

# Spatial.io

Prototyping virtual spaces

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João Costa – *Phd candidate*

# Activities

1- The platform

1.1 – How to use;

2 – Create a new space

2.1 – the templates;

2.2 – import 3D geometries, videos and images;

3 – File types and limitations;

[https://drive.google.com/drive/folders/1UGxDq1oJrMBjT0BRkYG89frzJFTnPF0p?usp=drive\\_link](https://drive.google.com/drive/folders/1UGxDq1oJrMBjT0BRkYG89frzJFTnPF0p?usp=drive_link)

# The platform

# The platform

- Create your own virtual spaces;
- Create your own avatar;
- Organize live events and interact with other people in a metaverse environment.

# The platform

- Build interactive worlds and share them
- Build games, quests, avatars and accessories;
- Unity integration – Unity creation toolkit;
- Works in Web, iOS, Android, and Meta Quest.

# How to use

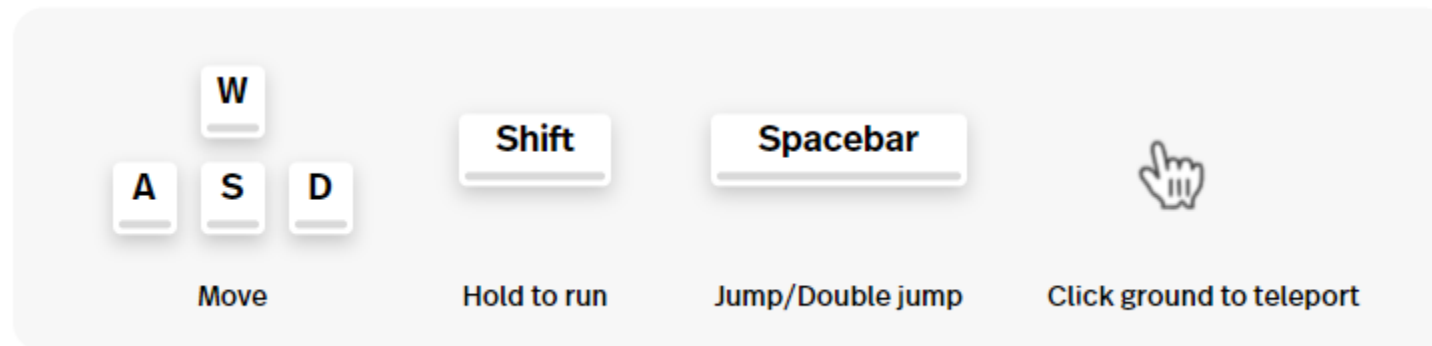
- Go to [spatial.io](https://spatial.io) and create an account;
- Visit a space;

# How to use

- To control the avatar use the **wasd** or arrows to navigate

## Controls and Tips

### Navigating the space



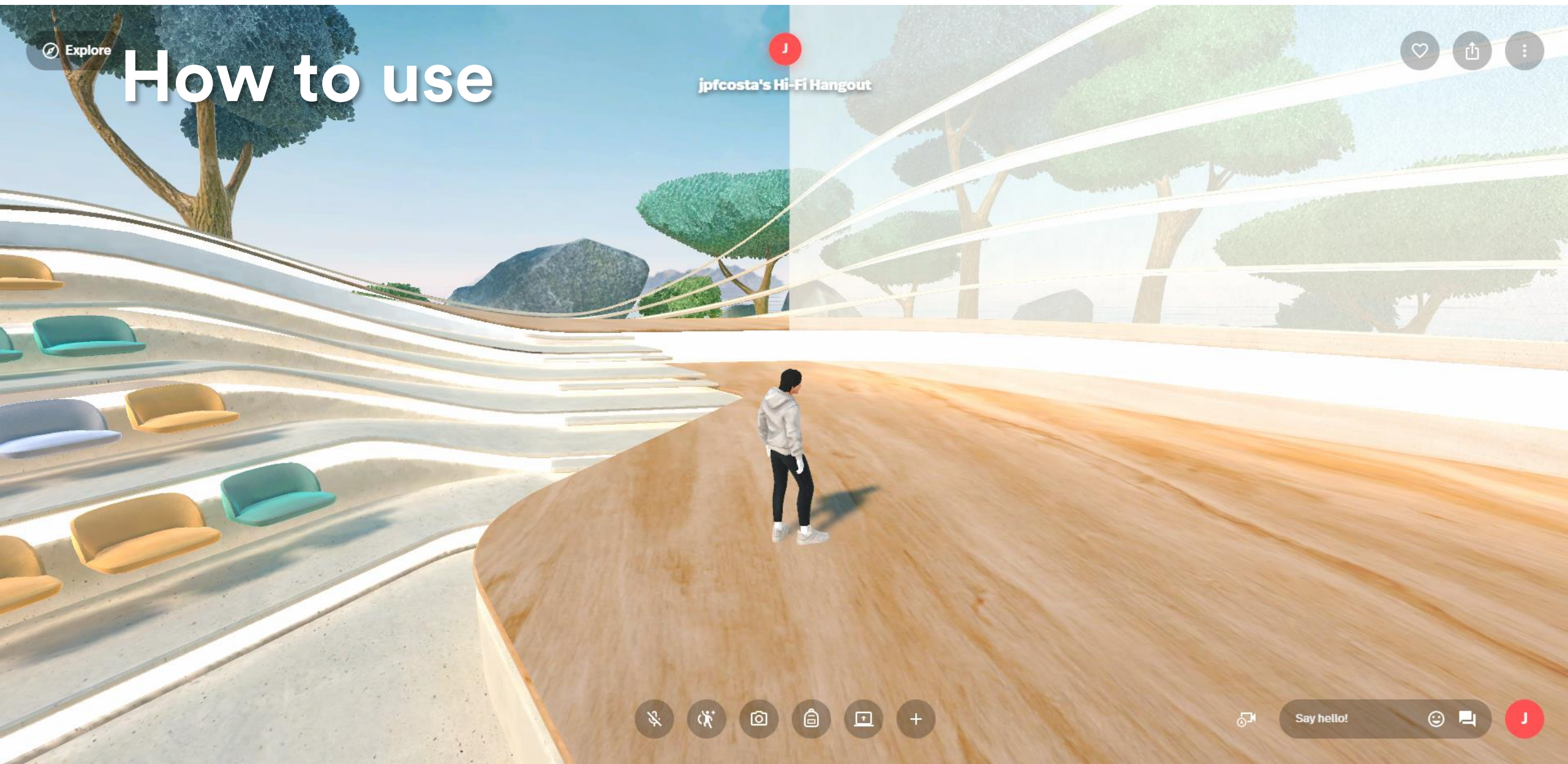


Explore

# How to use

J

jpfcosta's Hi-Fi Hangout

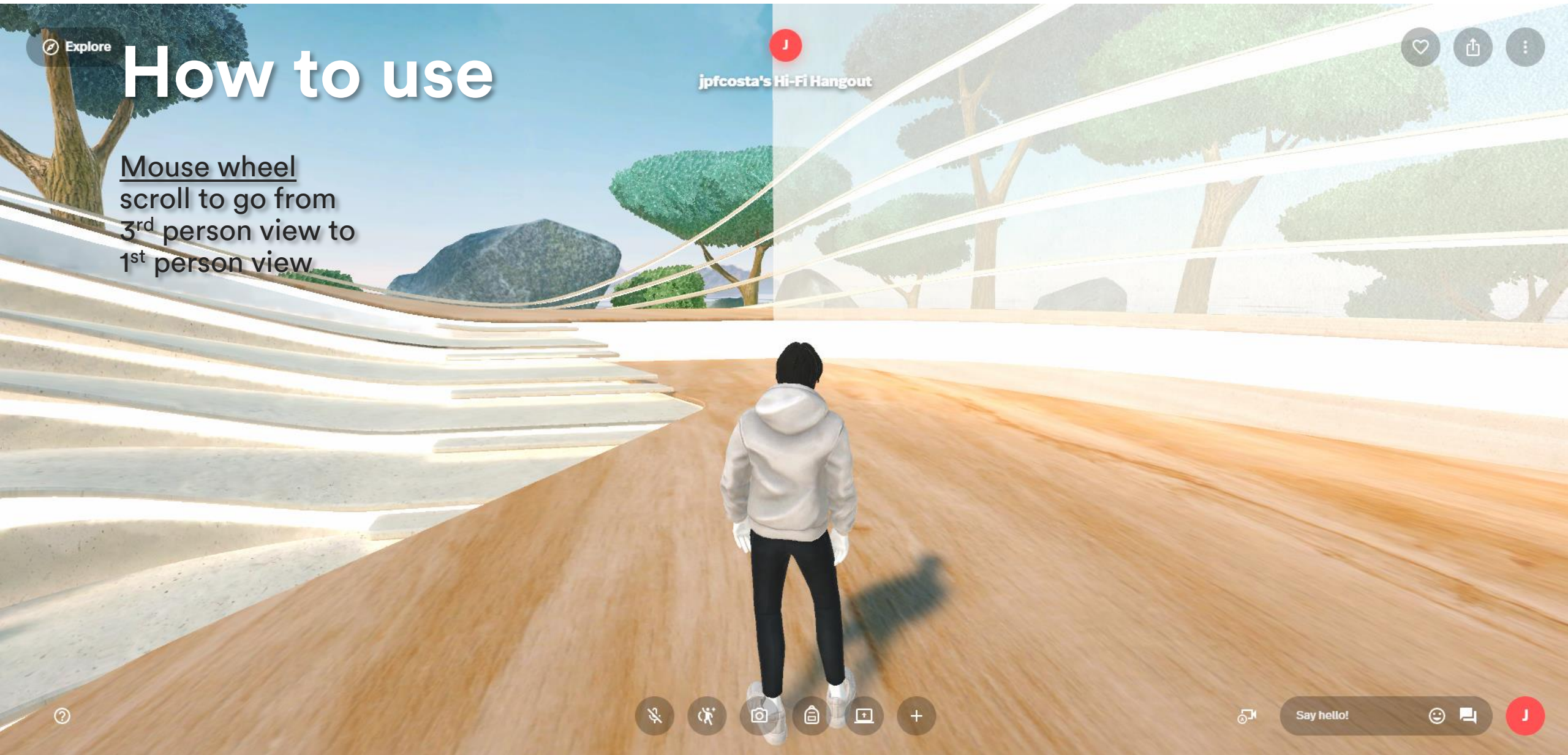


Explore

# How to use

Mouse wheel  
scroll to go from  
3<sup>rd</sup> person view to  
1<sup>st</sup> person view

jpfcosta's Hi-Fi Hangout

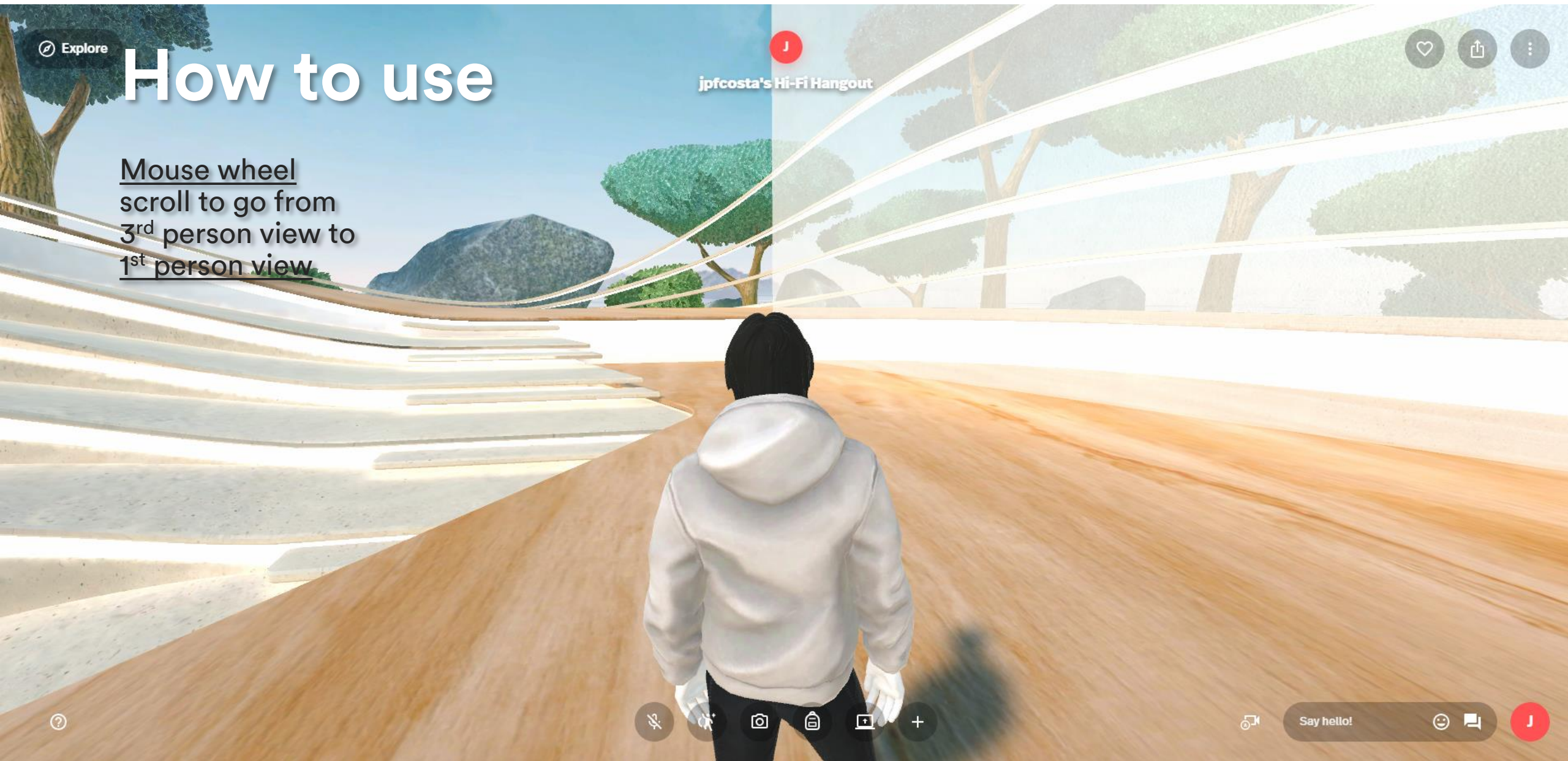


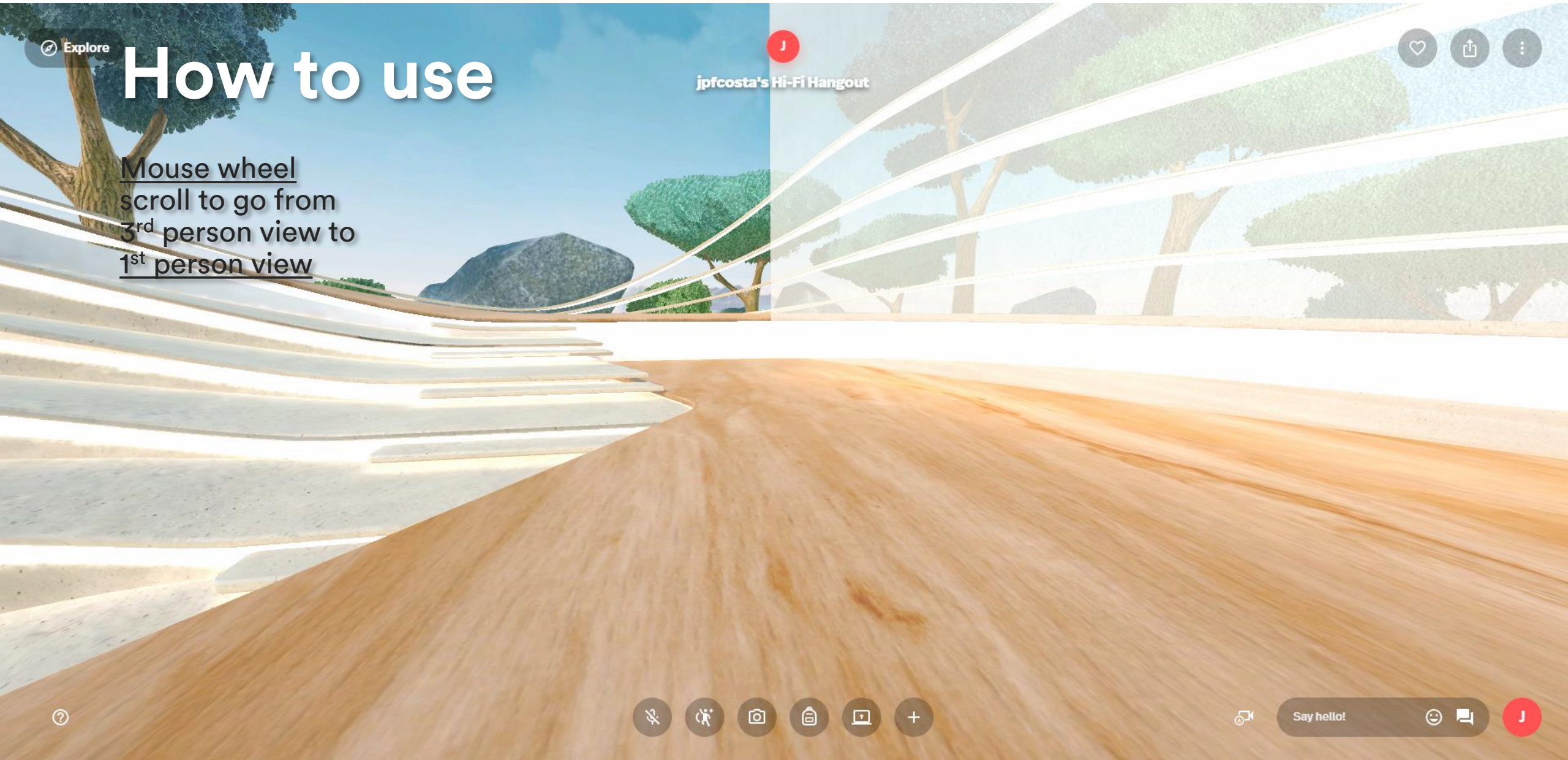
Explore

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Mouse wheel  
scroll to go from  
3<sup>rd</sup> person view to  
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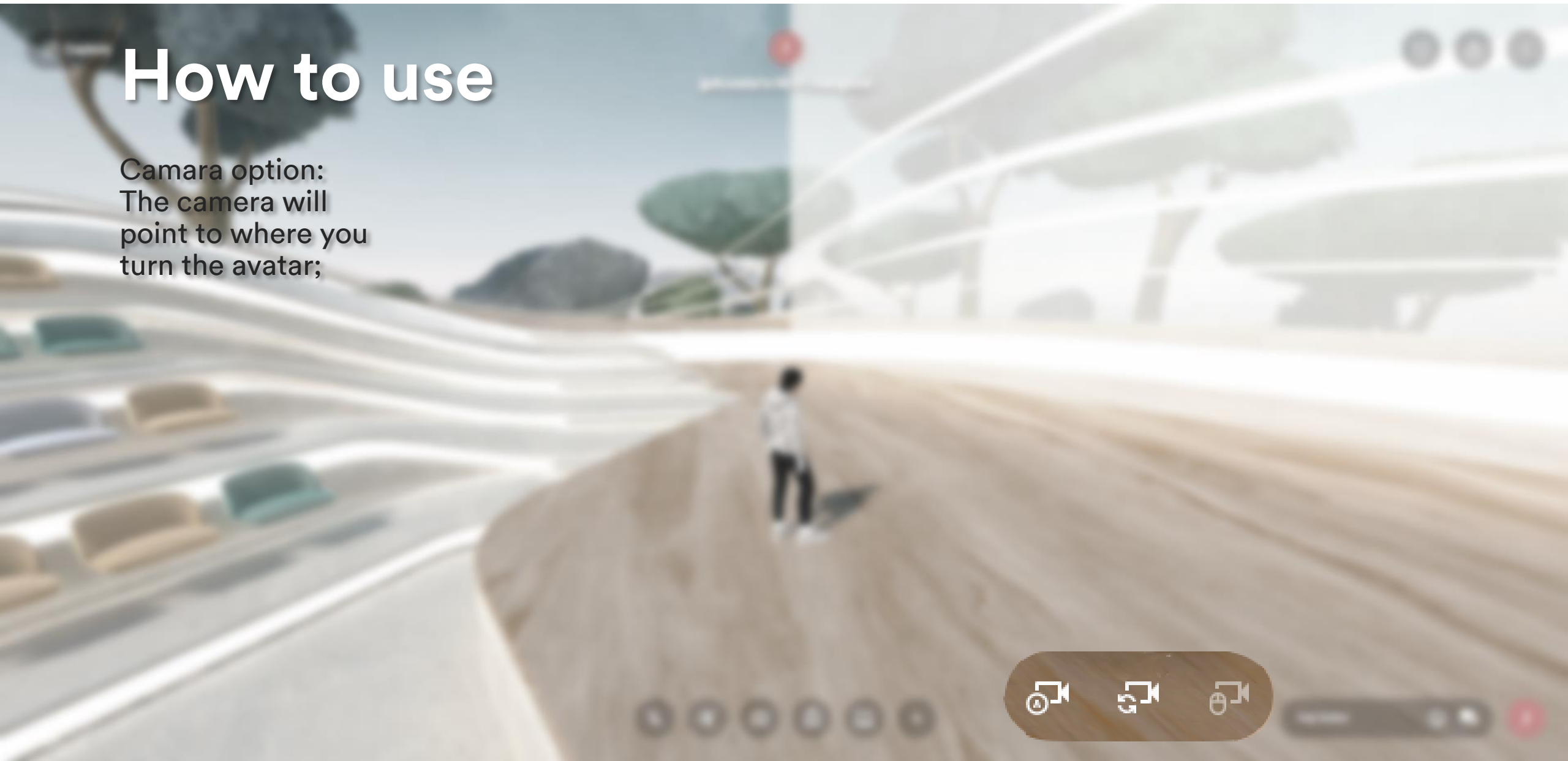


# How to use

Mouse wheel  
scroll to go from  
3<sup>rd</sup> person view to  
1<sup>st</sup> person view

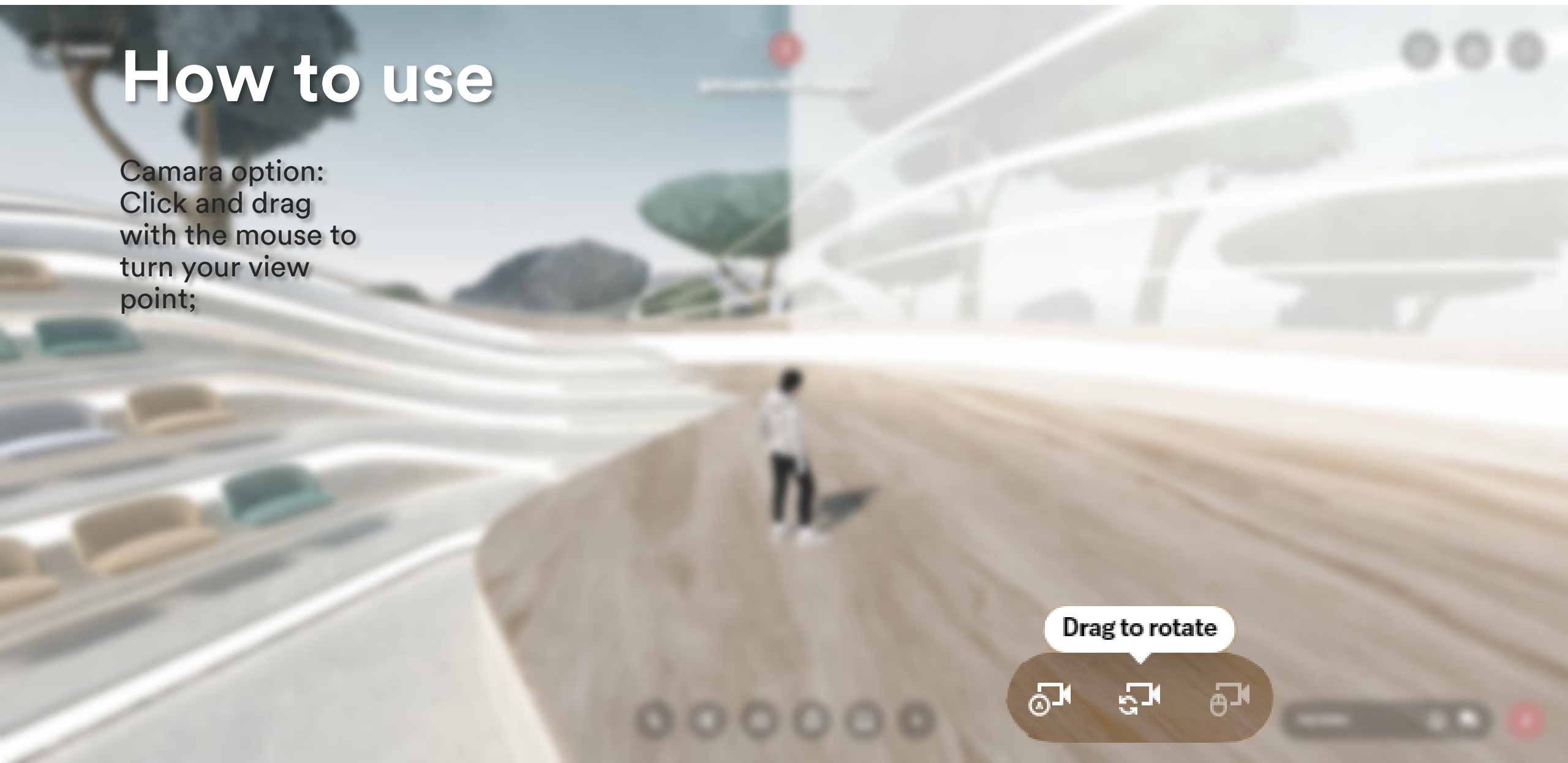
# How to use

Camera option:  
The camera will  
point to where you  
turn the avatar;



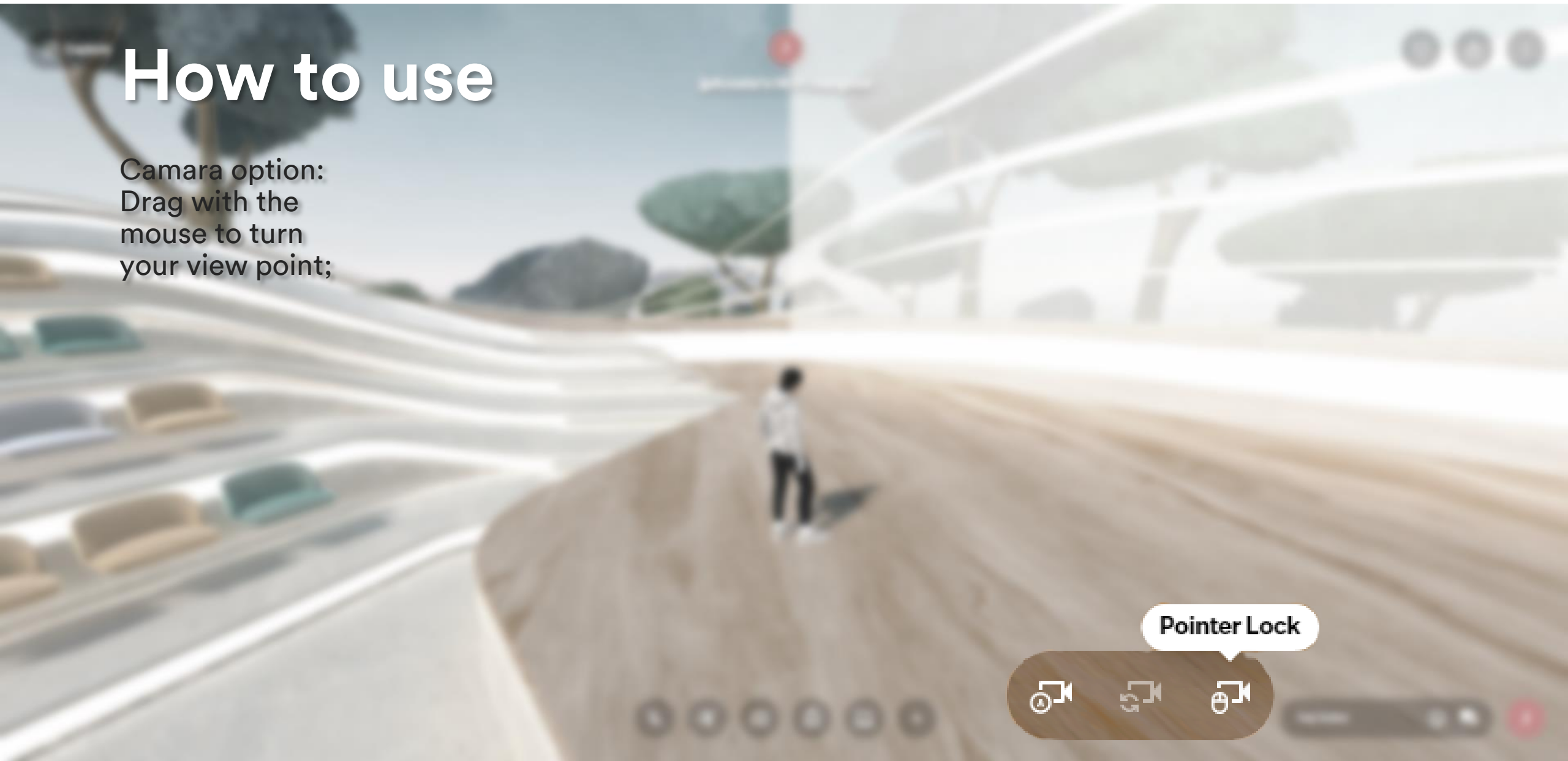
# How to use

Camera option:  
Click and drag  
with the mouse to  
turn your view  
point;



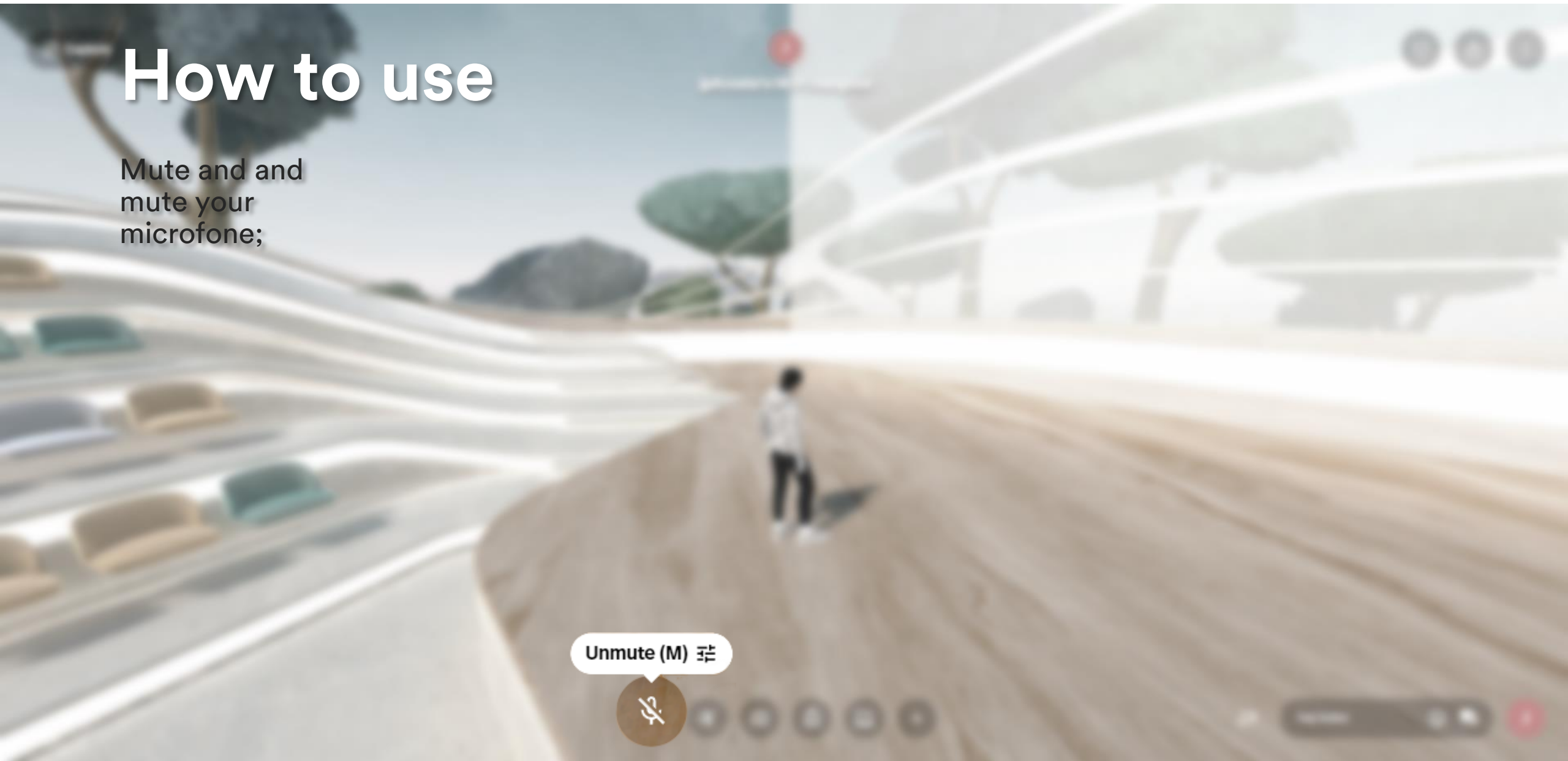
# How to use

Camera option:  
Drag with the  
mouse to turn  
your view point;



# How to use

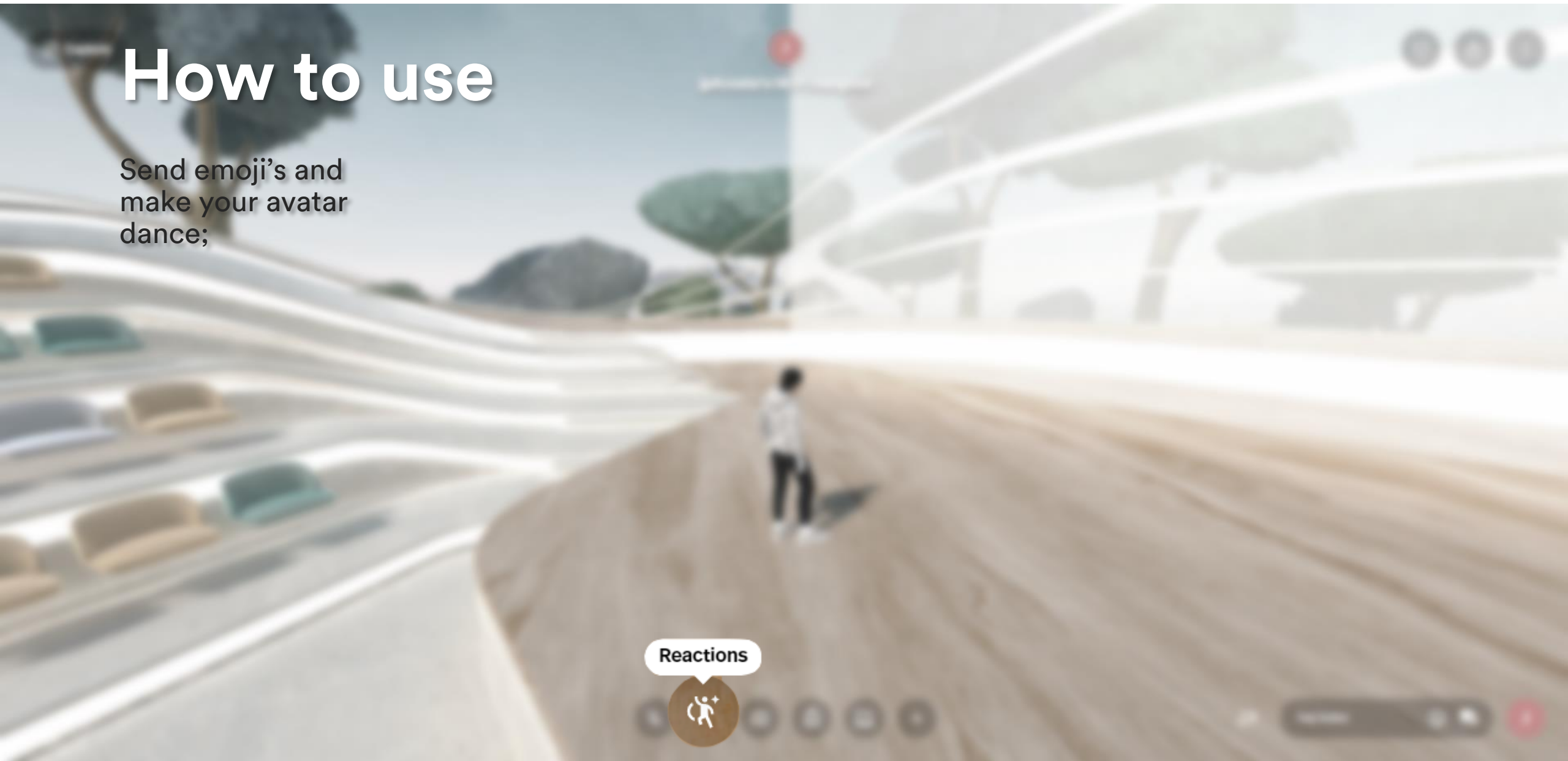
Mute and unmute your microphone;



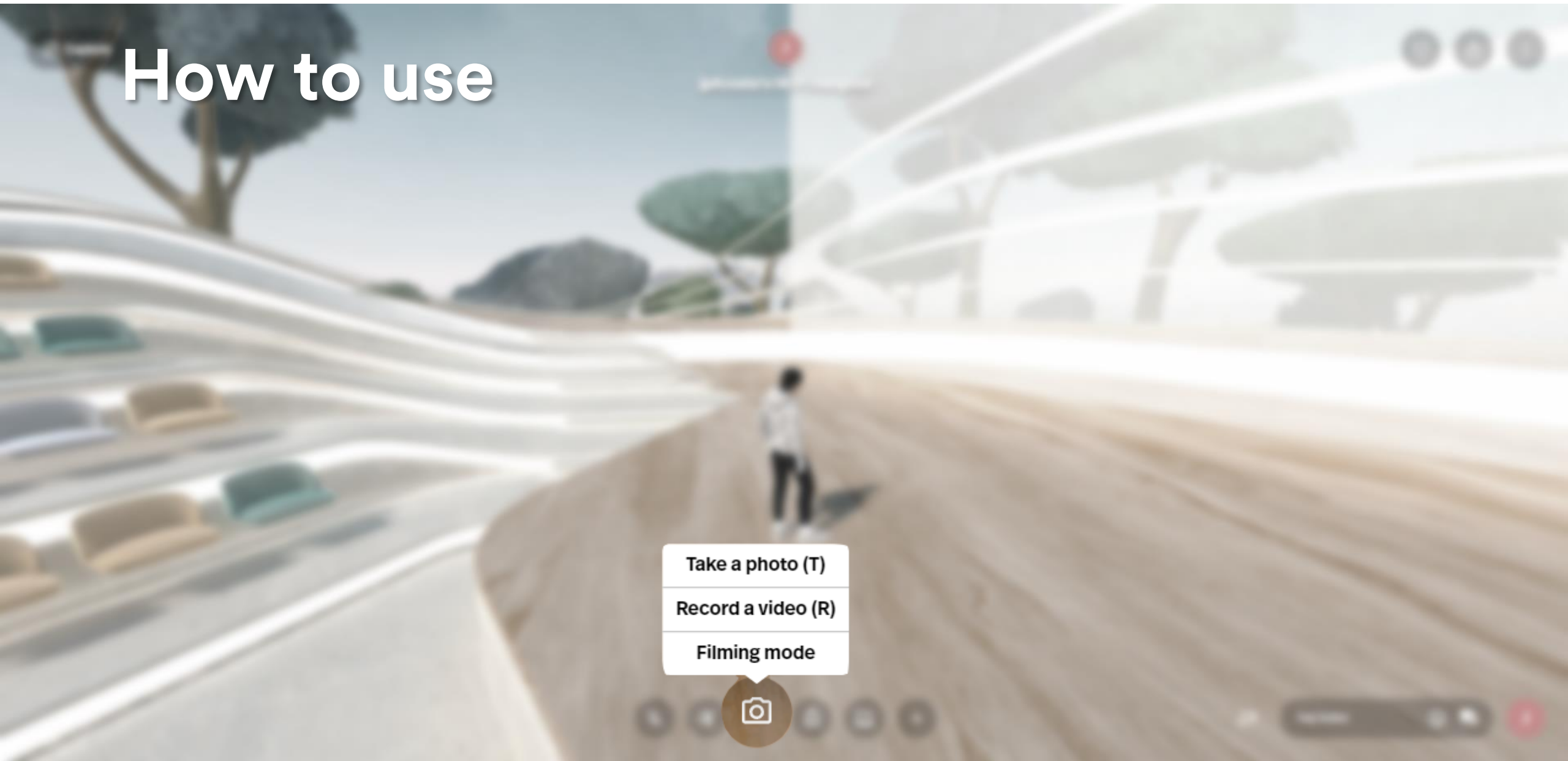


# How to use

Send emoji's and  
make your avatar  
dance;

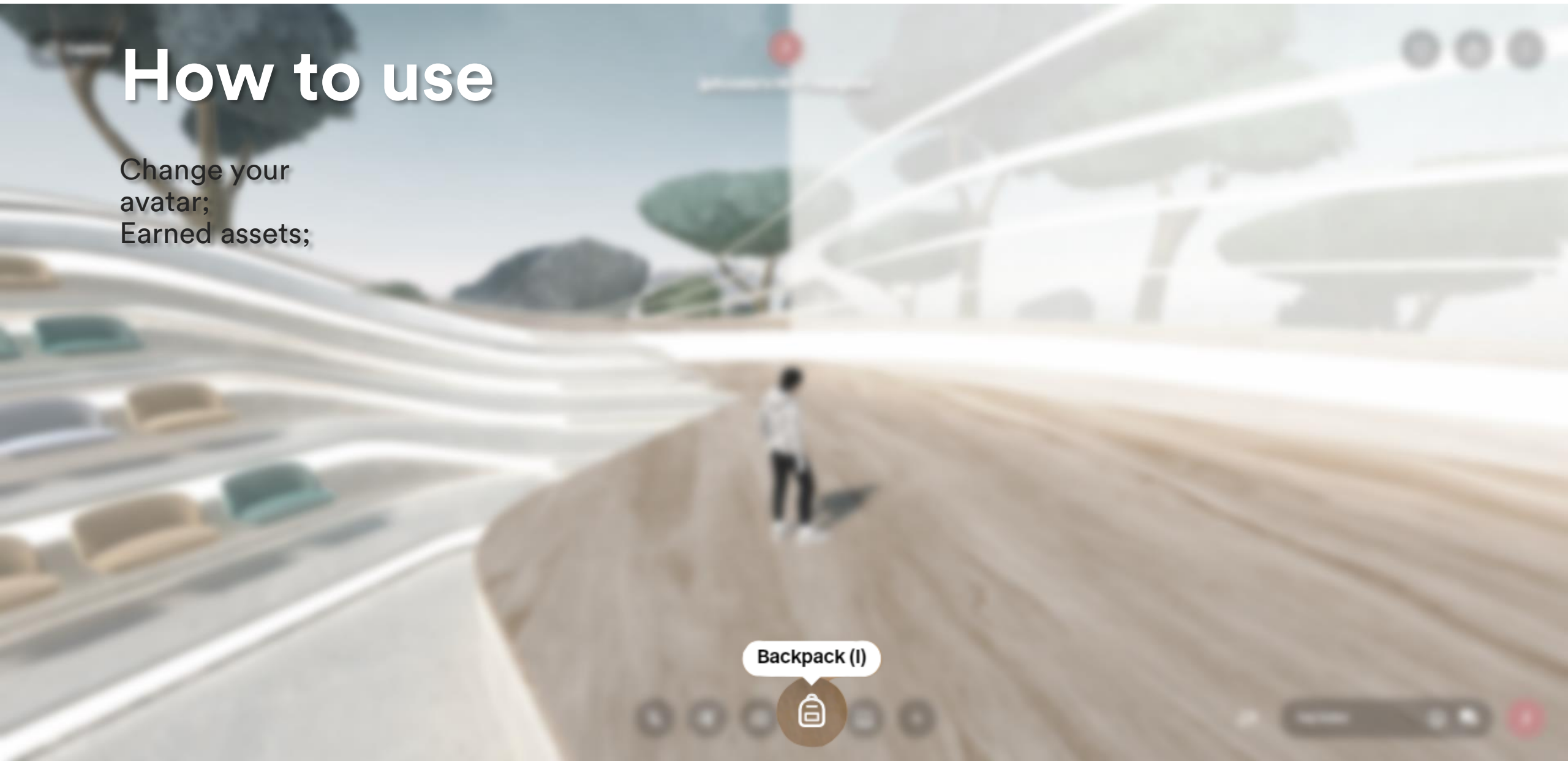


# How to use

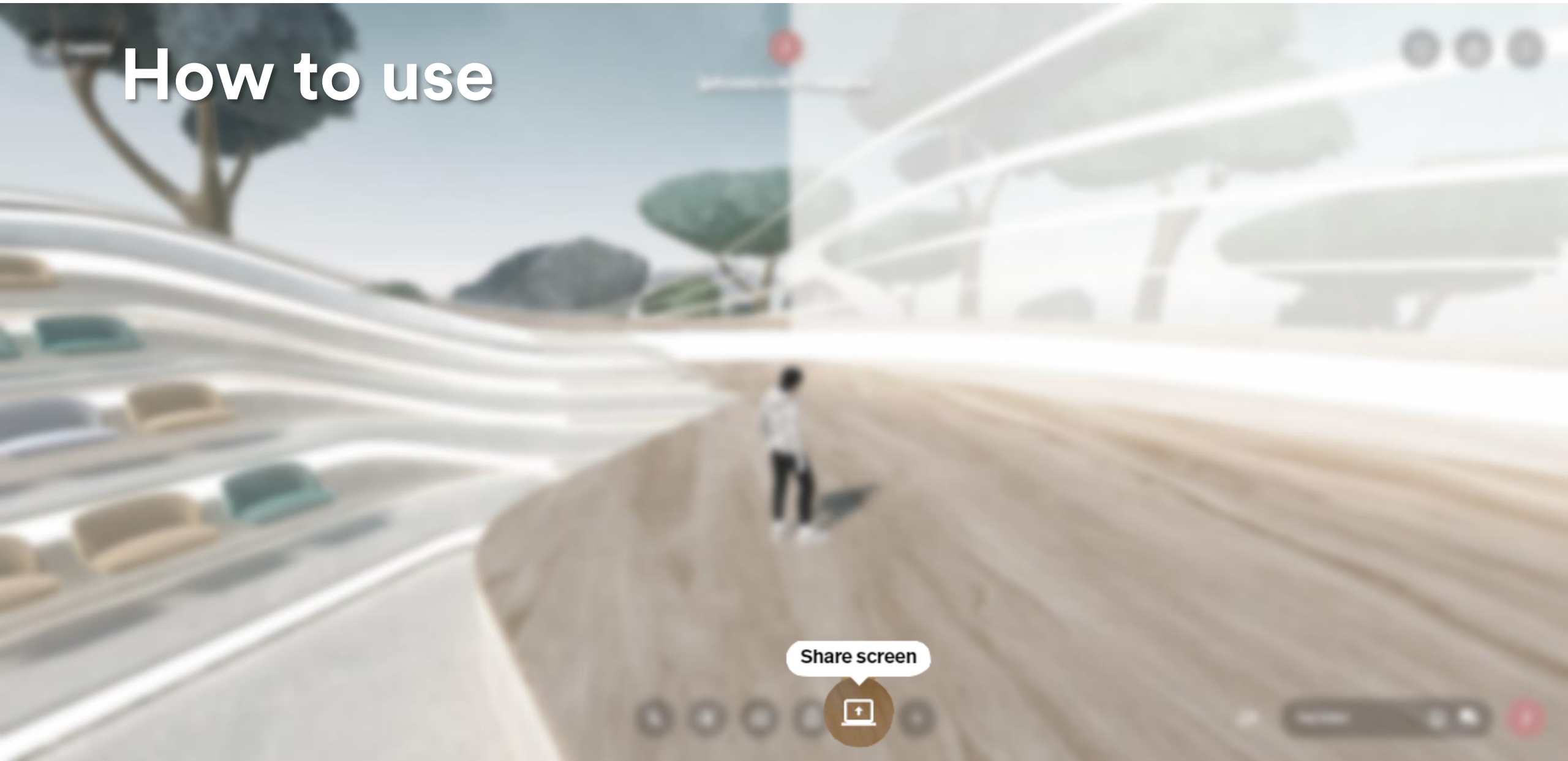


# How to use

Change your  
avatar;  
Earned assets;



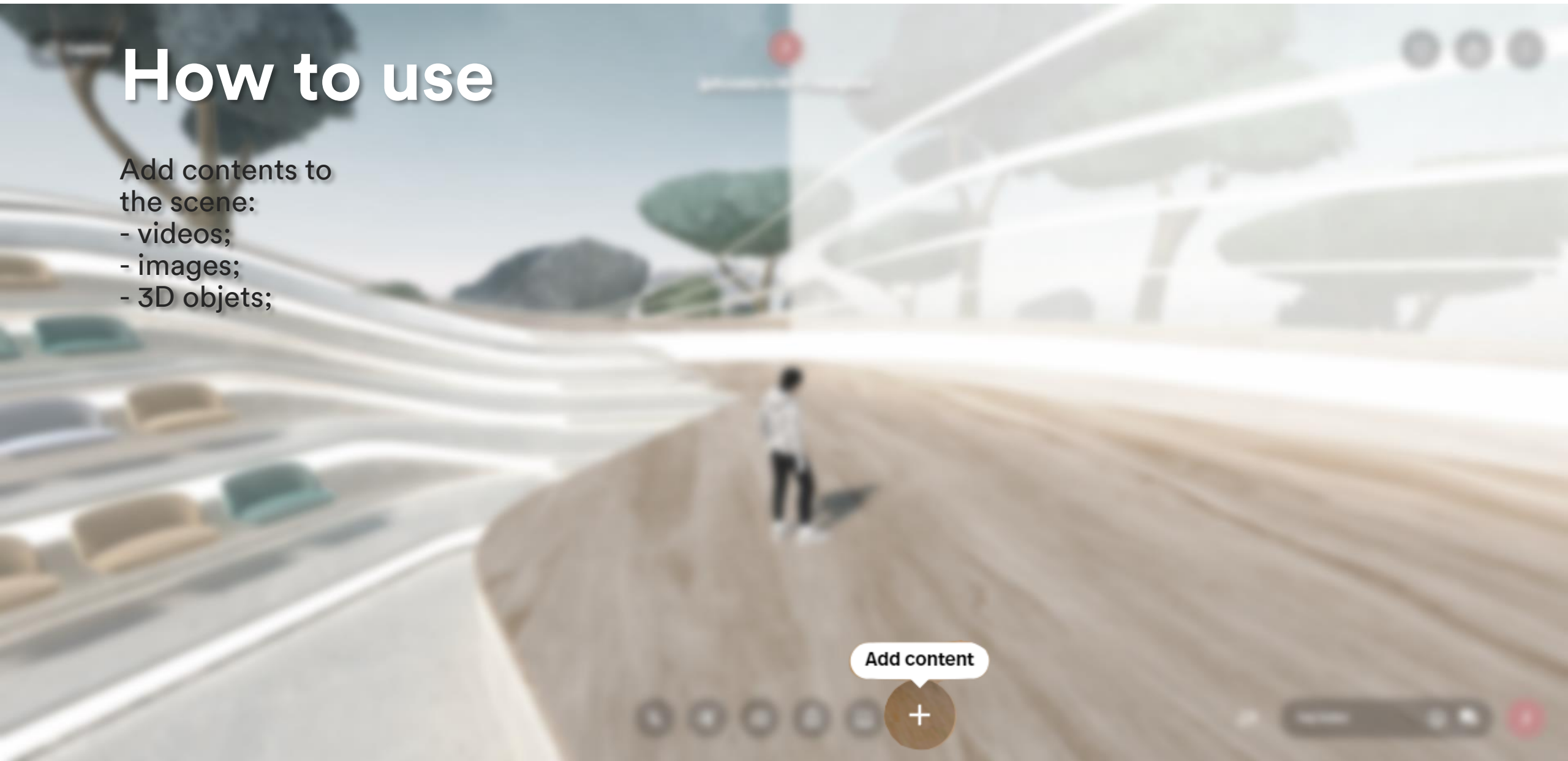
# How to use



# How to use

Add contents to  
the scene:

- videos;
- images;
- 3D objects;



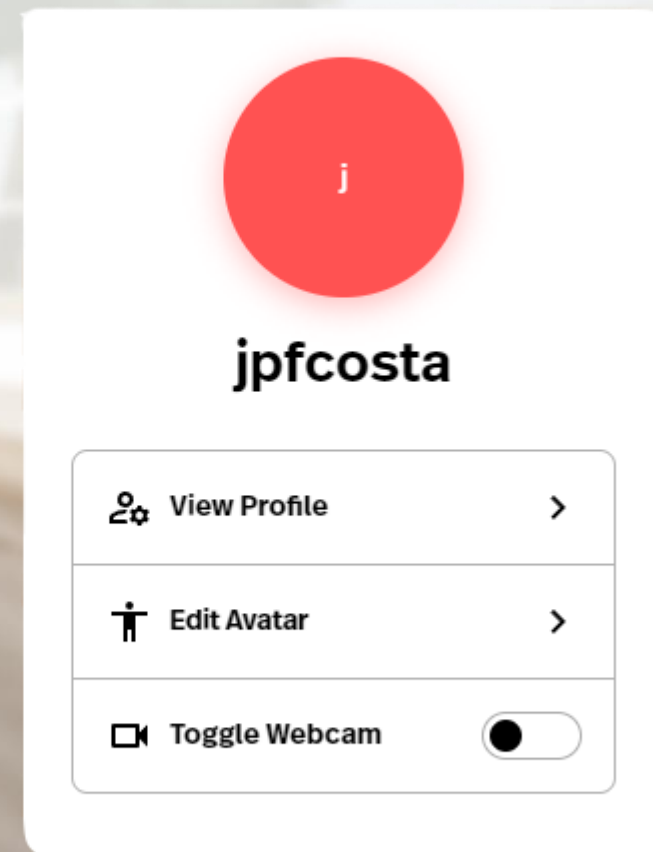
# How to use

Use to communicate with the people in your virtual space;



# How to use

Edit your SPATIAL profile, avatar and turn your webcam on;  
Useful for presentations and meetings;



The image shows a user profile card in a virtual meeting environment. The card features a red circular avatar with the letter 'j', the username 'jpfcosta', and three interactive options: 'View Profile' with a right-pointing chevron, 'Edit Avatar' with a right-pointing chevron, and 'Toggle Webcam' with a toggle switch that is currently turned off. The background is a blurred virtual space with a person's avatar and a navigation bar at the bottom.

# How to use

Settings

Audio Grouping Tools

Environment

Host Tools

Leave Audio

Save as Template

Delete Space

---

Help

Controls

Pair Headset



# How to use

Edit some performance settings according to your hardware;  
Edit settings of the virtual room:

- Spatial sound;
- Participants chat;
- other advanced modes;

Settings

Audio Grouping Tools

Environment

Host Tools

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Delete Space

Help

Controls

Pair Headset

## Settings

Spatial Audio Falloff

Auto Save

Advanced Transform Controls

Cinema Mode

Participant Chat

### AUDIO/VIDEO

Camera No devices found

Microphone No devices found

Screen Share 720p 30fps ▾

Render Quality 1x ▾

Target Framerate 30 fps ▾

Done

# How to use

Turn on or off the audio for the participants;

Settings

Audio Grouping Tools

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# How to use

Where we will be editing the virtual room;

Settings

Audio Grouping Tools

**Environment**

Host Tools

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Help

Controls

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# How to use

Change the looks of the virtual room;  
You can choose from templates or pre-made ones provided by the platform;

## Environment Settings

### Unity Package

Compress Object Textures



Choose New Environment

Upload Custom Environment

Add Entrance Point

CLEAR CONTENT

# How to use

This is the option that will allow you to personalize your virtual space;



## Environment Settings

### Unity Package

Compress Object Textures



Choose New Environment

Upload Custom Environment

Add Entrance Point

CLEAR CONTENT

# How to use

Change the place where the avatars respawn – the place where you and your visitors start;

## Environment Settings

### Unity Package

Compress Object Textures



Choose New Environment

Upload Custom Environment

Add Entrance Point

CLEAR CONTENT

# How to use

Pro feature, not available;

Settings

Audio Grouping Tools

Environment

Host Tools

Leave Audio

Save as Template

Delete Space

Help

Controls

Pair Headset



# How to use

Settings

Audio Grouping Tools

Environment

Host Tools

Leave Audio

Save as Template

Delete Space

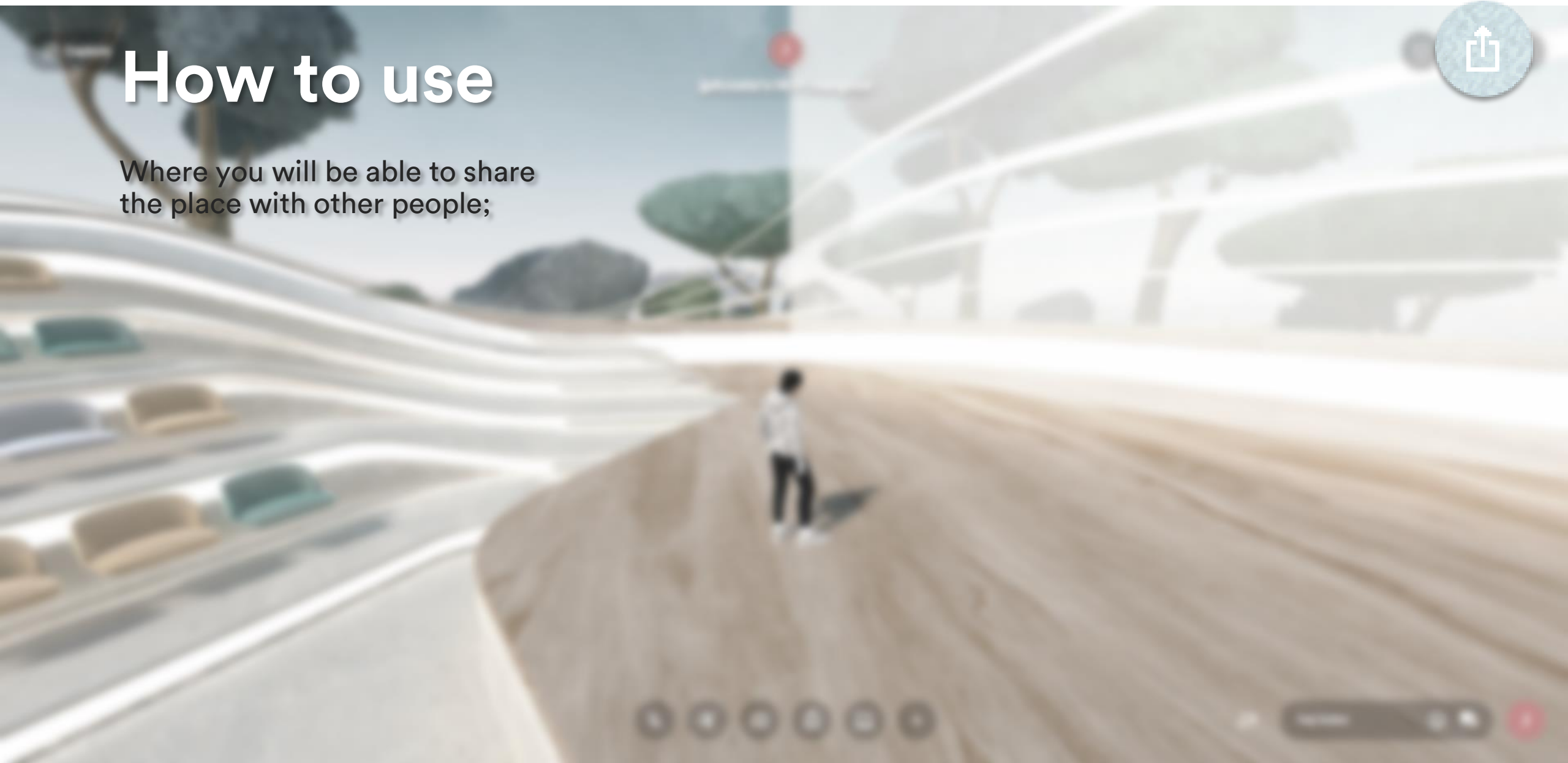
Help

Controls

Pair Headset

# How to use

Where you will be able to share the place with other people;



# How to use

Allow others to co-create the virtual space with you;

## Share jpfcosta's Hi-Fi World

🌐 Anyone with the link ▾

Can View ✓

Publicly Listed

Discoverable on Spatial homepage, search, and y

Can Edit

Go Live 🇺🇸

Broadcast your space to all of Spatial

<https://www.spatial.io/s/jpfcostas-Hi-Fi-World-i>

COPY

✉ Invite by email >

Overflow Groups

👤 If your space hits capacity (50 people) a new instance will be created to host 50 more - this continues up to 500 people!

Plus

⚙ Host settings

Plus



# How to use

Share the link to allow others into your virtual space;

## Share jpfcosta's Hi-Fi World

🔒 Anyone with the link ▾

Can View ✓

Publicly Listed

Discoverable on Spatial homepage, search, and y

Can Edit

Go Live 🎤

Broadcast your space to all of Spatial

GO LIVE

<https://www.spatial.io/s/jpfcostas-Hi-Fi-World-i>

COPY

✉ Invite by email >

Overflow Groups

👤 If your space hits capacity (50 people) a new instance will be created to host 50 more - this continues up to 500 people!

Plus

⚙ Host settings

Plus



# Create a new space

Recently Visited



**Nebula Eleven - Collect Kittens**  
Shmerz



**Kunstmuseum Bern INFINITE**  
Kunstmuseum Bern



**METAVERSE BEAUTY WEEK**  
CULT



**BMW Demo**  
Bentley



**McDonald's Lunar New Year Experience**  
Karen X Cheng



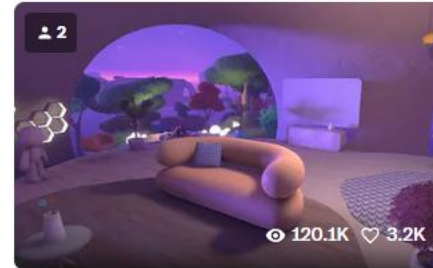
**Spatial Material Examples**  
Wonkee



**Ocean Drive Spatial**  
Oliver Ronan



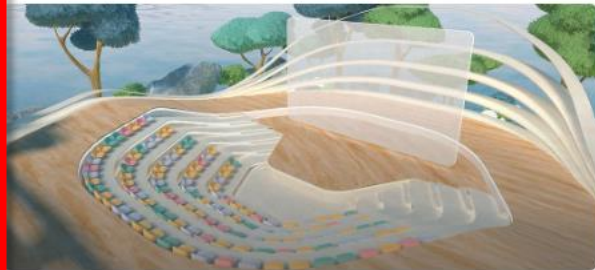
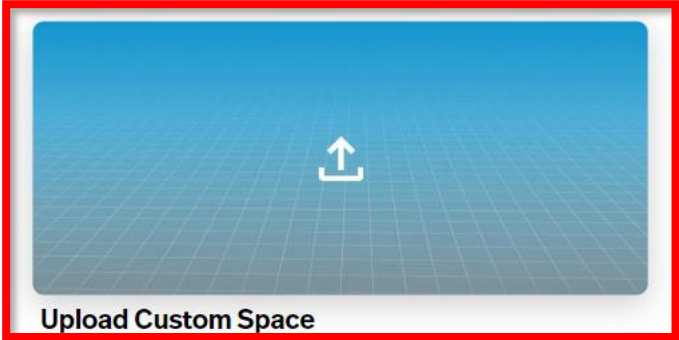
**Airbus 380**  
Oliver Ronan



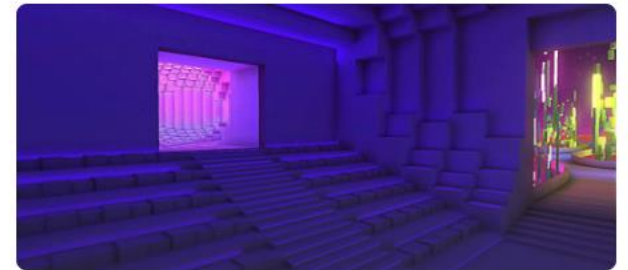
**Spatial Level One**  
Spatial

# Create New Space

- Free
- Creator Toolkit
- Collectibles
- Your Templates



Haven Stage



Agora



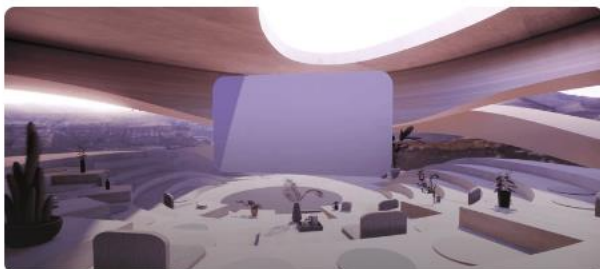
Isle Gallery



Aeries Gallery



Obsidian Gallery



Explore

Heart icon, Share icon, Menu icon

J

jpcosta's Digital Meetup



?

Navigation icons: Eraser, Move, Camera, Home, Presentation, Add

🗨️

Say hello! 😊

J



# Create a new space

Let's create a new space with 3D objects that we made;

Settings

Audio Grouping Tools

Environment

Host Tools

Leave Audio

Save as Template

Delete Space

---

Help

Controls

Pair Headset



✕

### Environment Settings

Upload Custom Space

Compress Object Textures

Choose New Environment

**Upload Custom Environment**

Add Entrance Point

**CLEAR CONTENT**

## Upload Custom Environment

Drop 3D Model Here

Supported File Formats: .FBX .GLTF .GLB

or

Select From Your Device

Select From Content Menu

[Recommendations for custom environments](#)

# Create a new space

Let's add content to our new space;

Add content



# Create a new space

Recent content that we already used;  
Images;  
Video;  
3D geometry;


### Content

- RECENT
- STUFF
- FURNITURE
- SKETCHFAB
- CREATOR TOOLKIT
- NFTS
- TEMPLATES
- INTEGRATIONS
- UPLOAD


[Add Note](#)

[Web Search](#)


[Create Portal](#)




collider.glb




collider.glb




collider.glb




collider.glb




collider.glb




collider.glb



collider.glb






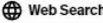
# Create a new space

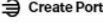
Pre-made  
objects


**Content**

- RECENT
- STUFF
- FURNITURE
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- NFTS
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 Add Note

 Web Search


 Create Portal



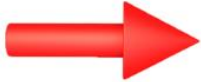
Empty Frame




Mirror




Airplane




Arrow




Boombox




Cake



Cat



Champagne




Cloud


# Create a new space

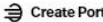
Pre-made  
objects

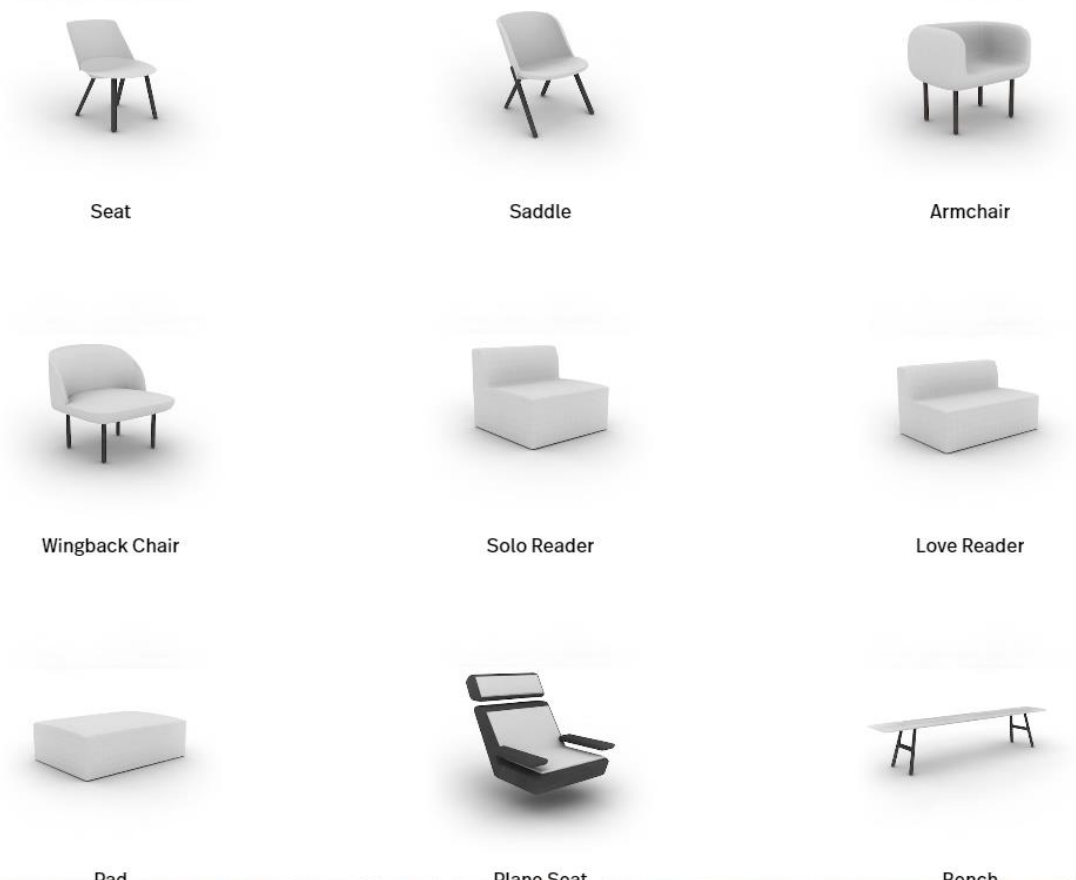
**Content**

- RECENT
- STUFF
- FURNITURE
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- UPLOAD

 Add Note

 Web Search

 Create Portal



Seat

Saddle

Armchair

Wingback Chair

Solo Reader

Love Reader

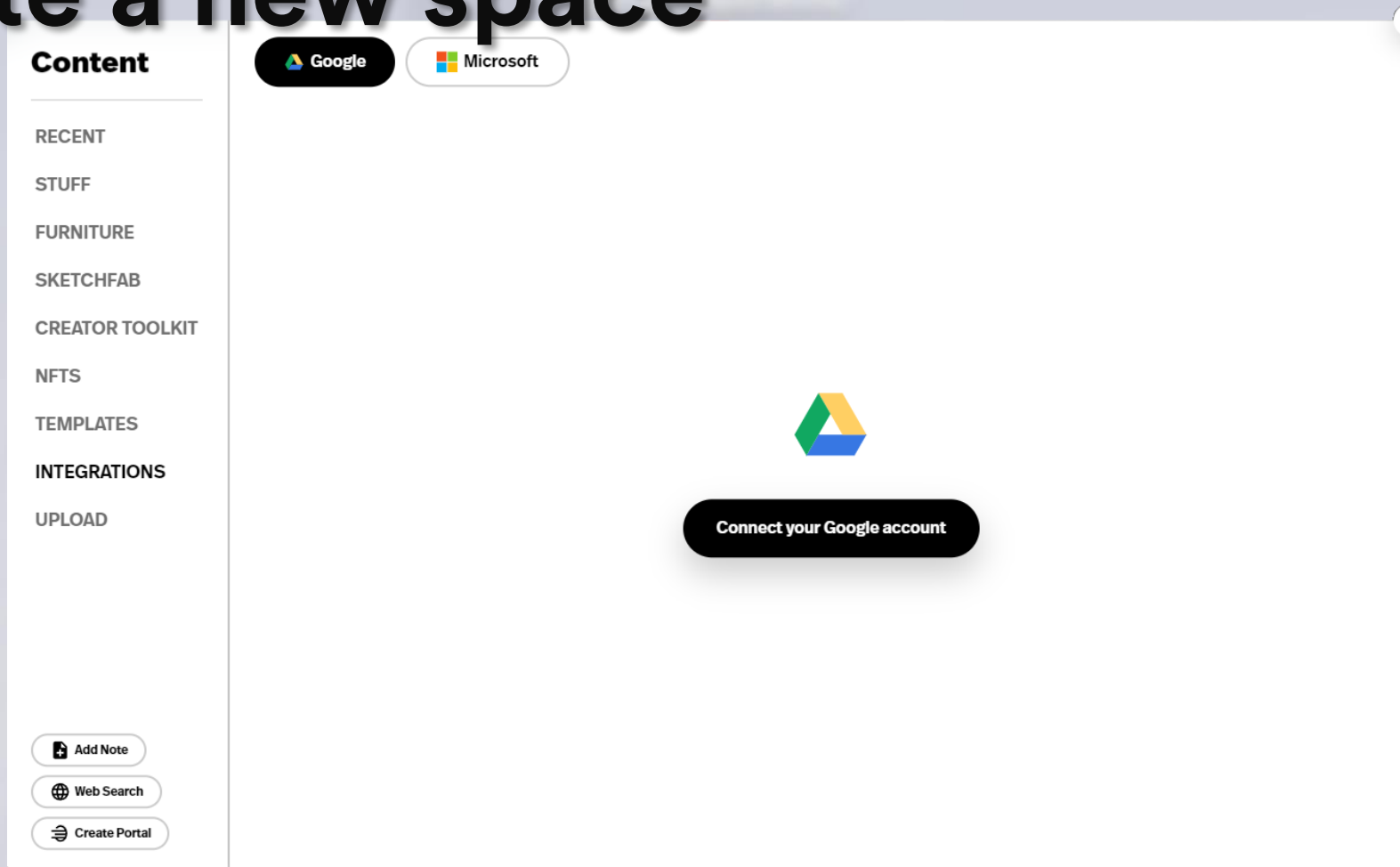
Pad

Plane Seat

Bench

# Create a new space

Link with cloud storage services for ease of access and team sharing;





# Create a new space


Upload from  
your  
computer:  
Images;  
Video;  
3D  
geometry;

## Content

- RECENT
- STUFF
- FURNITURE
- SKETCHFAB
- CREATOR TOOLKIT
- NFTS
- TEMPLATES
- INTEGRATIONS
- UPLOAD

 Add Note

 Web Search

 Create Portal

Drag files here

We support 3D models, images, videos, documents, and more! 

or

Select From Your Device

# File types and sizes

3D geometry;	Format	Maximum Size
	<i>3D Files - We recommend that you use a maximum texture size of 2048x2048.</i>	
Textures and materials:	OBJ	100 MB
	gITF	100 MB
Recommended:	GLB	100 MB
1024px x 1024px, and a maximum of 8 textures per file.	FBX	100 MB
	DAE	60 MB
Maximum:	PCD	10 MB
1024px x 1024 px, up to 16 textures;	ZIP	500 MB
Or 2048px x 2048px, maximum of 4 textures		

# File types and sizes

Video and image;

## Videos

MP4

50 MB

MOV

50 MB

GIF

200 MB

## Images

PNG

10 MB

JPEG

10 MB

TIFF

10 MB

# File types and sizes

- <https://support.spatial.io/hc/en-us/articles/360036170911>
- **3D Model Preparation Guide**
- <https://support.spatial.io/hc/en-us/articles/360042195672>