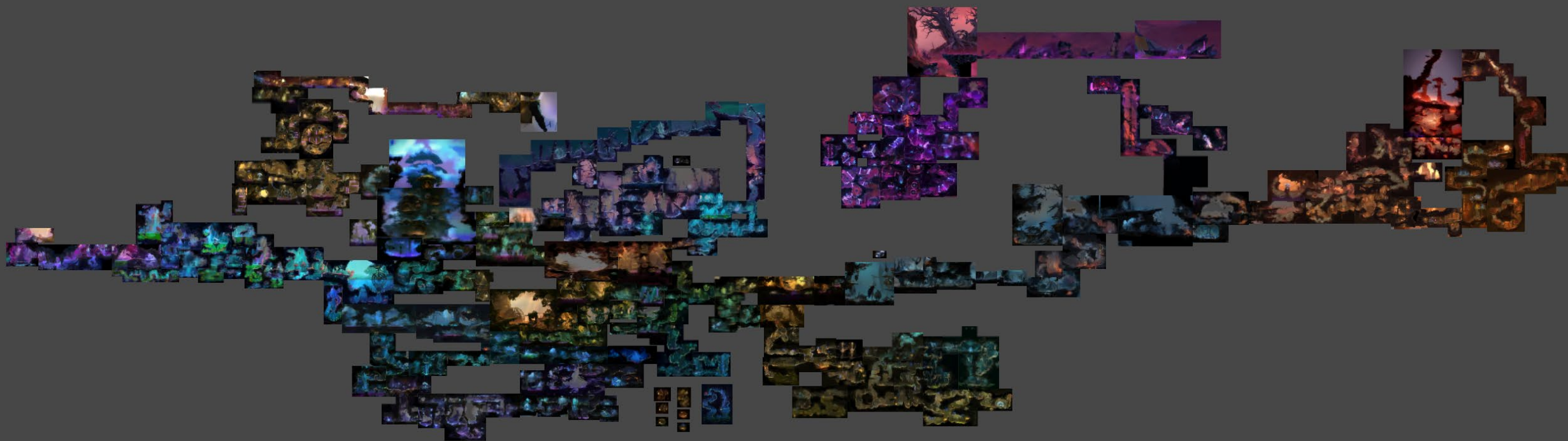
Scene layout

Shader framework

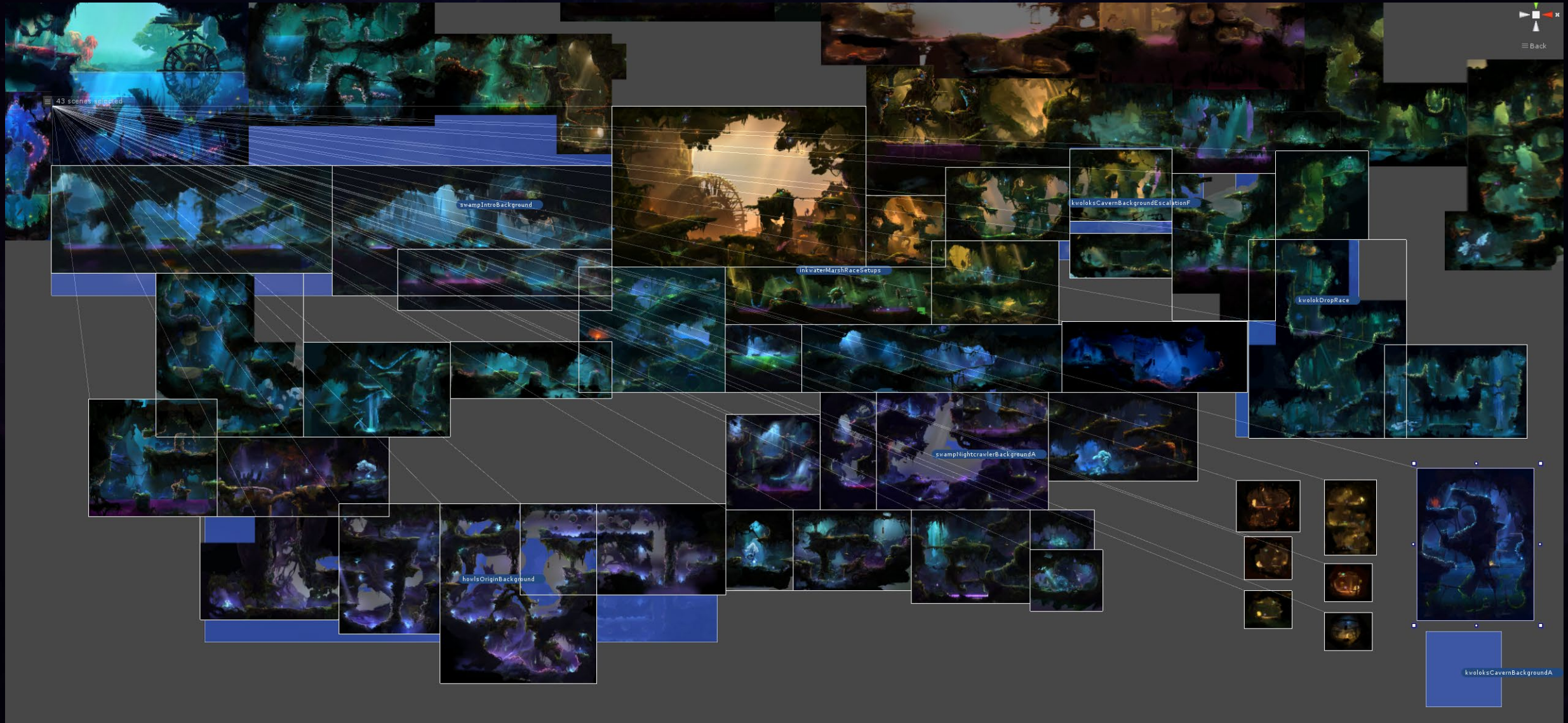
- Dressing
- Lighting
- Animation



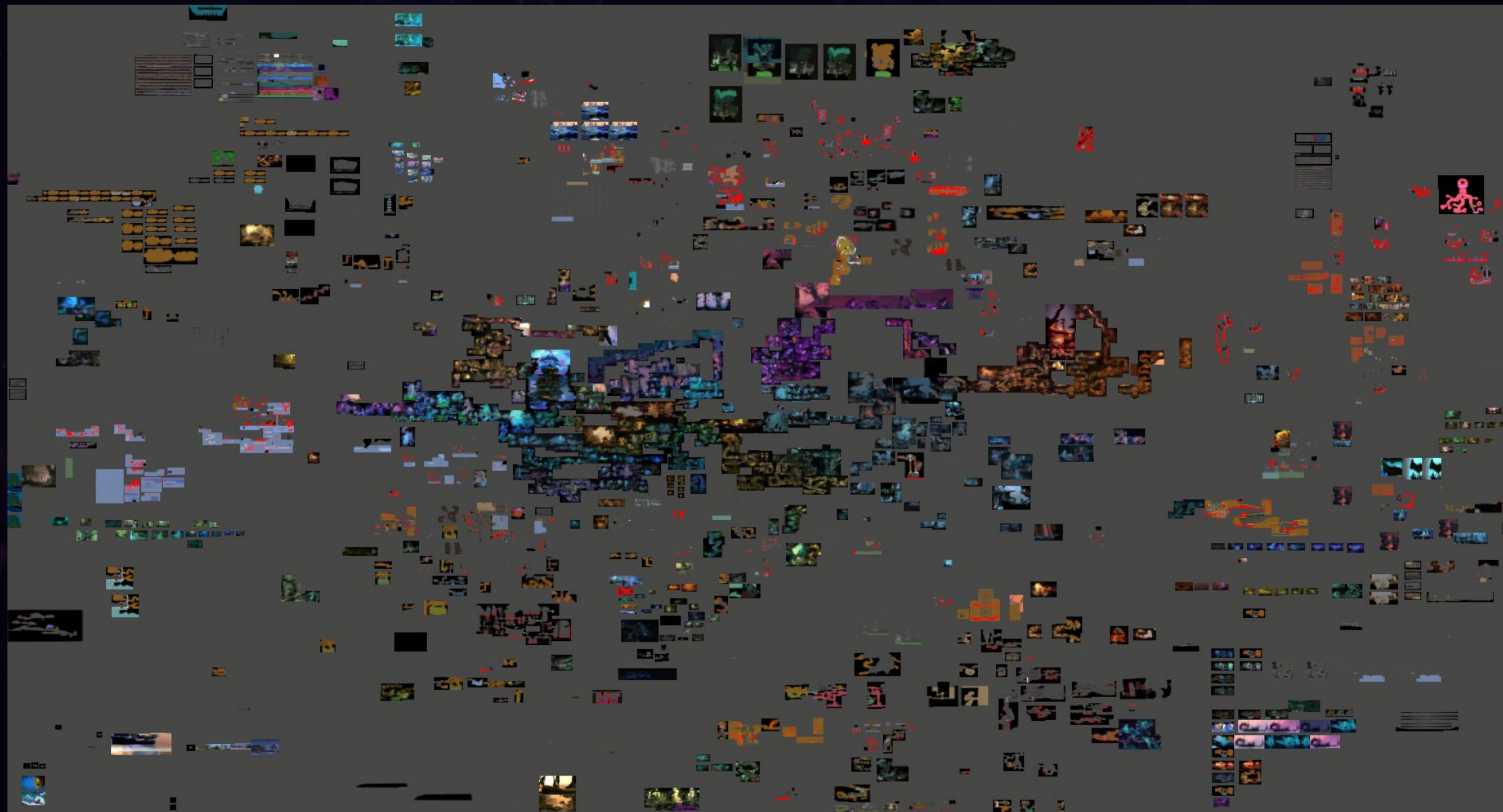
World Overview



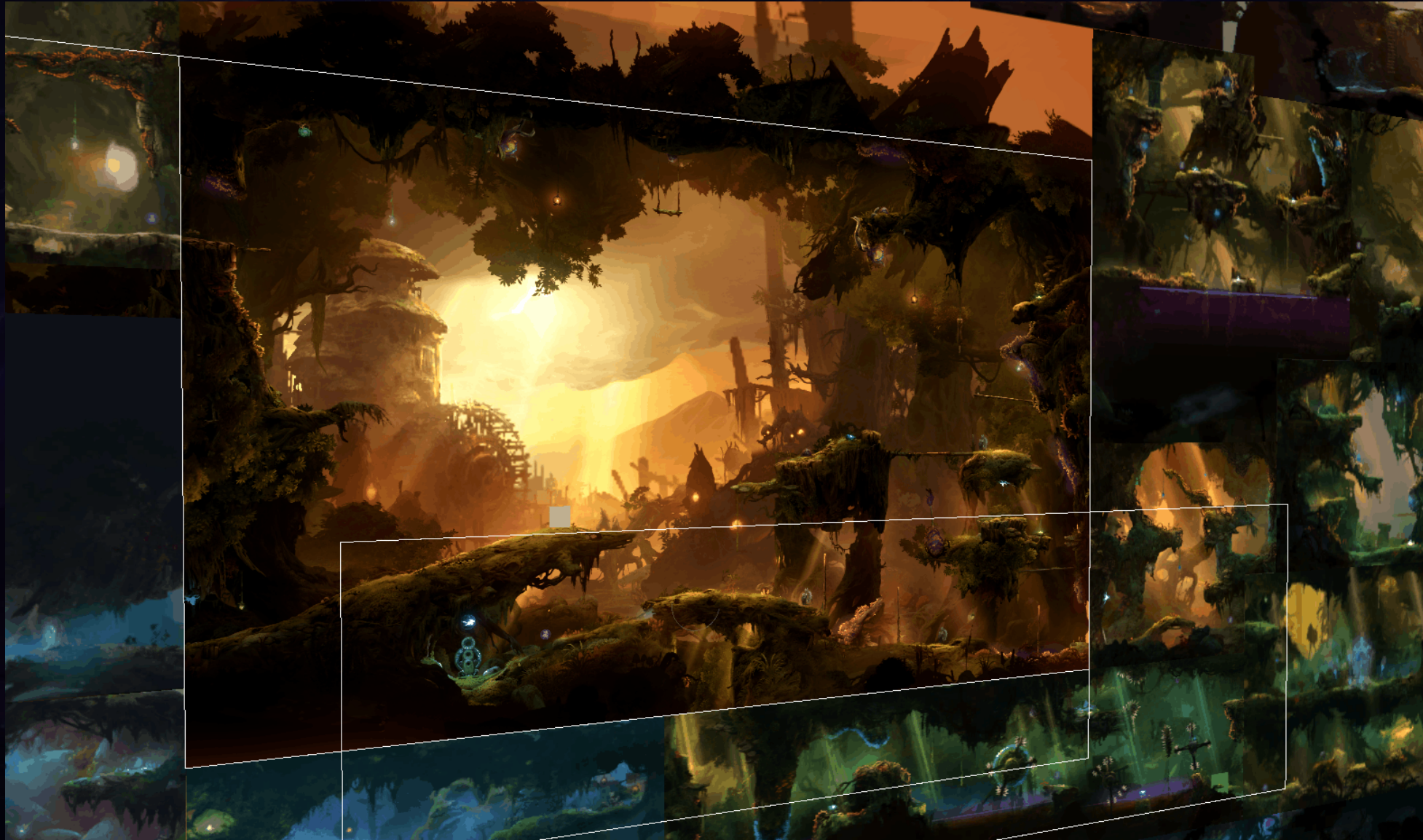
A Tiled World



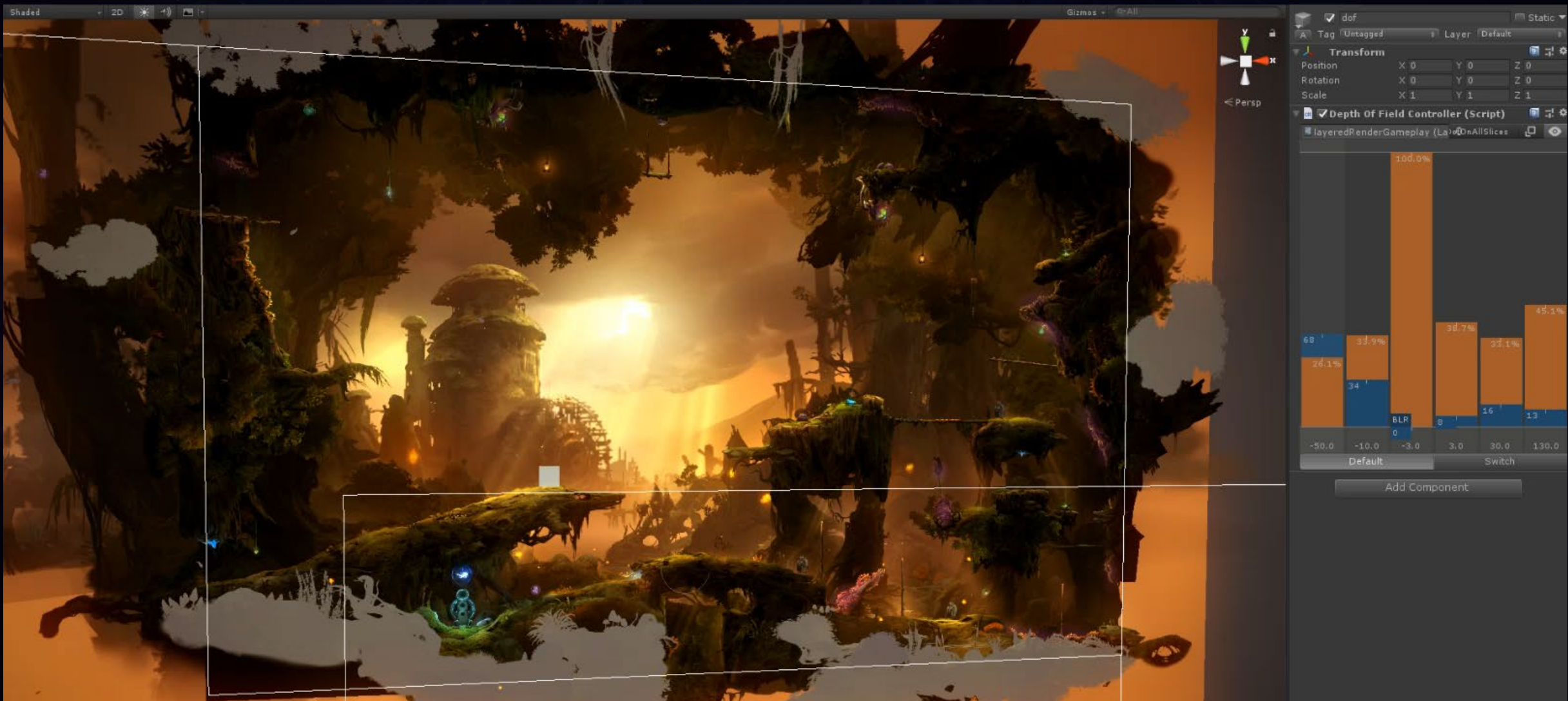
Order out of Chaos



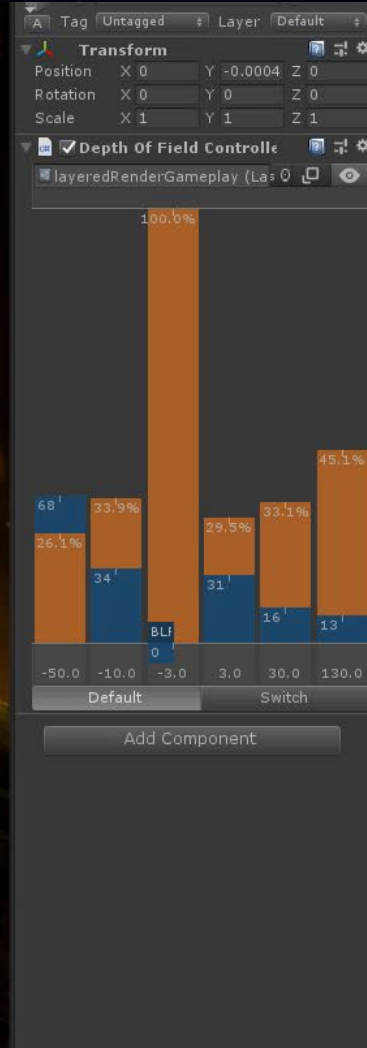
Scene Preview



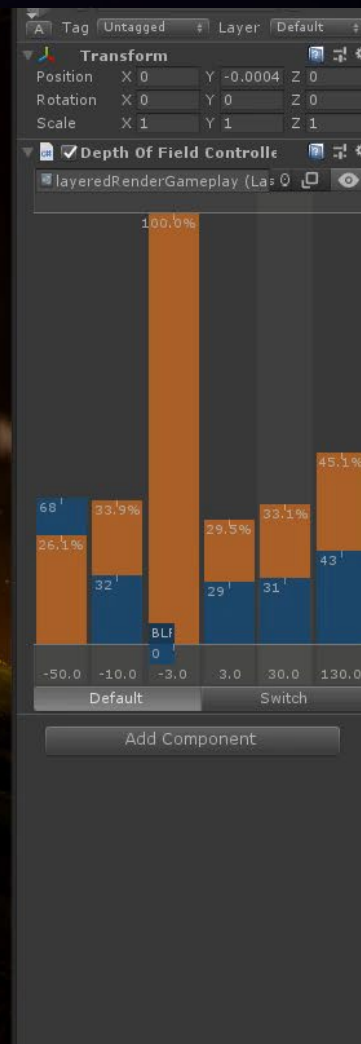
Scene Layers



Layer Depth of Field



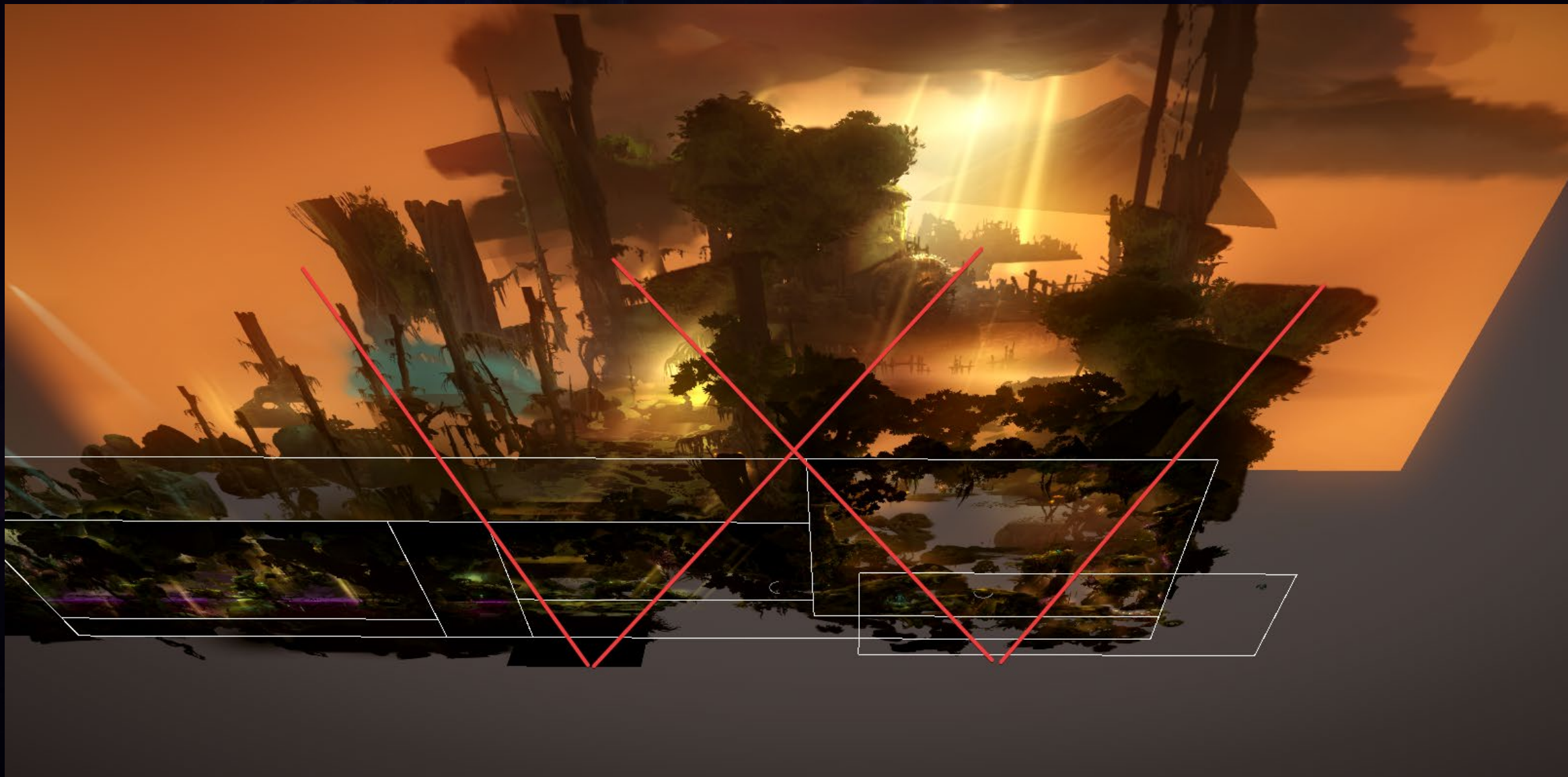
Layer Downsampling



Art Layering



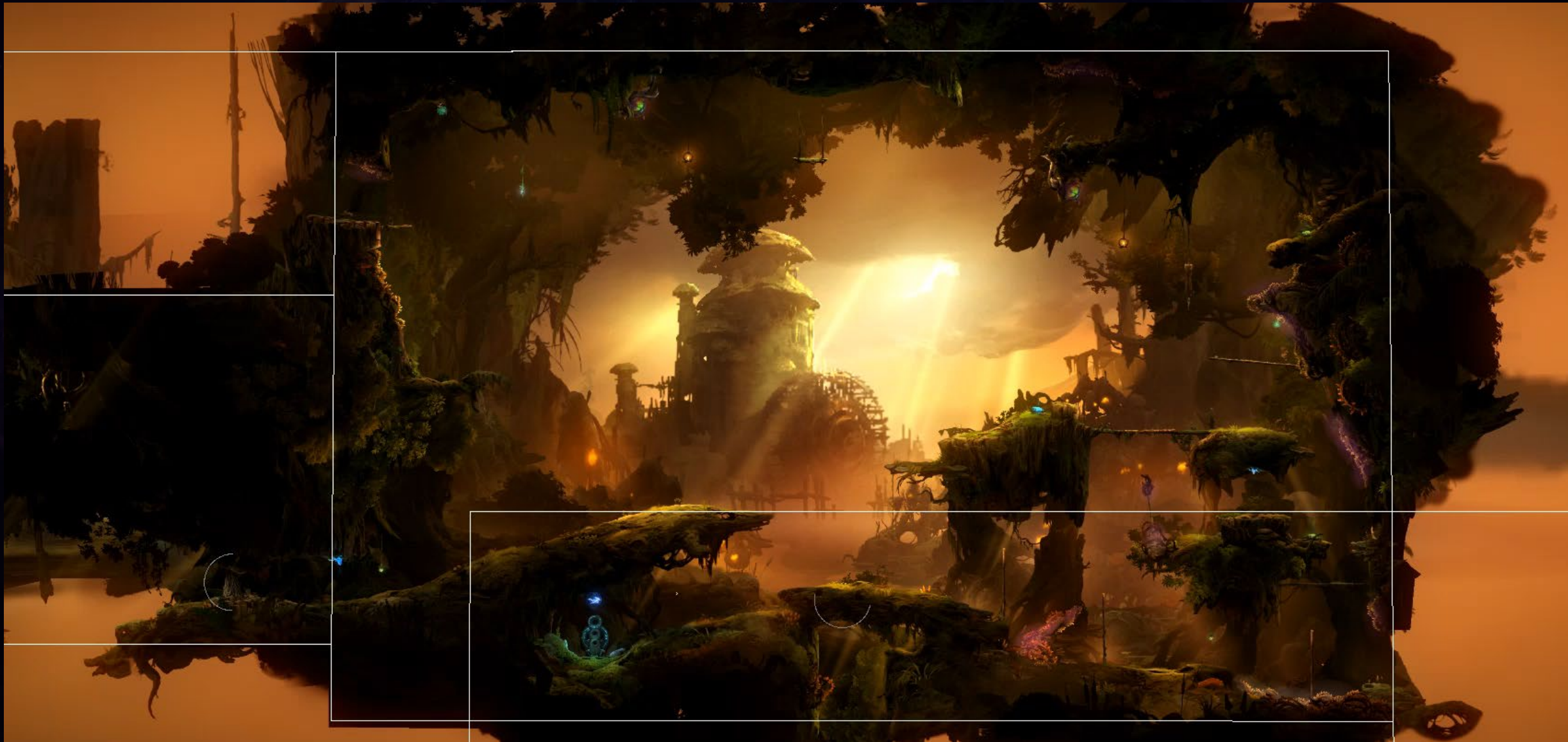
Depth Issues



Scene streaming



Background Scenes



Composing Assets



Asset masking



Ubershader

Stackable Shader Blocks:

- Dressing:
 - Masking
- Lighting:
 - Multiplication
- Animation:
 - Turbulence
 - Distortion

Cluster Animation Bone 0	Skinning	Rotation Animator
Sand Worm	Scale Animator	Position animator
Transparency animator	VerletSkinning3D	Cluster Animation Bone 2
Cluster Animation Bone 1	VerletSkinning2D	Turbulence Transparency
Turbulence Scale	Turbulence Rotation	Turbulence Distortion
Turbulence Brightness	Turbulence Translation	Interaction Punch
Interaction Light	Interaction Rotation	Bubble
Distort extra	Distort	Refraction
UnderWaterLine	Water Debris	WaterLine
Alpha Mask Fade	Spirit Light Mask	Mask
Mask Extra	Mask Dissolve	DepthPrecull
Soft Edge	WaterFallMask	Multiply Layer Third
Multiply Layer	Multiply Layer Extra	Multiply Layer Distort Third
Multiply Layer Distort	Multiply Layer Distort Extra	Hue Shift
Gradient Remap	Additive Layer	Emissivity
Environment Lighting	Environment Tint	Additive Layer distorted
Additive Layer Extra	Tint	Cubemap Reflection
Darkening	Dodge Layer	Directional Light
Directional Light Extra	Offset Map	Light Direction Normals
Light Direction Map	Outline	Fake Motion Blur
Separation Map	Uber Trail	GodRayMask
SandTrail	MinimalTrail	GodRay
Mesh Trail	Trail	Decal Layer Distort
Vertex color	Decal Layer	Night Berry
Worldmap	Text glow	Text shadow
Text anim glow	Text anim fade	Text anim distort
Textify	Text outline	Directional Light Mask
Point Light Mask	Water Displacement	Tessellation



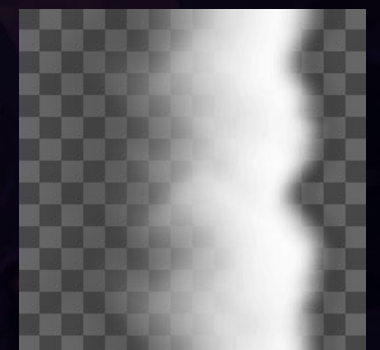
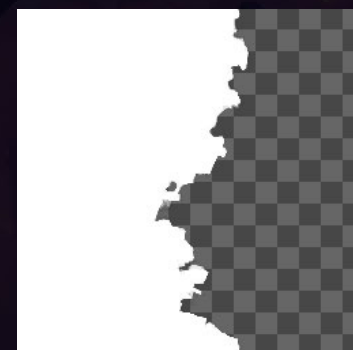
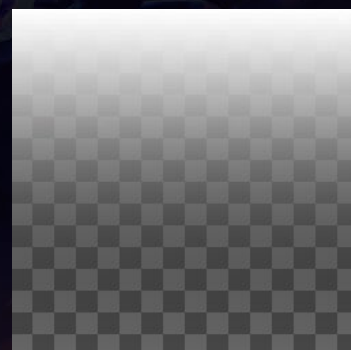
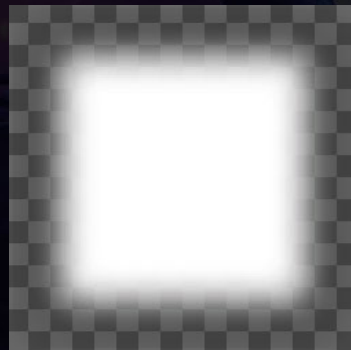
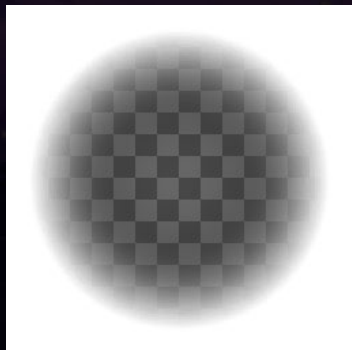
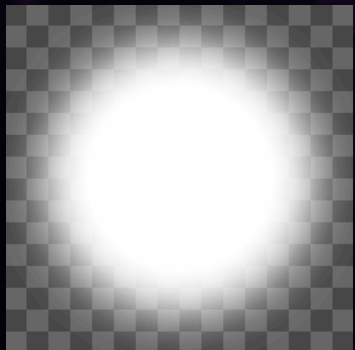
Dressing



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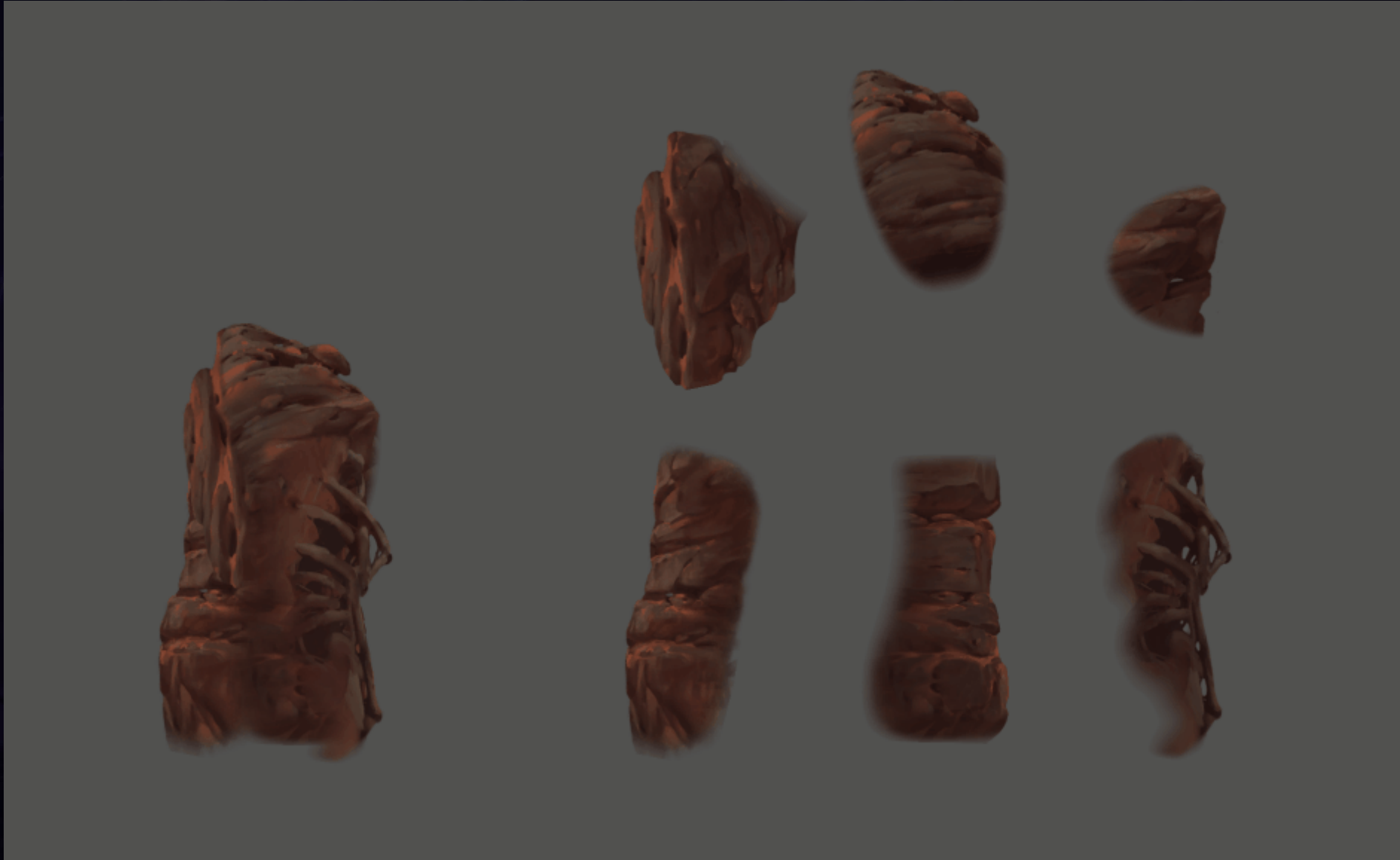
Masking



Masking Example

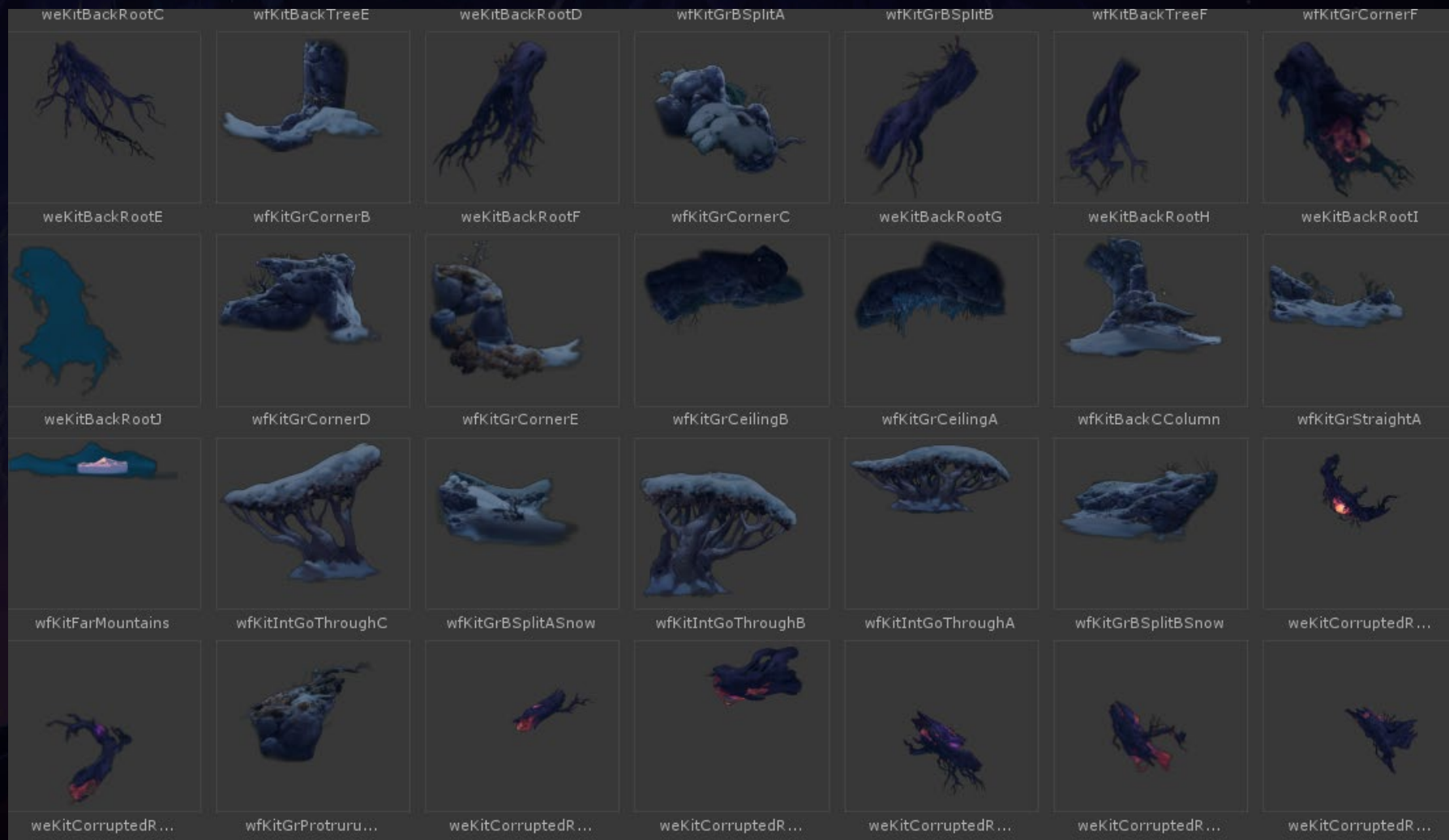


Masking in Dressing



Kits

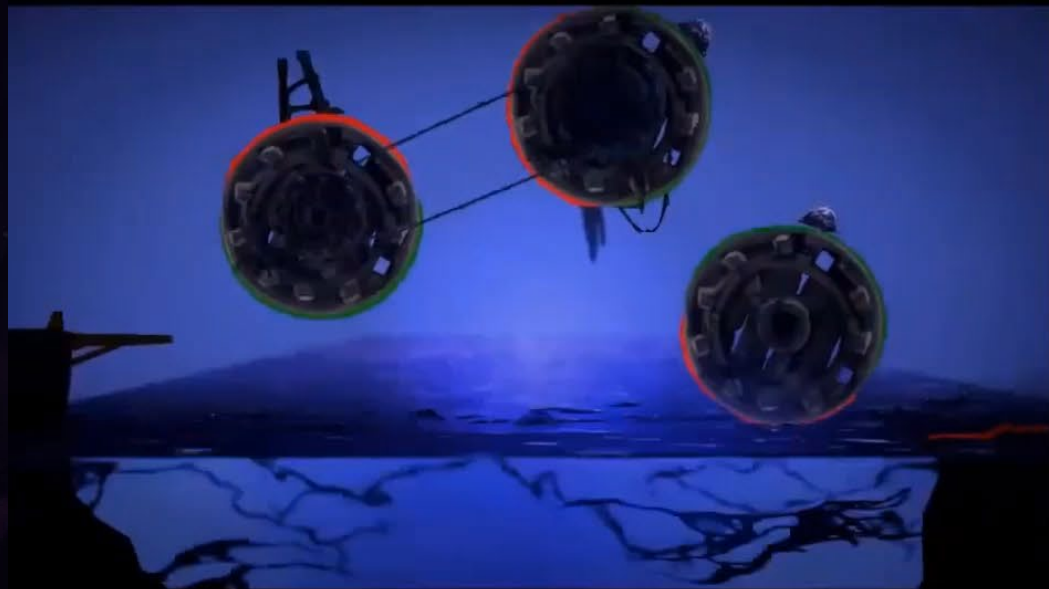
- Reusable groups of assets
- Create as we are dressing



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Dressing Workflow



Lighting & Atmosphere



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Lighting & Atmosphere

Base Tint

Fogs

- Distance Fog
- Local Fog

Lighting

- Static Lighting
- Dynamic Lighting
- 3D Characters

Post

- Light Variation
- Post settings

Base Tint



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No Lighting



Asset Tinting



Apply Tint



Fogs

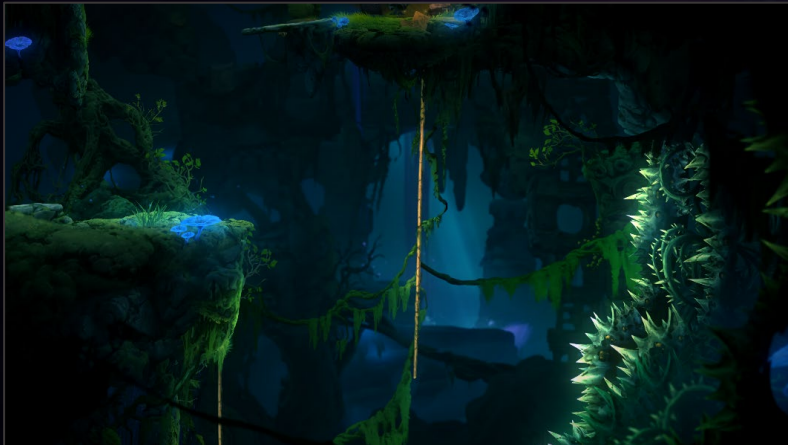
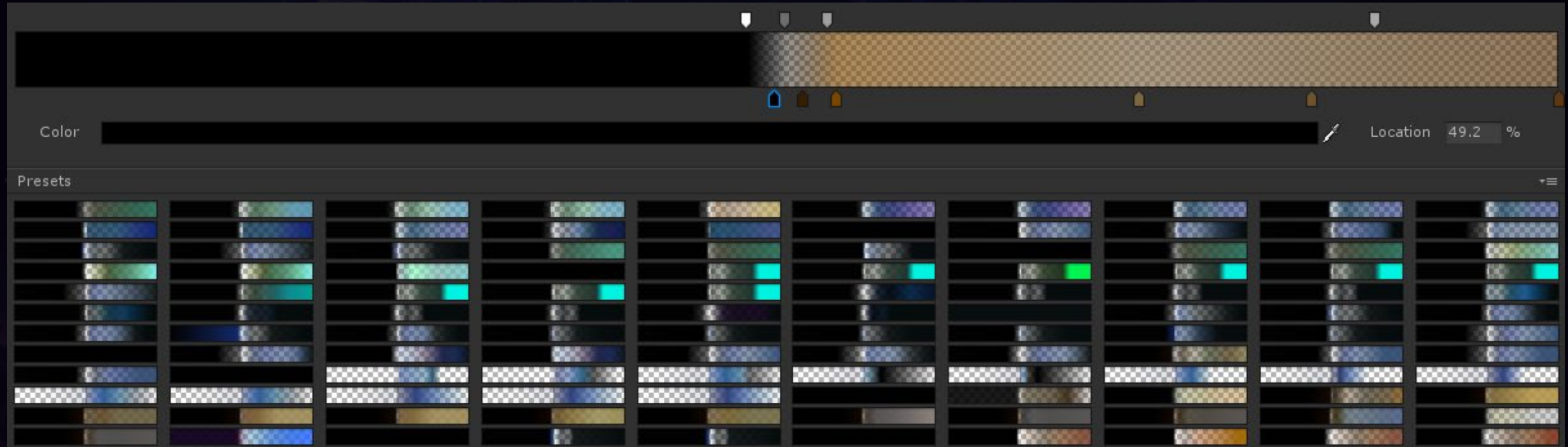


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Distance Fog



Fog Gradient



Fog Presets



Local Fog



Local Fog Assets



Local Fog



Static Lighting



Multiply



Lighting per asset



Lighting per asset



Light Canvasses



Light Canvas Painting Light



Light Canvas Painting Shadow



Dressing Progress



Many Canvasses per scene



Multiply & Canvasses



Static Lighting Recap



Pure Assets



Before & After



Dynamic Lighting



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Pointlights on Ori & Items



Pointlight as Dressing



Pointlight for Dressing



Pointlight for Effects



Lightmasks



Lightmask Painting



Pointlight



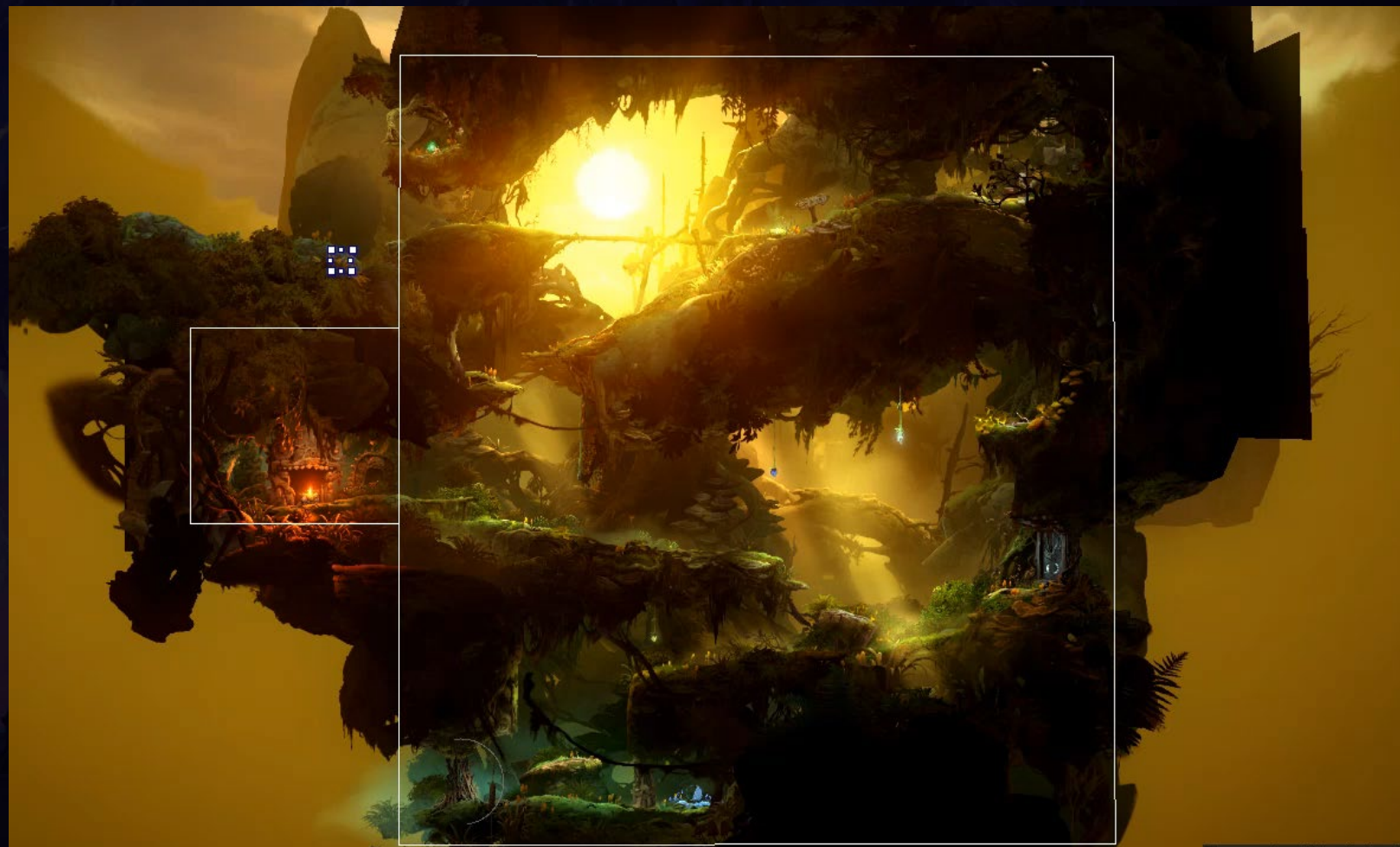
Ori Pointlight



Day & Night States

Switch:

- Light Canvasses
- Global Fog
- Local Fog
- Asset Groups (sun etc.)
- Point lights
- Post Settings



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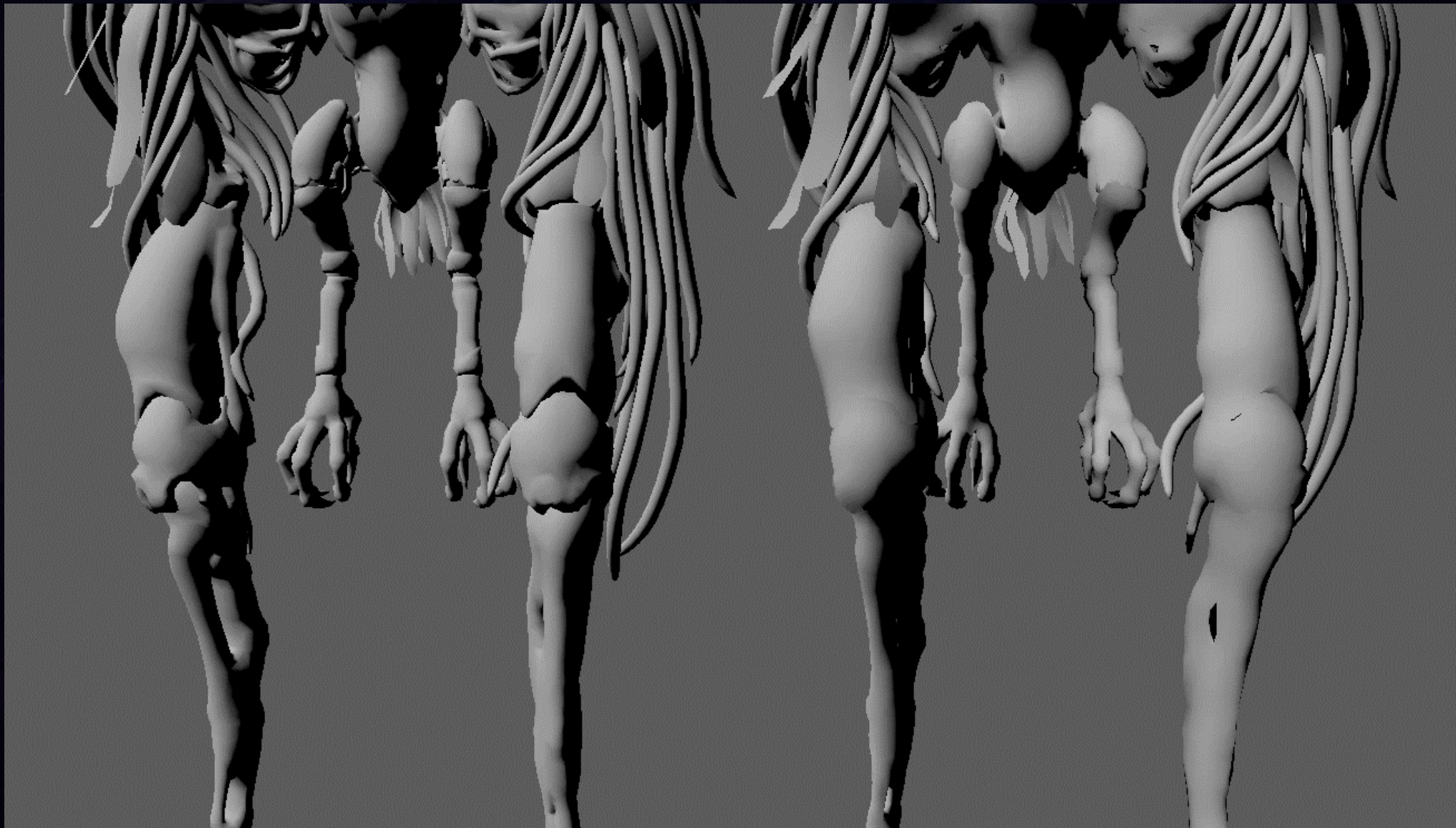
3D Lighting



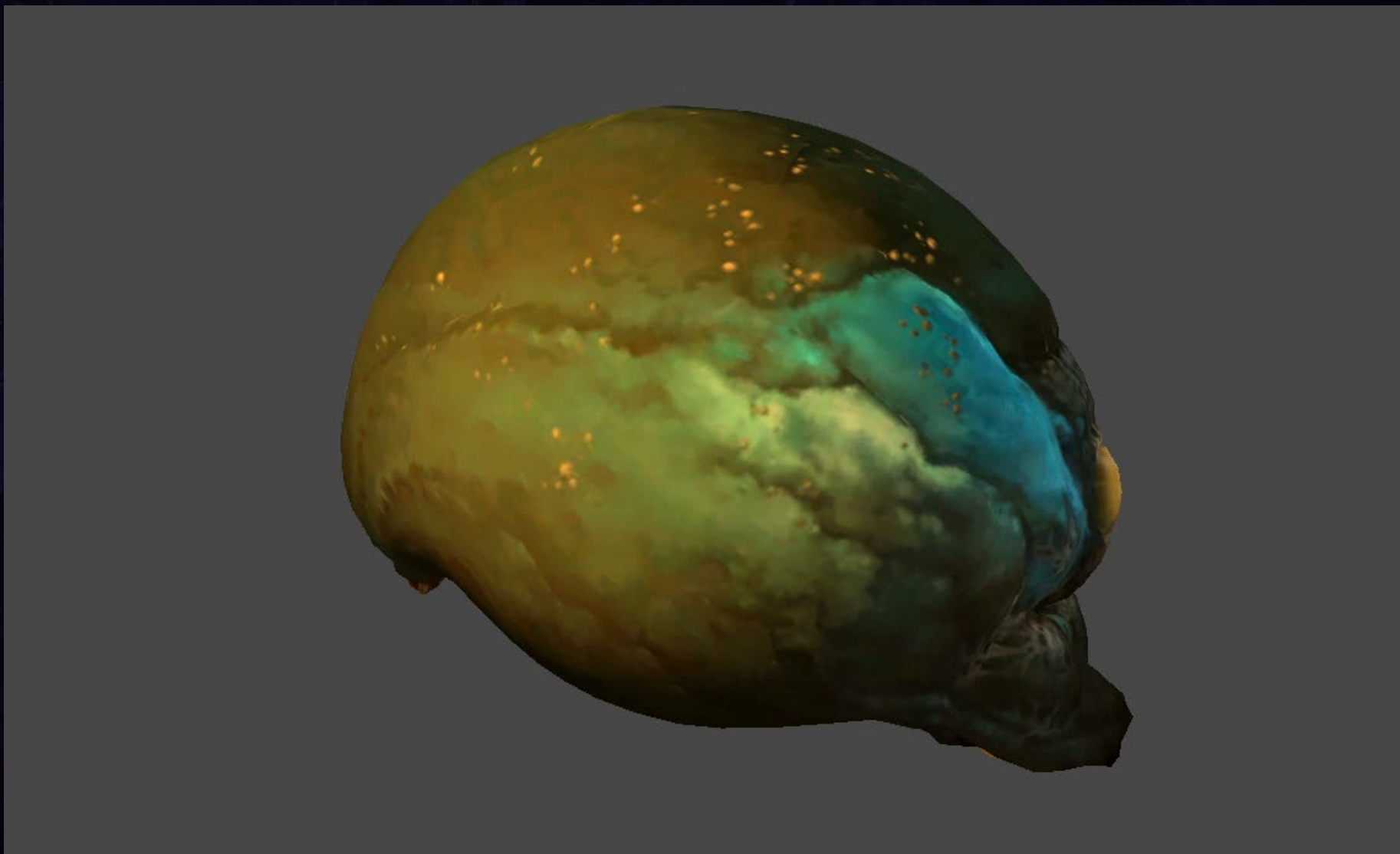
Big 3D Models



Simplify Shading



Offset Maps



Adjustment per light



3D light

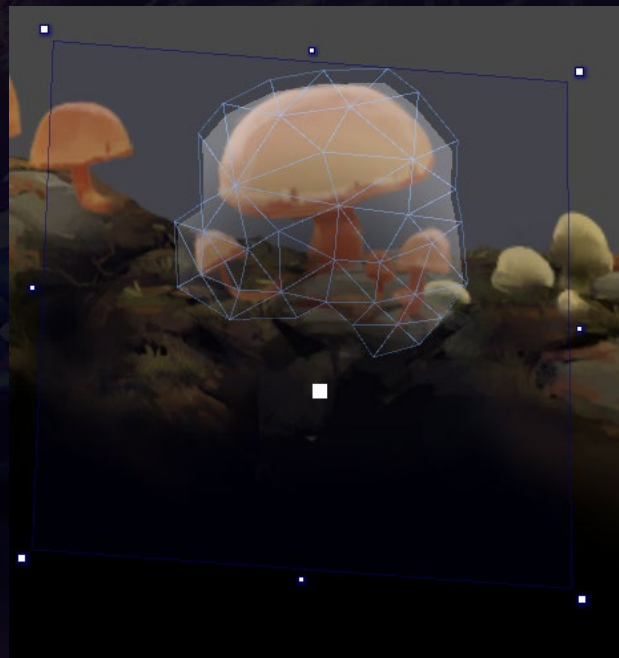


Environment Animation

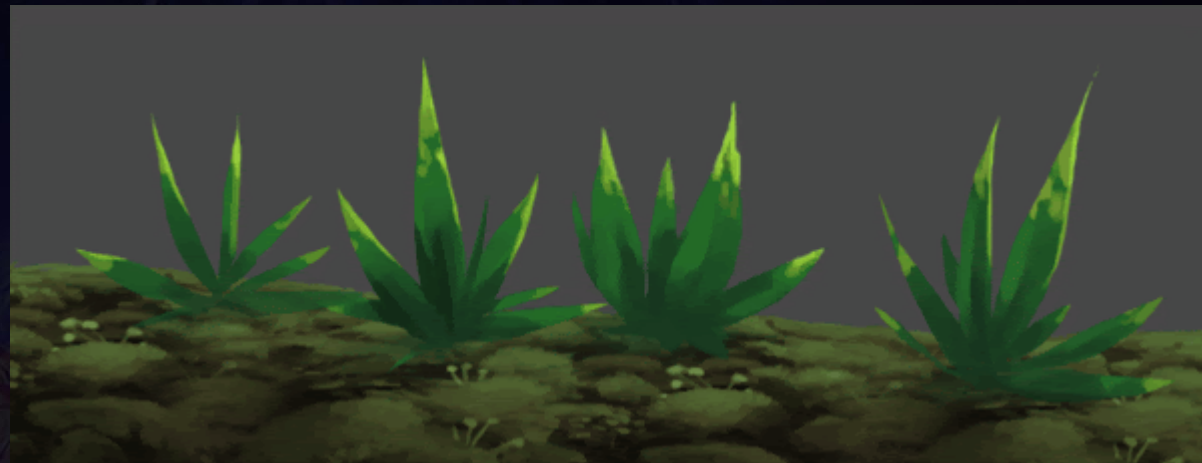


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Turbulence Scale



Turbulence Rotation



Turbulence Translation



Mesh Adjustments



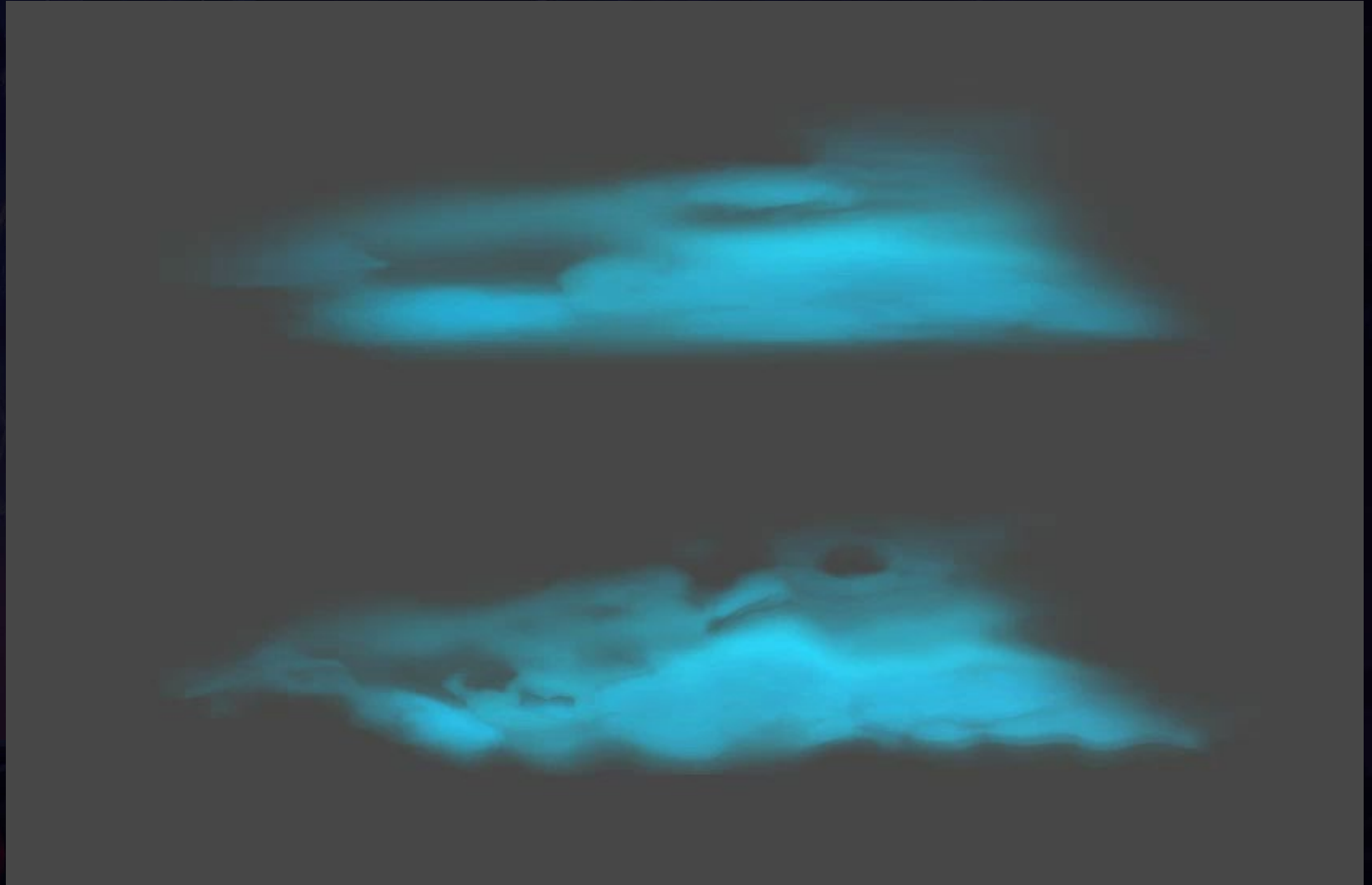
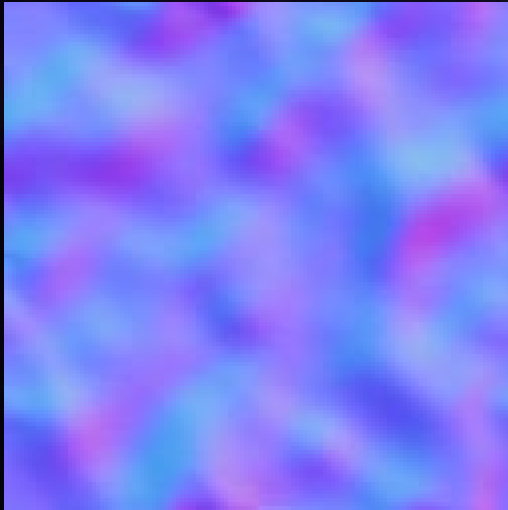
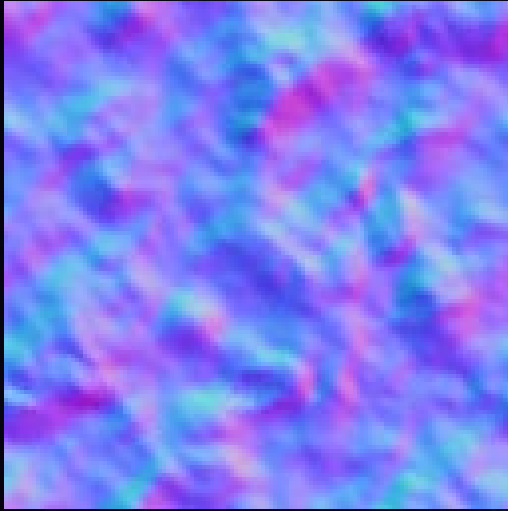
Stack Rotation & Scale



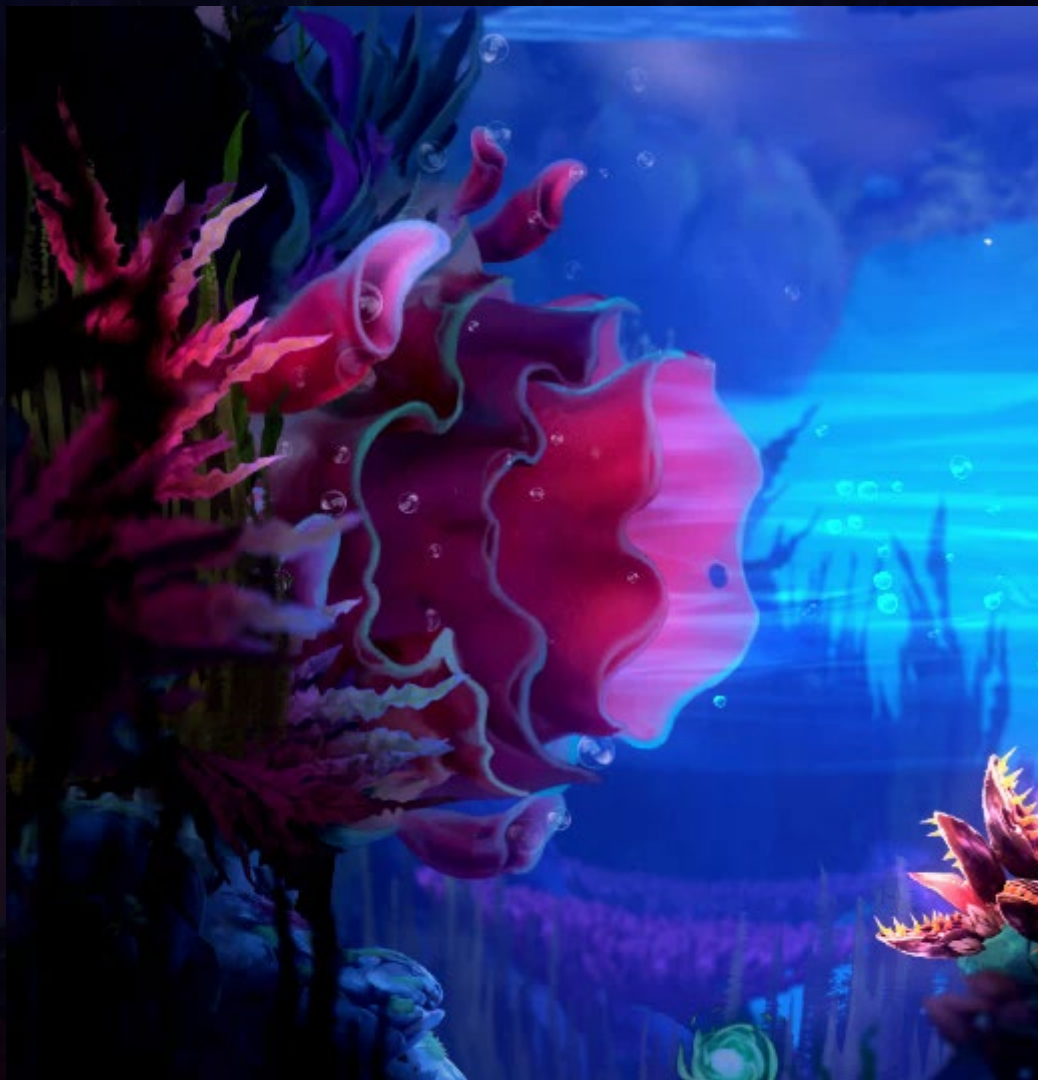
Stack All Three



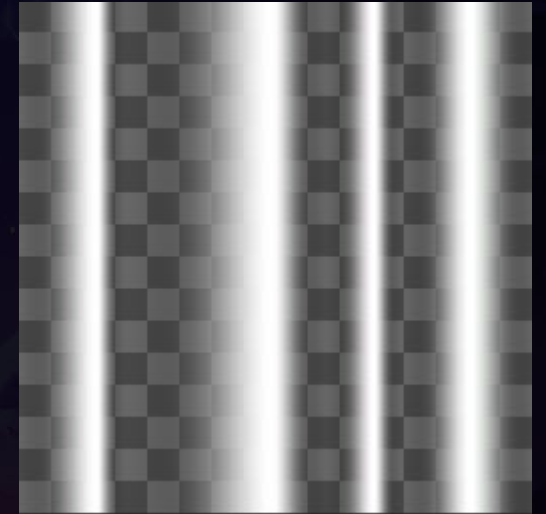
Distort



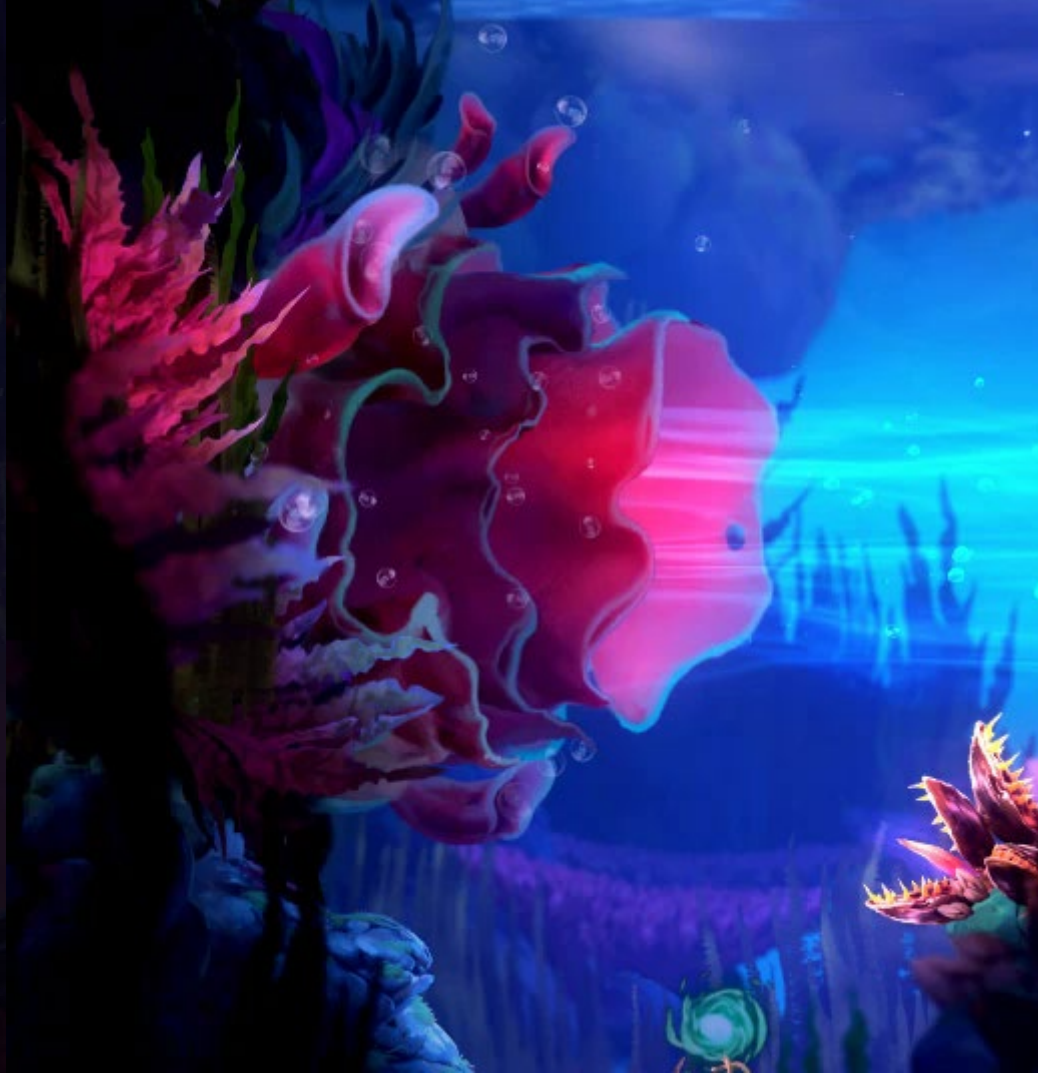
Example



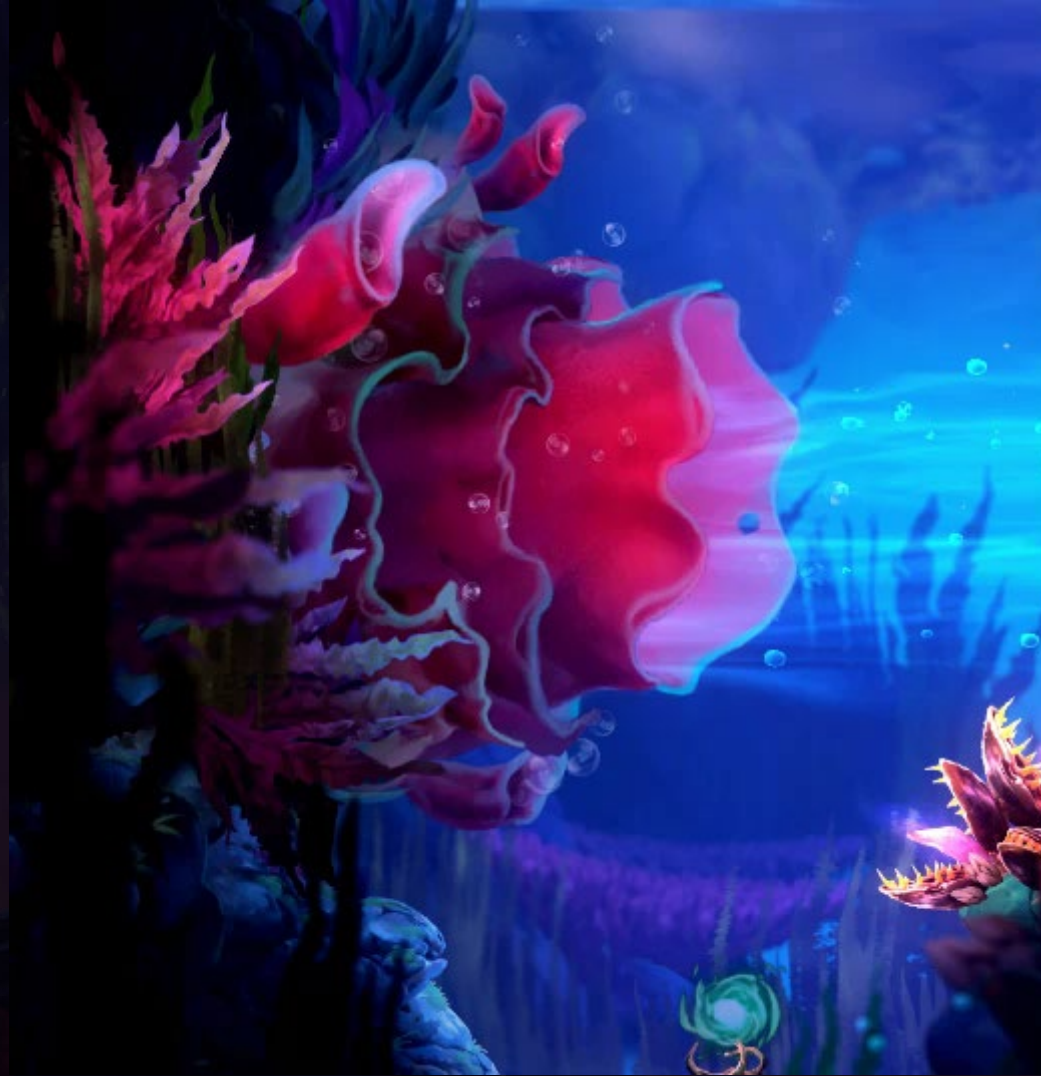
Turbulence Scale



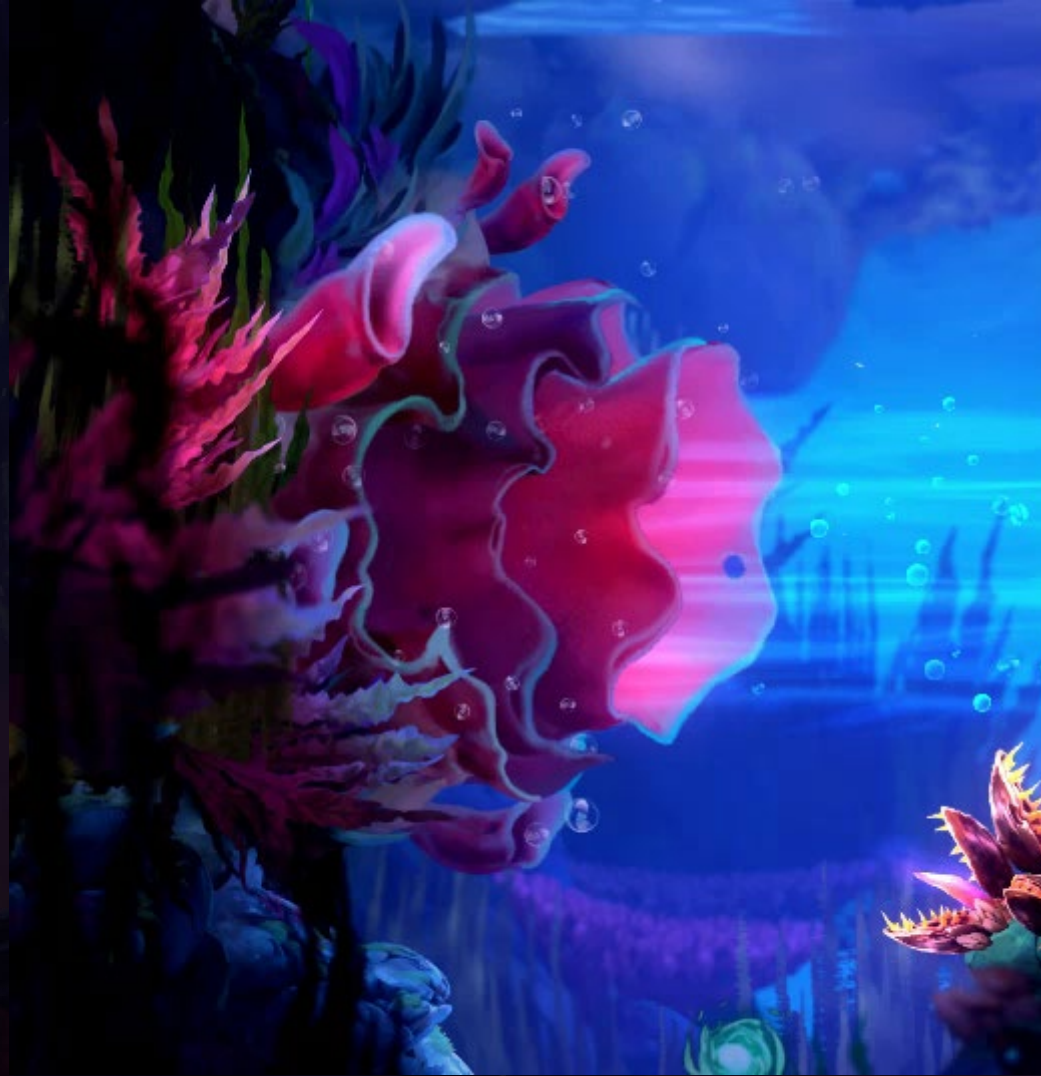
Distort



Turbulence Rotation



Extra Distort

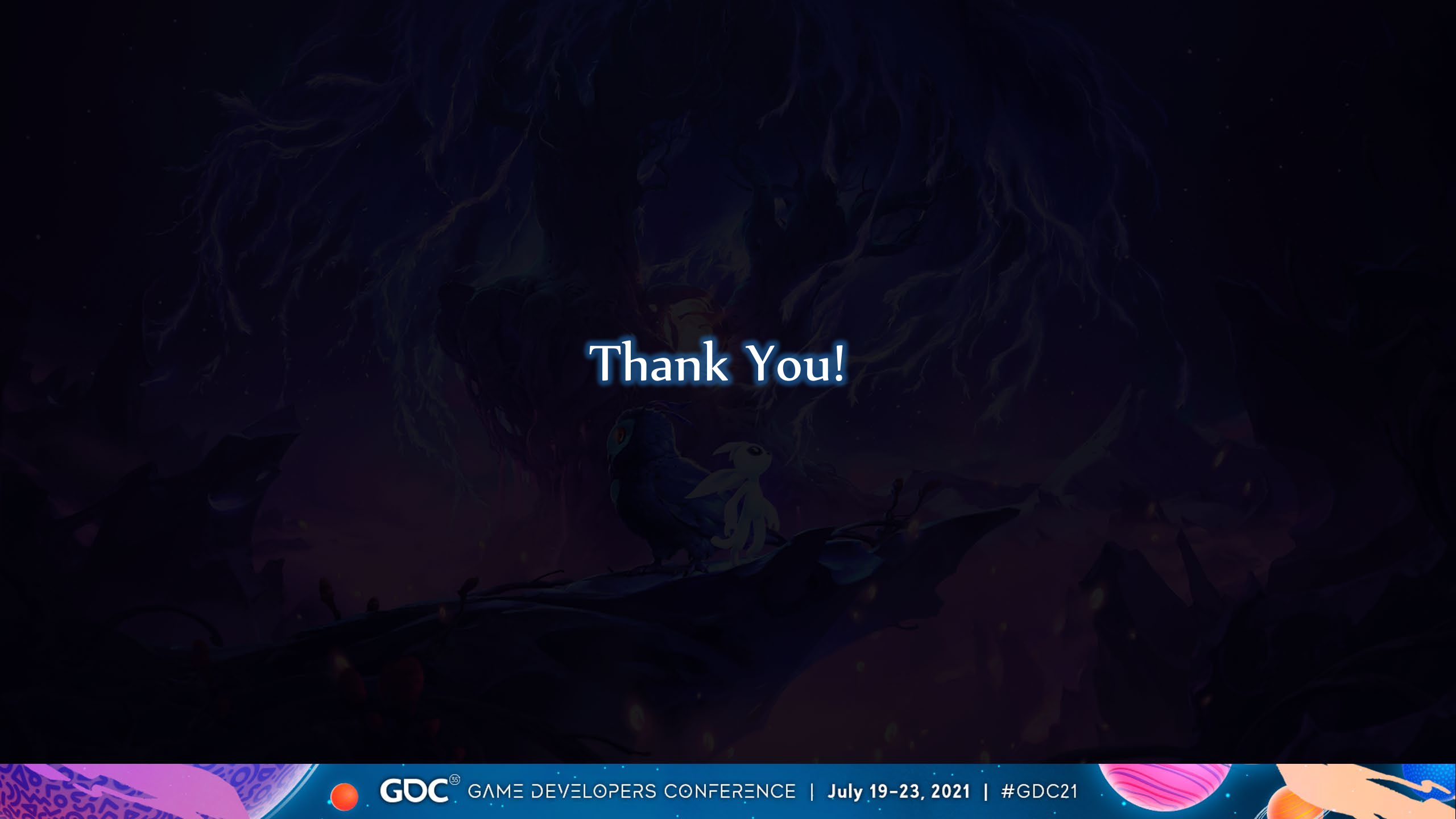


Bringing it all together

Recap

- Simple basics
- Power of stacking
- Very handcrafted





Thank You!



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