

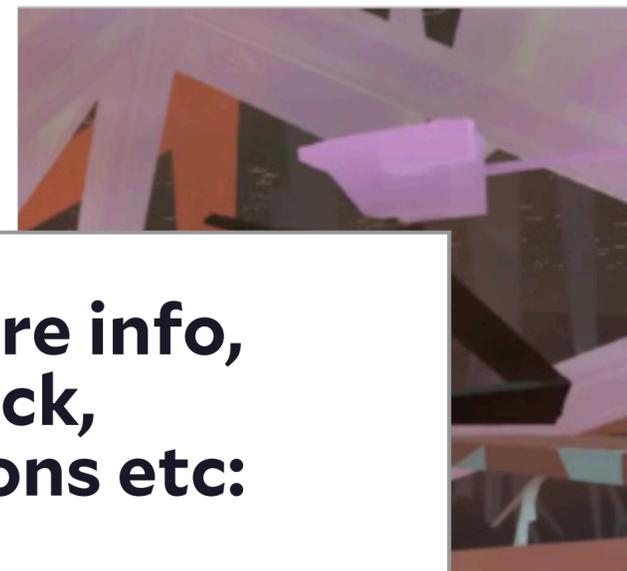
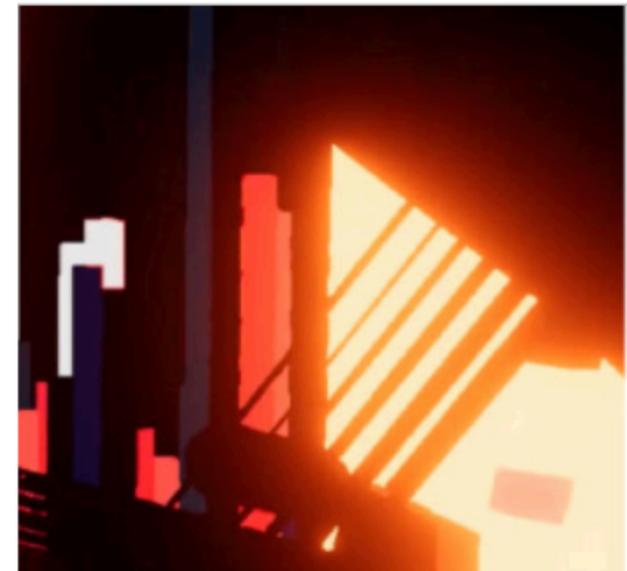
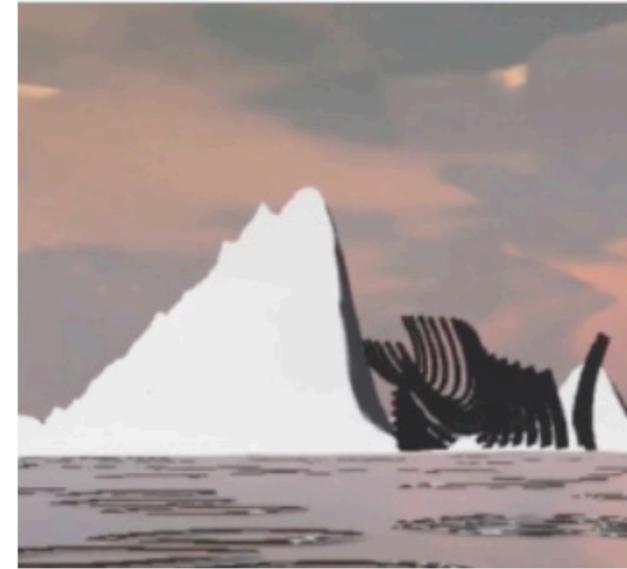
VR Interactive Music Experience - Version 1.0 2018-07-25

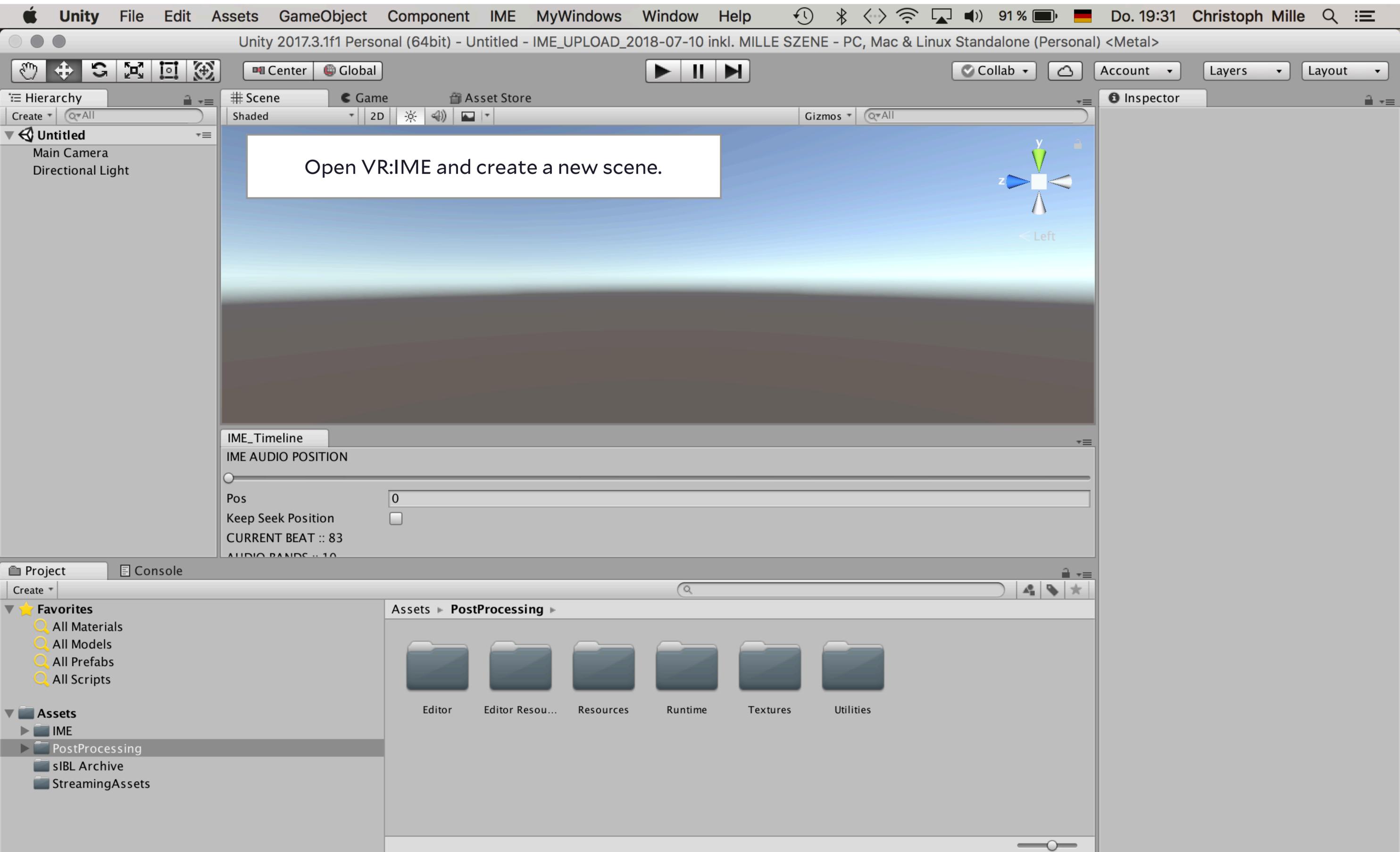
The VR Interactive Music Experience is a tool to create audio reactive elements in Unity for VR and other use cases. Its main components are an audio analyzer and several audio reactive features.

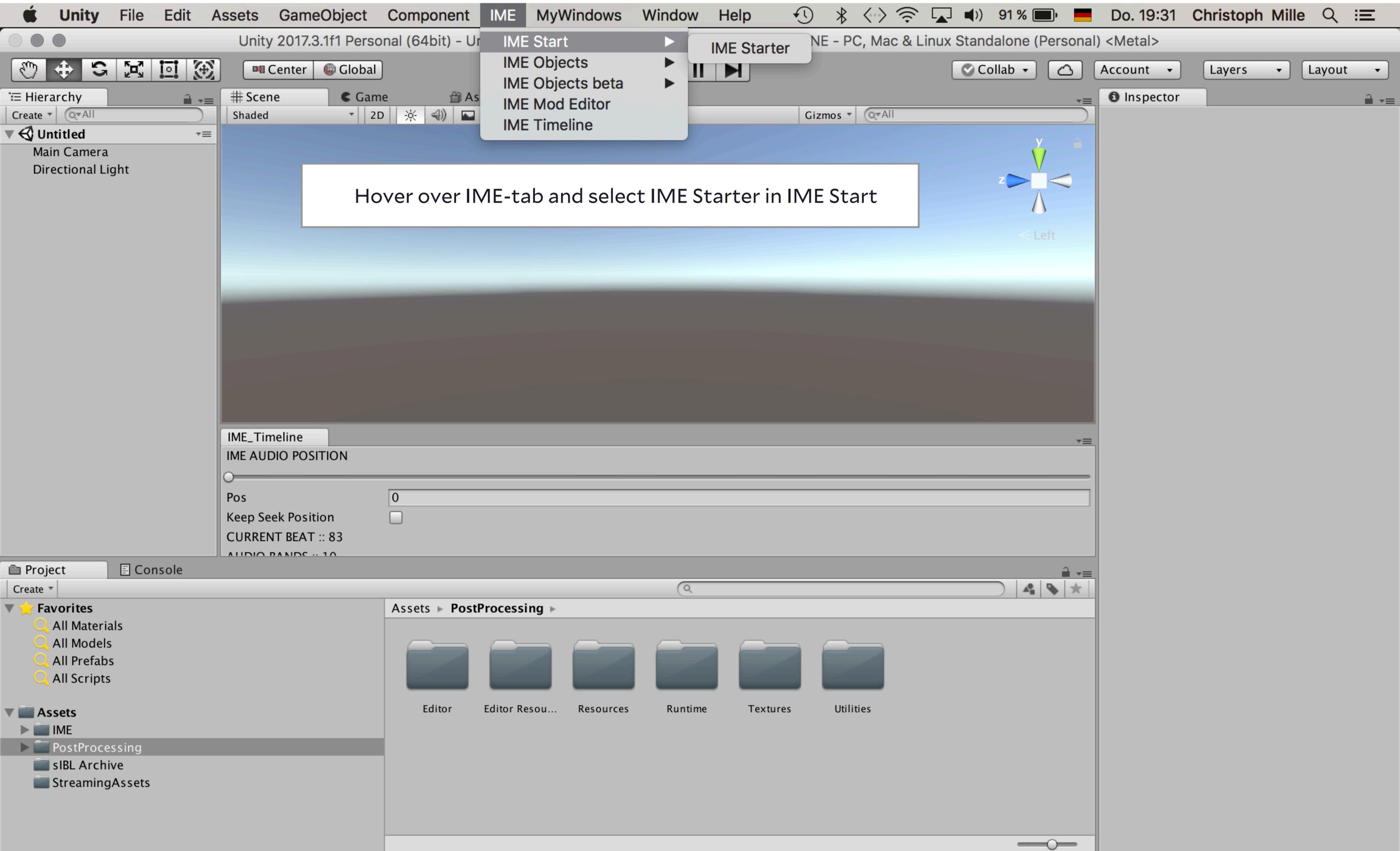
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**For more info,
feedback,
questions etc:**

info@vr-ime.com







Congrats you created your first IME Starter. Now choose some music you want to analyze. After having selected your desired music, click play and wait until the song has played thoroughly once.

Inspector

IME Starter(Clone) Static

Tag Untagged Layer Default

Transform

Position X -1.9268 Y -1.2882 Z 3.99030

Rotation X 0 Y 0 Z 0

Scale X 1 Y 1 Z 1

Initializer (Script)

Script Initializer

Audio Clip Frank Mueller - Hexaline

With Shader Updater

Loop

Fader

Fader Start 0

Fader Finish 0

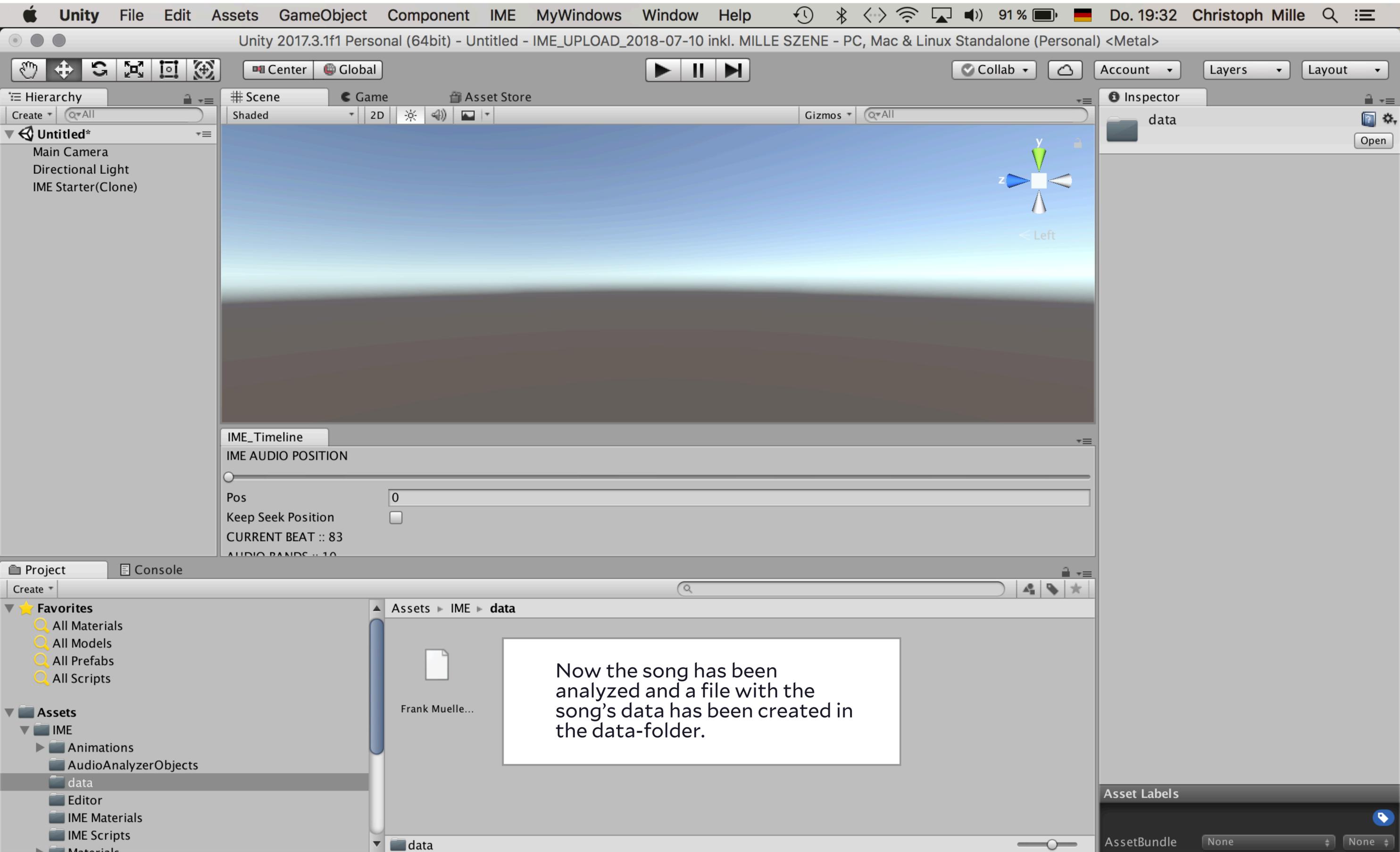
Add Component

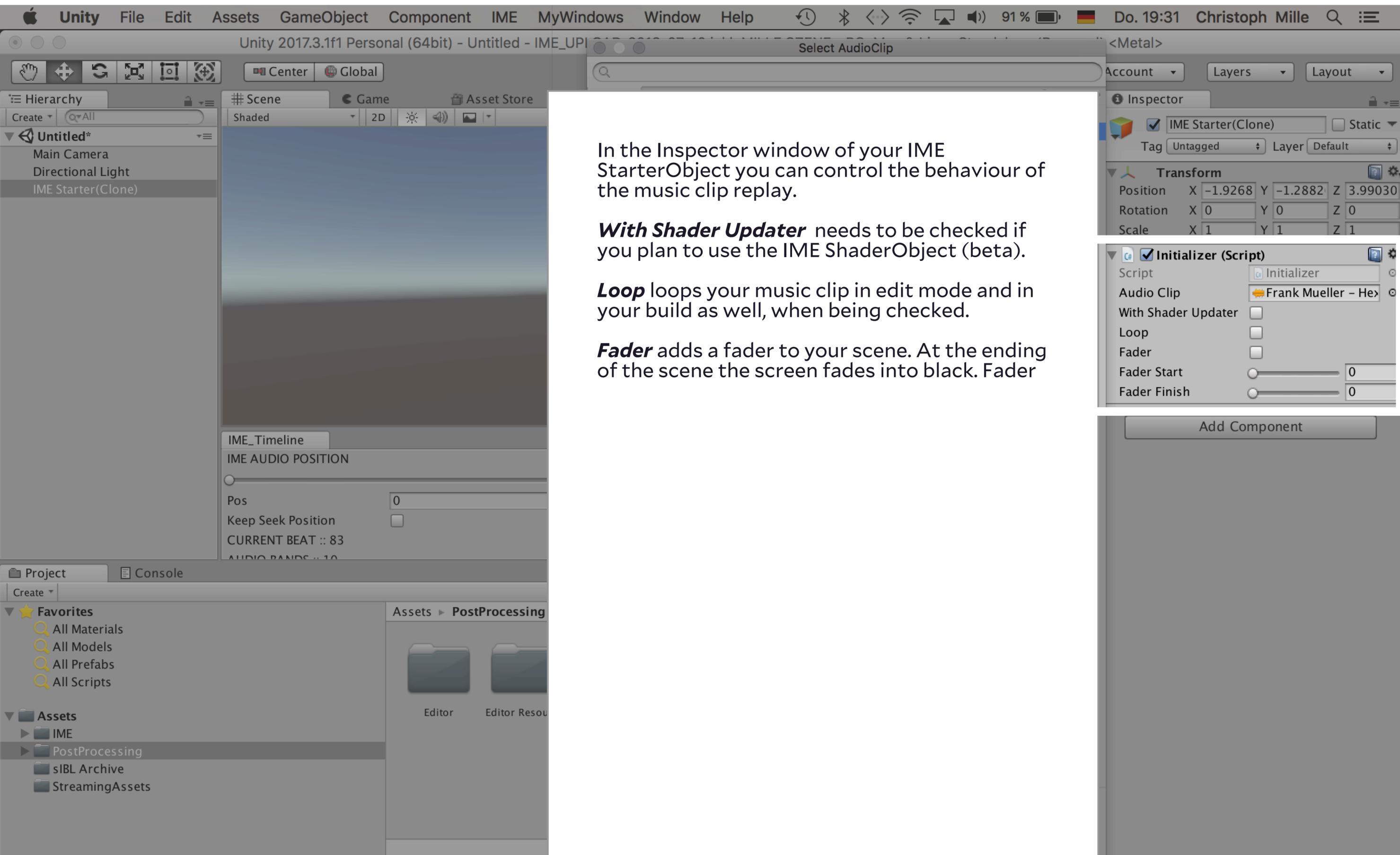
Assets > PostProcessing

Editor Editor Resou... R

ch 1 Frank Mueller - Hexaline
Audio Clip
Vorbis, 44100 Hz, Stereo, 06:59.918

ch 2 Assets/IME/Music/Frank Mueller - Hexaline.mp3



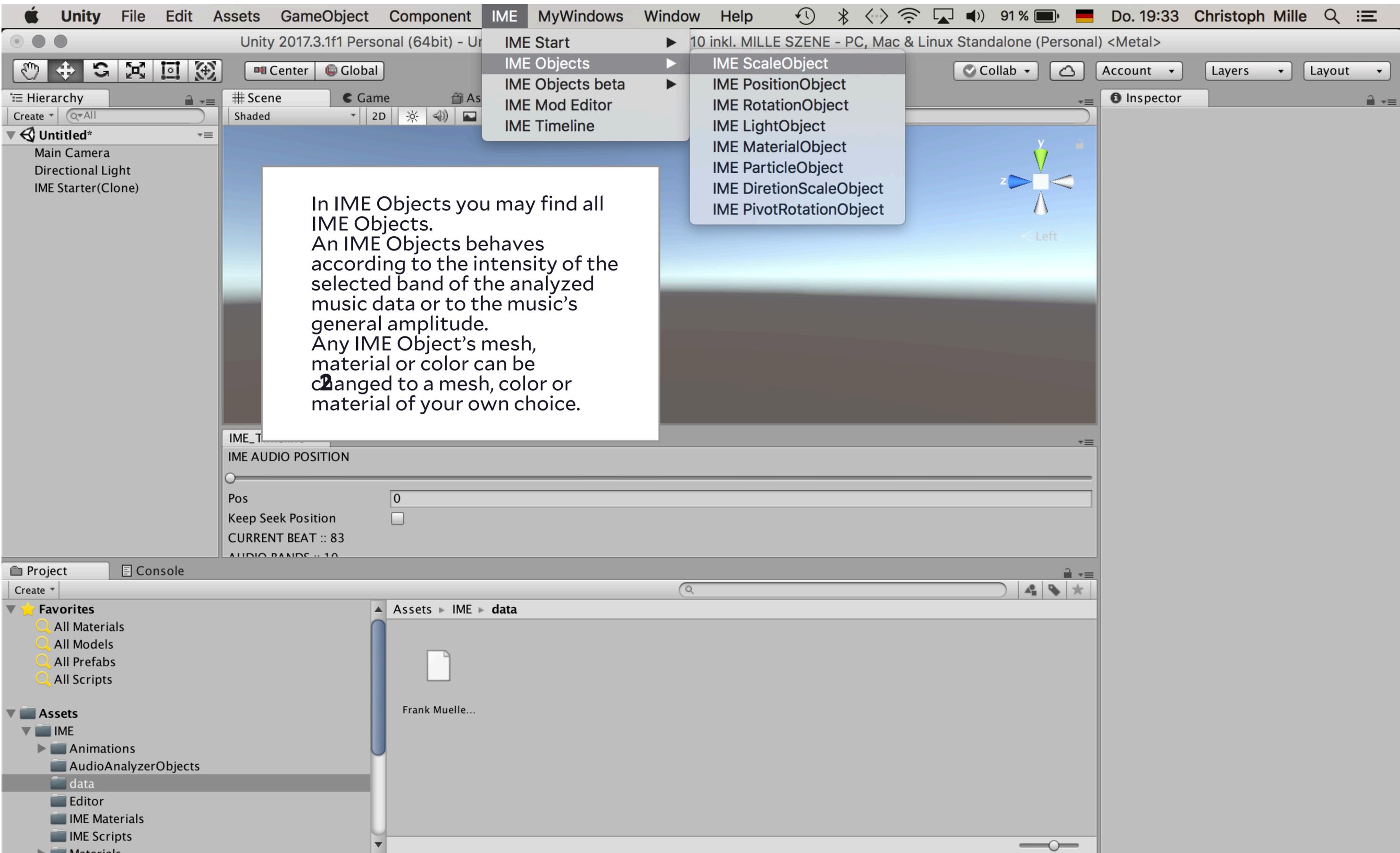


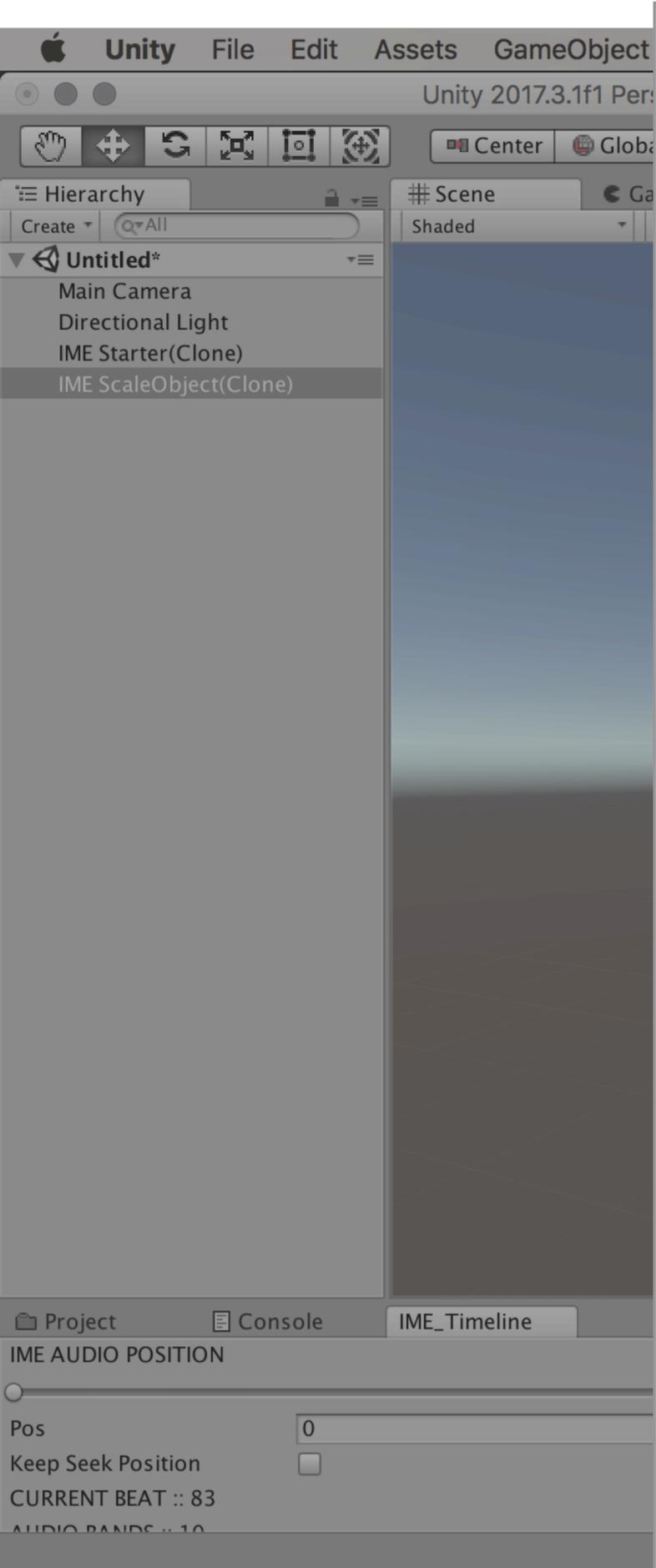
In the Inspector window of your IME StarterObject you can control the behaviour of the music clip replay.

With Shader Updater needs to be checked if you plan to use the IME ShaderObject (beta).

Loop loops your music clip in edit mode and in your build as well, when being checked.

Fader adds a fader to your scene. At the ending of the scene the screen fades into black. Fader





Size defines how many Elements are defined for the IME Objects behaviour. Every element can have its own defined parameters. For example: an IME Object with 2 Elements can use the data of 2 bands to define its appearance. One defines the y-axis amplitude one the x-axis amplitude.

Band defines which band of the analyzed data is used.

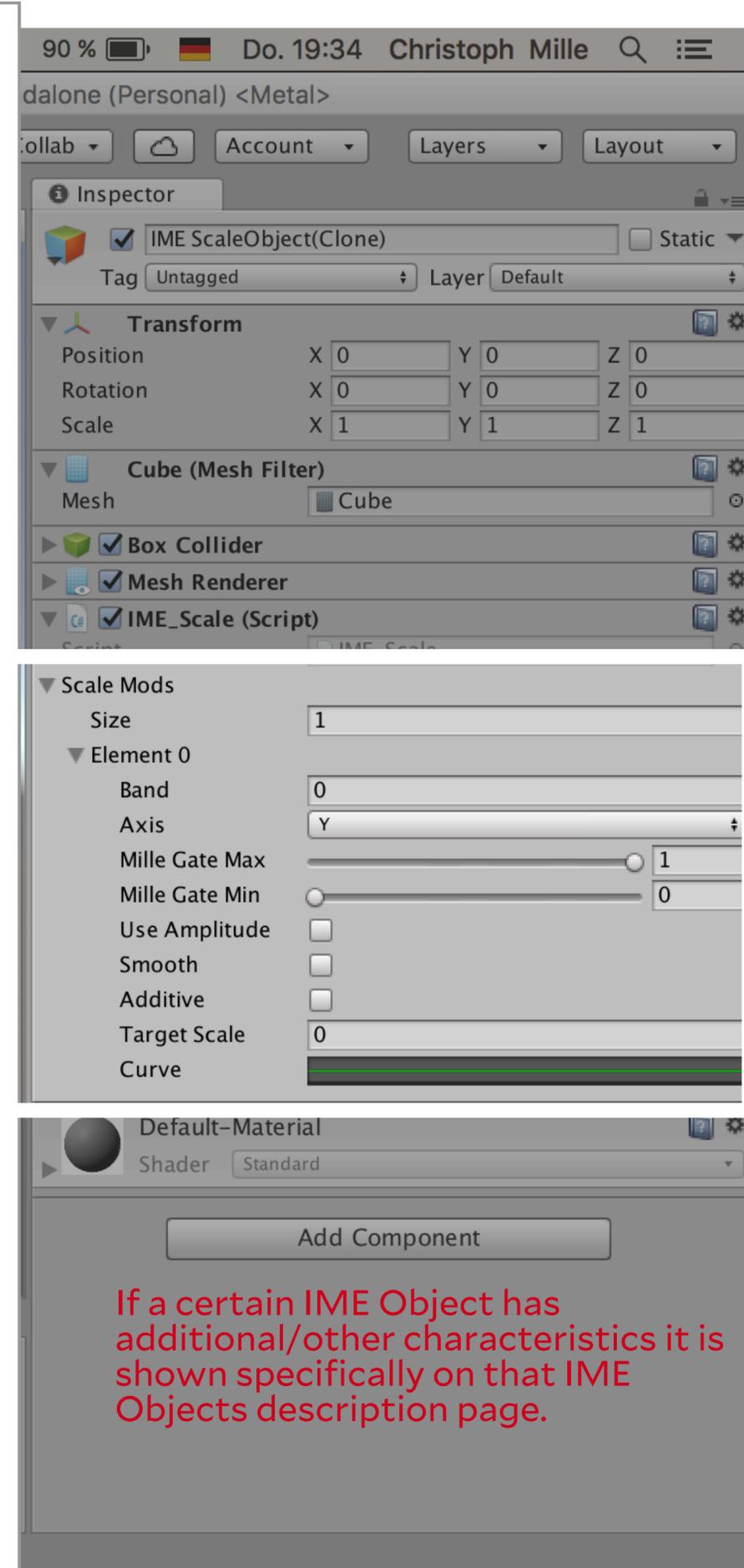
Mille Gate Max & Mille Gate Min define how early/late the IME Objects maximum and minimum parameters contingent of the band's data are reached.

Amplitude uses only the general analyzed data to define the objects paramaters. Use either a band OR the amplitude.

Smooth softens the analyzed data's values so that their impact on an IME Objects appearance is less sharp and clear, but more soft and restrained.

Additive means that any of the band's analyzed values gets added on each other. For example: an IME ScaleObject doesnt grow and shrink with each value, but every value gets stacked on each other, therefore that object grows as long as there is band data.

Target Scale defines the maximum mulitplier of the objects triggered parameter. For example an IME ScaleObject with a regular Scale parameter of x=1, y=1, z=1 and Target Scale of 2, while having chosen „all axis“, will reach a Scale parameter of x=2, y=2, z=2, whenever the band's analyzed data values reach maximum.



If a certain IME Object has additional/other characteristics it is shown specifically on that IME Objects description page.

The screenshot shows the Unity 2017.3.1f1 Personal (64bit) interface. The main scene view displays a blue sky and a grey ground plane. A small cube is positioned in the center, with a white text box overlaid on it. The text box contains the following text: **Axis** defines which scale-axis will be affected. x, y, z or all together. The cube's gizmo is visible, showing the x, y, and z axes. The Inspector panel on the right shows the selected object, IME ScaleObject(Clone), with the following properties: Transform (Position: X 0, Y 0, Z 0; Rotation: X 0, Y 0, Z 0; Scale: X 1, Y 1, Z 1), Cube (Mesh Filter) (Mesh: Cube), Box Collider, Mesh Renderer, and IME_Scale (Script). The IME_Scale (Script) component has the following settings: Script: IME_Scale, Scale Mods (Size: 1), Element 0 (Band: 0, Axis: Y, Mille Gate Max: 1, Mille Gate Min: 0, Use Amplitude: unchecked, Smooth: unchecked, Additive: unchecked, Target Scale: 0, Curve: a green curve). The Hierarchy panel on the left shows the scene hierarchy: Main Camera, Directional Light, IME Starter(Clone), and IME ScaleObject(Clone). The Console panel at the bottom shows the IME Timeline and IME AUDIO POSITION settings: Pos: 0, Keep Seek Position: unchecked, CURRENT BEAT :: 83, AUDIO BANDS :: 10.

The screenshot shows the Unity 2017.3.1f1 Personal (64bit) interface. The main scene view displays a cube with a gizmo and a text box explaining the IME PositionObject script parameters. The Inspector panel on the right shows the script's configuration.

Axis defines which position-axis will be affected.
x, y, z or all together
Max Range defines how far the object's position changes at maximum.

Inspector Panel:

- IME PositionObject(Clone) Static
- Tag: Untagged, Layer: Default
- Transform**
 - Position: X 0, Y 0, Z 1.63
 - Rotation: X 0, Y 0, Z 0
 - Scale: X 1, Y 1, Z 1
- Cube (Mesh Filter)**
 - Mesh: Cube
- Box Collider**
- Mesh Renderer**
- IME_Position (Script)**
 - Script: IME_Position
 - Pos Mod
 - Size: 1
 - Element 0
 - Band: 0
 - Axis: x
 - Mille Gate Max: 1
 - Mille Gate Min: 0
 - Max Range: 4
 - Smooth:
 - Use Amplitude:
 - Additive:
 - Curve: [Graph]
- Default-Material
 - Shader: Standard

Console Panel:

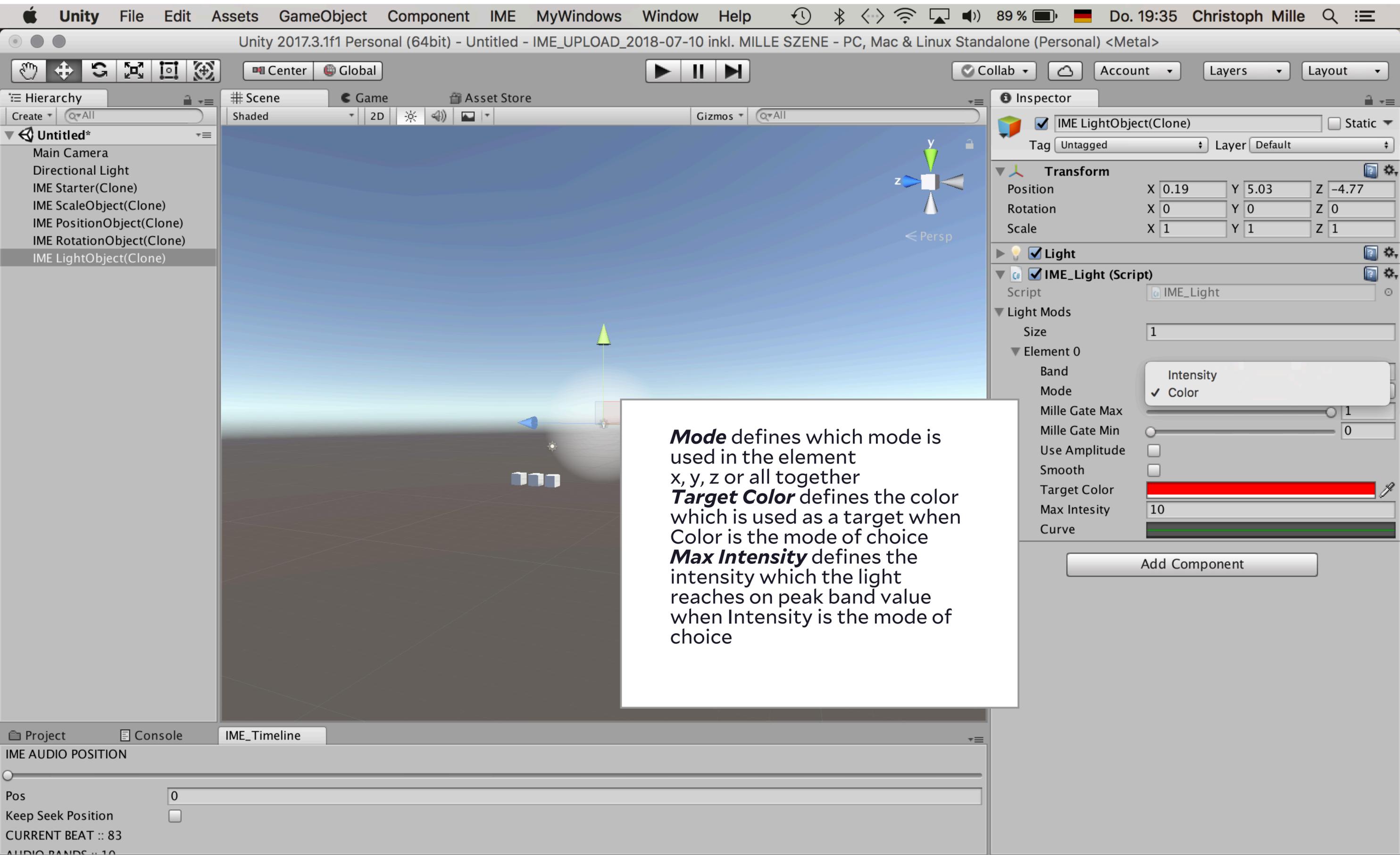
IME AUDIO POSITION

Pos: 0

Keep Seek Position:

CURRENT BEAT :: 83

AUDIO BANDS :: 10



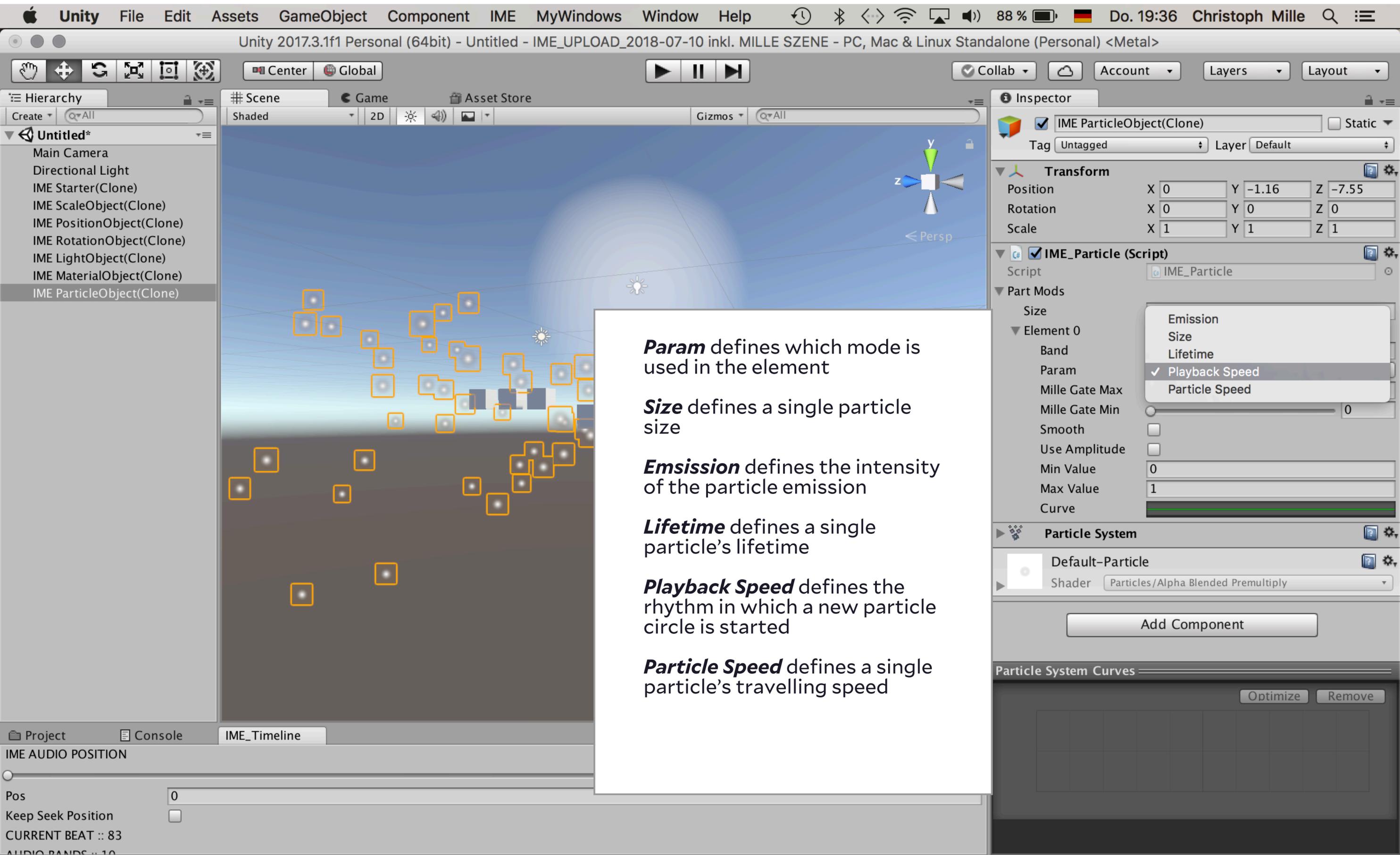
The screenshot shows the Unity 2017.3.1f1 Personal (64bit) interface. The main scene view displays a 3D environment with a blue sky, a sun, and a cube on a dark ground plane. The cube is highlighted with a blue selection box. A text box is overlaid on the scene, providing definitions for material properties:

- Mode** defines which mode is used in the element
- Target Color** defines the materials target color
- Emission** defines the intensity of the material emission (only works when material has an emission defined!)

The Inspector panel on the right shows the selected object, 'IME MaterialObject(Clone)', with the following properties:

- Tag: Untagged
- Layer: Default
- Transform: Position (X: -1.77, Y: -0.79, Z: -3.43), Rotation (X: 0, Y: 0, Z: 0), Scale (X: 1, Y: 1, Z: 1)
- Cube (Mesh Filter): Mesh: Cube
- Box Collider: checked
- Mesh Renderer: checked
- IME_Material (Script): checked, Script: IME_Material
- Material Mods: Size: 1
- Element 0: Band: 0, Mode: Single Color (checked), Emission (selected), Mille Gate Max: 0, Mille Gate Min: 0, Use Amplitude: unchecked, Smooth: unchecked, Target Color: pink, Curve: green
- Standard Shader: Standard

The Hierarchy panel on the left shows the scene hierarchy, with 'IME MaterialObject(Clone)' selected. The Console panel at the bottom shows the 'IME AUDIO POSITION' and 'CURRENT BEAT :: 83'.



Param defines which mode is used in the element

Size defines a single particle size

Emission defines the intensity of the particle emission

Lifetime defines a single particle's lifetime

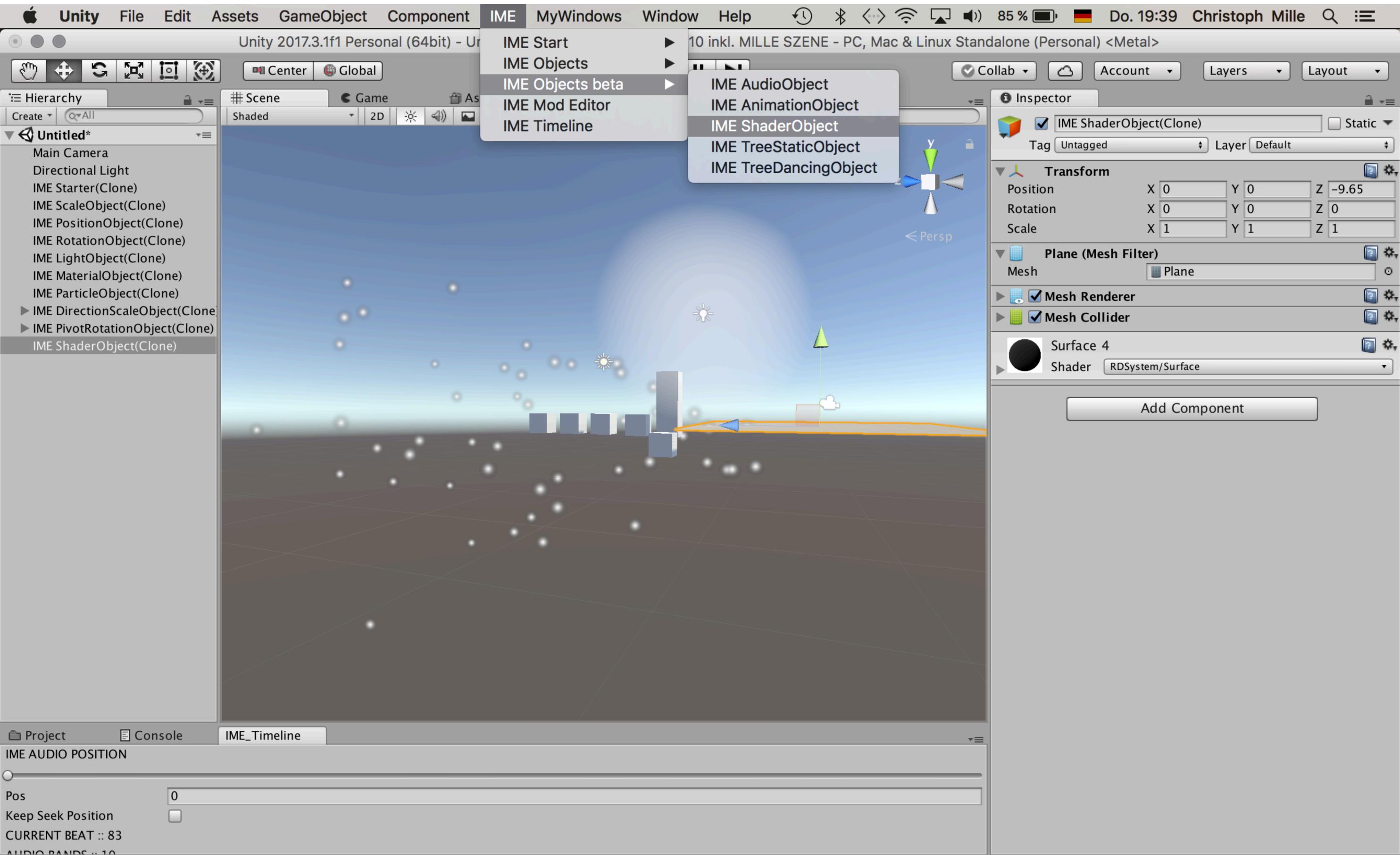
Playback Speed defines the rhythm in which a new particle circle is started

Particle Speed defines a single particle's travelling speed

Axis defines which axis is used in the element to rotate

Max Rotation sets the maximum degree the object rotates whenever the element band peaks

Note: **Additive** in IME Rotation or IME PivotRotation means that the object rotates continuously in one direction controlled by the intensity of Max Rotation and the band values of the element.



The screenshot displays the Unity 2017.3.1f1 Personal (64bit) interface. The main scene view shows a 3D environment with a grid floor, a blue sky, and a large red 'beta' watermark. A white text box in the center of the scene reads: **IME ShaderObject needs With Shader Updater in IME Starter checked.**

The Hierarchy panel on the left shows the following objects under 'Untitled*':

- Main Camera
- Directional Light
- IME Starter(Clone)
- IME ScaleObject(Clone)
- IME PositionObject(Clone)
- IME RotationObject(Clone)
- IME LightObject(Clone)
- IME MaterialObject(Clone)
- IME ParticleObject(Clone)
- IME DirectionScaleObject(Clone)
- IME PivotRotationObject(Clone)
- IME ShaderObject(Clone)

The Inspector panel on the right shows the 'IME Starter(Clone)' component selected. The 'Transform' component is visible with the following values:

Property	X	Y	Z
Position	-1.926838	-1.288263	3.990309
Rotation	0	0	0
Scale	1	1	1

The 'Initializer (Script)' component is also visible, with the following settings:

- Script: Initializer
- Audio Clip: Frank Mueller - Hexaline
- With Shader Updater:
- Loop:
- Fader:
- Fader Start: 0
- Fader Finish: 0

The Console panel at the bottom shows the 'IME Timeline' and 'IME AUDIO POSITION' section with a slider set to 0. The 'CURRENT BEAT' is 83 and 'AUDIO BANDS' is 10.

The screenshot displays the Unity 2017.3.1f1 Personal (64bit) interface. The main window shows a 3D scene with a character on a platform, a text box with the text "Just play around with all options, it's **beta**, baby!", and a large red "beta" watermark. The Hierarchy panel on the left lists various objects, including "IME AnimationObject(Clone)". The Inspector panel on the right shows the properties of the selected "IME AnimationObject(Clone)", including the "Animator" component and the "IME_Animation (Script)" component. The Console panel at the bottom shows the "IME AUDIO POSITION" and "CURRENT BEAT :: 83".

Unity 2017.3.1f1 Personal (64bit) - Untitled - IME_UPLOAD_2018-07-10 inkl. MILLE SZENE - PC, Mac & Linux Standalone (Personal) <Metal>

Center Global

Collab Account Layers Layout

Hierarchy

Create All

Untitled*

- Main Camera
- Directional Light
- IME Starter(Clone)
- IME ScaleObject(Clone)
- IME PositionObject(Clone)
- IME RotationObject(Clone)
- IME LightObject(Clone)
- IME MaterialObject(Clone)
- IME ParticleObject(Clone)
- IME DirectionScaleObject(Clone)
- IME PivotRotationObject(Clone)
- IME ShaderObject(Clone)
- IME AnimationObject(Clone)
 - Hips
 - mesh

Scene Game Asset Store

Shaded 2D Gizmos All

Inspector

IME AnimationObject(Clone) Static

Tag Untagged Layer Default

Transform

Animator

IME_Animation (Script)

Script IME_Animation

Anim

Idle Anim

Band 4

Use Amplitude

Use Buffer

Curve

Anim Controller HipHop_w_layer1

Dance_cutoff 0.65

Idle_cutoff 0.2

Idlecounter 0

Playback Speed Min 1

Playback Speed Max 3

Test 0

Generate Transitions

Generate Animator

Add Component

Project Console IME_Timeline

IME AUDIO POSITION

Pos 0

Keep Seek Position

CURRENT BEAT :: 83

AUDIO BANDS :: 10

Unity 2017.3.1f1 Personal (64bit) - Untitled - IME_UPLOAD_2018-07-10 inkl. MILLE SZENE - PC, Mac & Linux Standalone (Personal) <Metal>

Center Global

Hierarchy

Scene

Game

Asset Store

Inspector

IME TreeStaticObject(Clone) Static

Tag Untagged Layer Default

Transform

(Mesh Filter)

Mesh

Mesh Renderer

Organic (Script)

Script Organic

Seed -507535616

Grow 1

Vanish 0

Scale Per Grow 0.72459

Branch Probability 0.41969

Branch End Probability 0.06047

Branch Angle 78.5094

Branch Length 5.16103

Branch Width

Mode

Mode_3D

Mode_2D

Create Random Tree

IME_Tree Grow (Script)

Script IME_TreeGrow

Grow

Grow Parameters

Enable

Curve

Band 0

Use Amplitude

Smooth

Start Level 0

Direction Up

Threshold 0

Vanish

Vanish Parameters

Default-Material

Shader Standard

beta

Mode defines if the tree is purely 2d or if he has branches extending in 3d as well.

Just play around with all options, it's beta, baby!

Unity 2017.3.1f1 Personal (64bit) - Untitled - IME_UPLOAD_2018-07-10 inkl. MILLE SZENE - PC, Mac & Linux Standalone (Personal) <Metal>

Curve

Hierarchy: Untitled*
Main Camera
Directional Light
IME Starter
IME ScaleObject
IME Position
IME Rotation
IME Light
IME Material
IME Particle
IME Directional
Cube
IME Pivot
IME Shader
IME Animation
IME TreeState

Inspector

IME ScaleObject(Clone) [Static]

Tag: Untagged Layer: Default

Transform

Cube (Mesh Filter)
Mesh: Cube

Box Collider

Mesh Renderer

IME_Scale (Script)
Script: IME_Scale

Scale Mods

Size: 1

Element 0

Band: 0
Axis: Y
Mille Gate Max: 1
Mille Gate Min: 0
Use Amplitude:
Smooth:
Additive:
Target Scale: 0
Curve: [Curve]

Curve

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

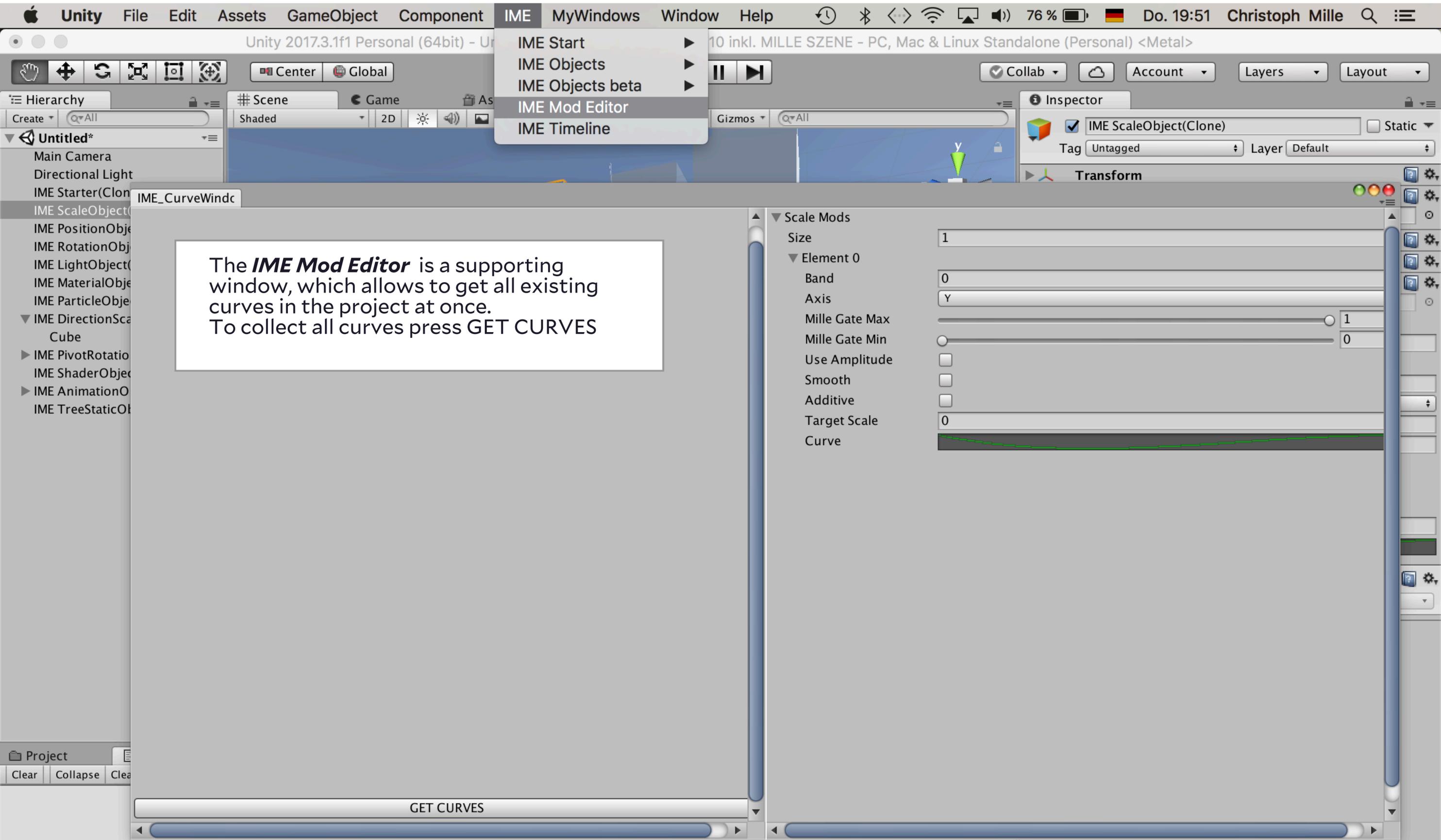
0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

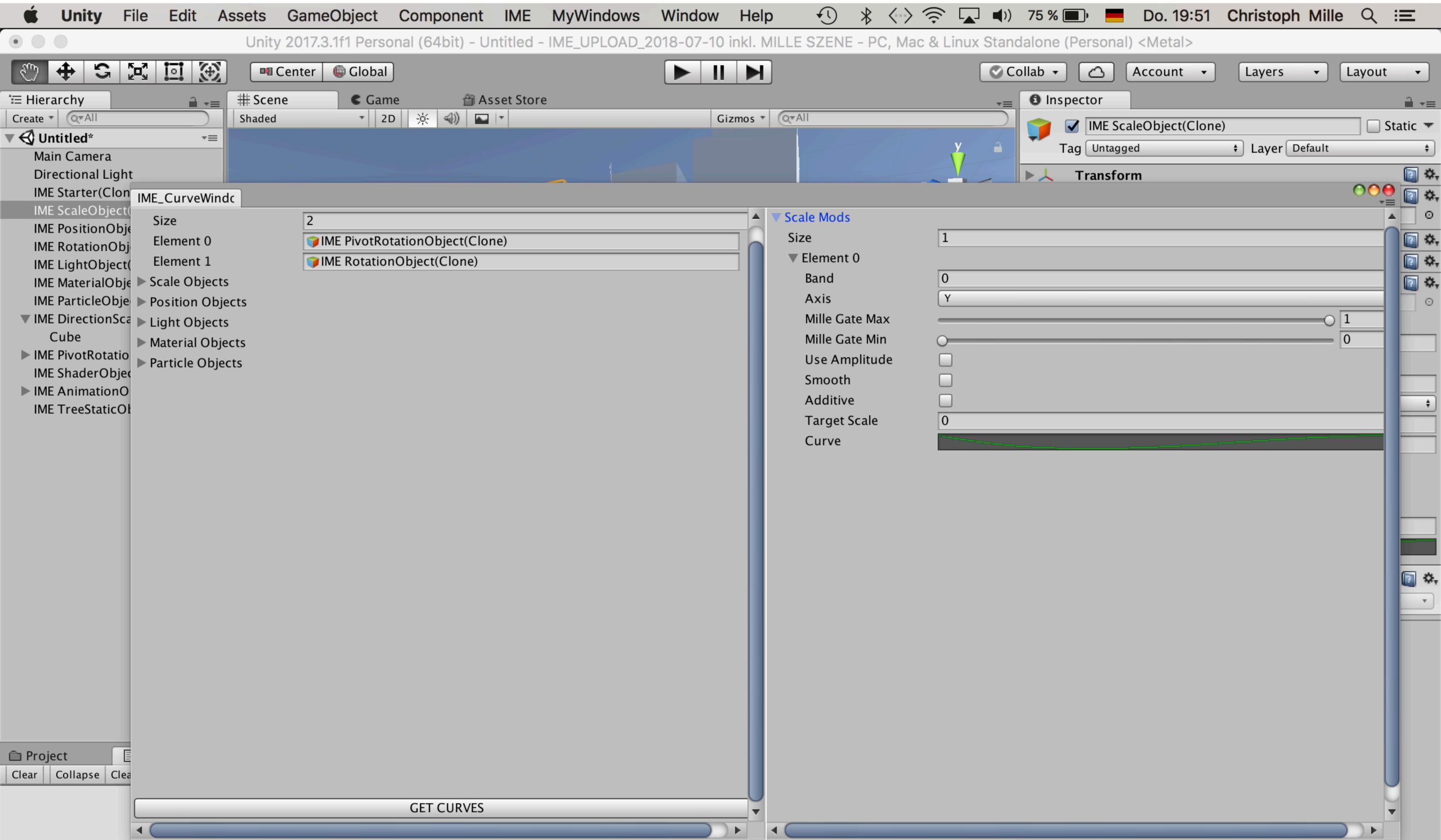
Project: Clear Collapse

Curve defines an IME Objects behavior over the course of the music theme's duration.

On the x-axis:
0 = start, 1 = end

On the y-axis:
0 = IME Object does nothing
1 = IME Object is at 100 % behaviour





The screenshot displays the Unity 2017.3.1f1 Personal (64bit) interface. The top menu bar includes Unity, File, Edit, Assets, GameObject, Component, **IME**, MyWindows, Window, and Help. The IME menu is open, showing options: IME Start, IME Objects, IME Objects beta, IME Mod Editor, and IME Timeline. The Hierarchy panel on the left lists various IME objects, with 'IME ScaleObject(Clone)' selected. The Inspector panel on the right shows the properties for 'IME ScaleObject(Clone)', including Transform, Cube (Mesh Filter), Box Collider, Mesh Renderer, and IME_Scale (Script). The IME Timeline window at the bottom shows 'IME AUDIO POSITION' with a slider at 0.264938 and a 'Keep Seek Position' checkbox. A text box at the bottom explains the IME Timeline support window and the 'Keep Seek Position' option.

The **IME** menu options are:

- IME Start
- IME Objects
- IME Objects beta
- IME Mod Editor
- IME Timeline

The Hierarchy panel shows the following objects:

- Untitled*
- Main Camera
- Directional Light
- IME Starter(Clone)
- IME ScaleObject(Clone)
- IME PositionObject(Clone)
- IME RotationObject(Clone)
- IME LightObject(Clone)
- IME MaterialObject(Clone)
- IME ParticleObject(Clone)
- IME DirectionScaleObject(Clone)
 - Cube
- IME PivotRotationObject(Clone)
- IME ShaderObject(Clone)
- IME AnimationObject(Clone)
- IME TreeStaticObject(Clone)

The Inspector panel shows the following components and settings for 'IME ScaleObject(Clone)':

- Tag: Untagged
- Layer: Default
- Transform
- Cube (Mesh Filter)
 - Mesh: Cube
- Box Collider
- Mesh Renderer
- IME_Scale (Script)
 - Script: IME_Scale
 - Scale Mods
 - Size: 1
 - Element 0
 - Band: 0
 - Axis: Y
 - Mille Gate Max: 1
 - Mille Gate Min: 0
 - Use Amplitude:
 - Smooth:
 - Additive:
 - Target Scale: 0
 - Curve:

- Default-Material
- Shader: Standard

The IME Timeline window shows:

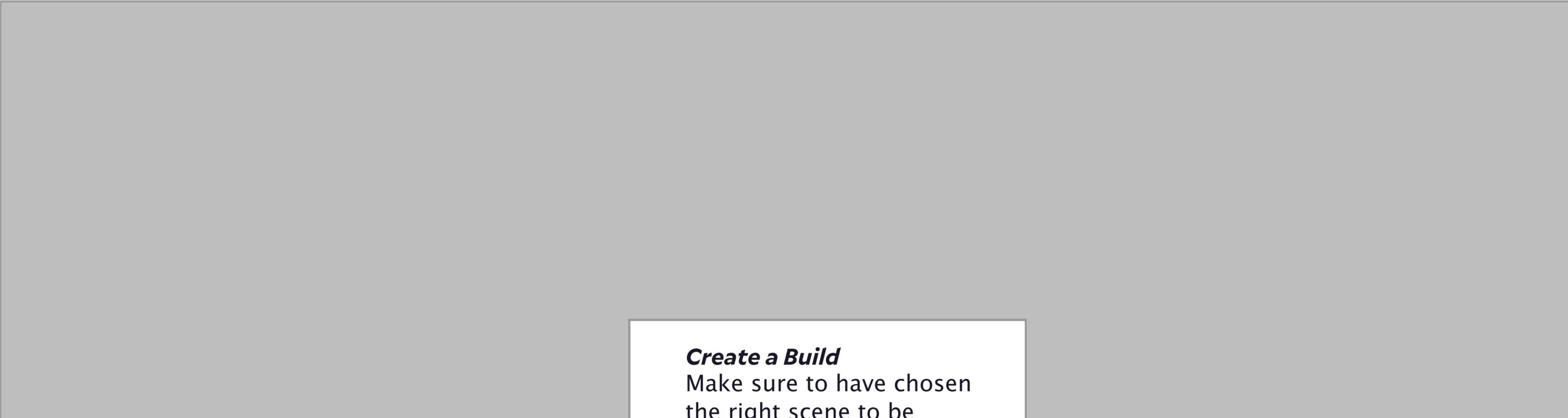
- IME AUDIO POSITION
- Pos: 0.264938
- Keep Seek Position:
- CURRENT BEAT :: 78
- AUDIO BANDS :: 10

The text box at the bottom explains the IME Timeline support window and the 'Keep Seek Position' option:

The **IME Timeline** support window allows to control the replay position of the (music) clip.

Keep Seek Position, when turned on keeps the replay position saved when stopping replay in the editor. Turned off the replay position jumps back to the start of the clip.

Scenes In Build



Create a Build

Make sure to have chosen the right scene to be exported and chose your target platform.

Add Open Scenes

Platform

- PC, Mac & Linux Standalone
- WebGL
- iOS
- tvOS
- Android
- Xbox One
- PS Vita
- PS4

PC, Mac & Linux Standalone

- Target Platform: Windows
- Architecture: x86_64
- Copy PDB files:
- Development Build:
- Autoconnect Profiler:
- Script Debugging:
- Scripts Only Build:

Compression Method: Default

Switch Platform Player Settings...

Build Build And Run

[Learn about Unity Cloud Build](#)

Scenes In Build

Save Scene

Save As: tutorialszene

Tags:

Assets Search

Create Build
Choose a name and a file folder and that's it.

Name
▶ SIBL Archive
▶ StreamingAssets
▶ PostProcessing
▶ IME
FrankMuellersHexaline-Demo.unity
2018 03 30 MILLE IME SZENE.unity
2018 07 11 MILLE IME SCENE backup.unity
Demo.unity
Skybox.mat
cam 1.asset

New Folder Cancel Save

Add Open Scenes

Platform

- PC, Mac & Linux Standalone
- WebGL
- iOS
- tvOS
- Android
- Xbox One
- PS Vita
- PS4

Compression Method Default

[Learn about Unity Cloud Build](#)

Switch Platform Player Settings...

Build Build And Run