



# 360 PRODUCTION

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# 360 IMAGE TYPES - EQUIRECTANGULAR (SPHERICAL)

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# 360 IMAGE TYPES – PANORAMA (FLAT)

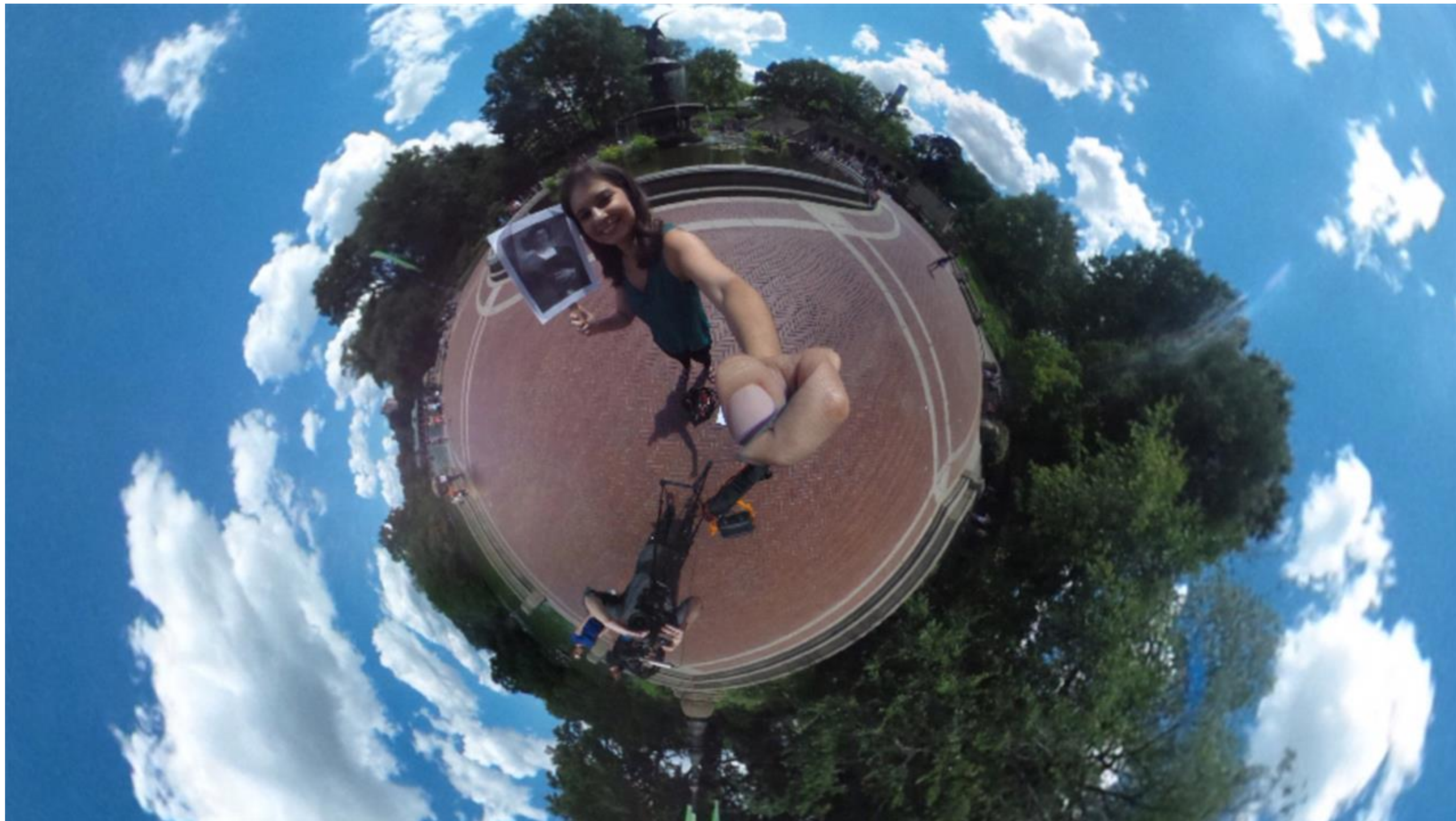
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# 360 IMAGE TYPES - TINY PLANET

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# 360 IMAGE TYPES – FISHEYE

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# 360 IMAGE TYPES - DUAL FISHEYE

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# LINEAR PROJECTS

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Based on the “frame”  
Creator controls the view

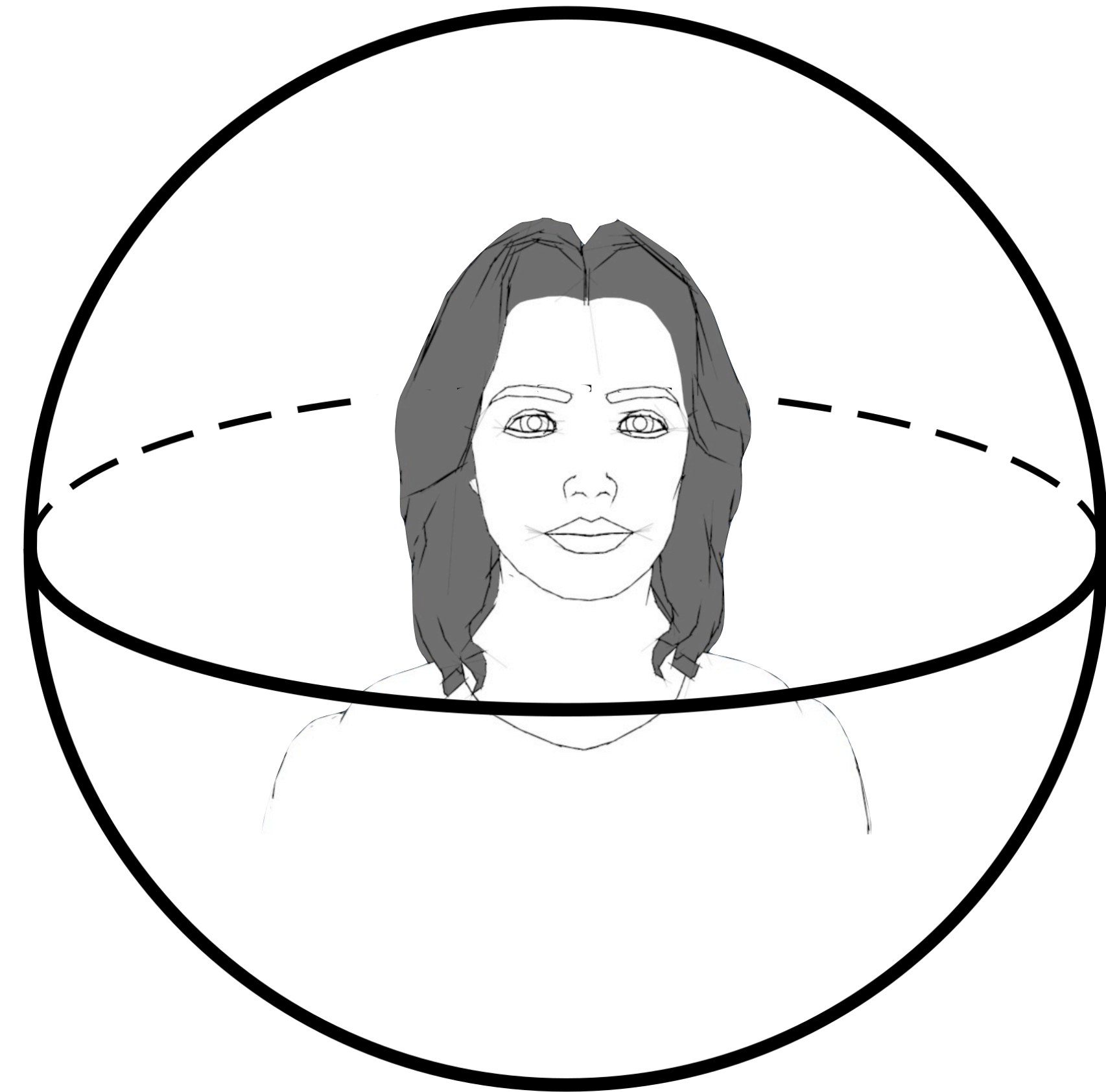




# 360 PROJECTS

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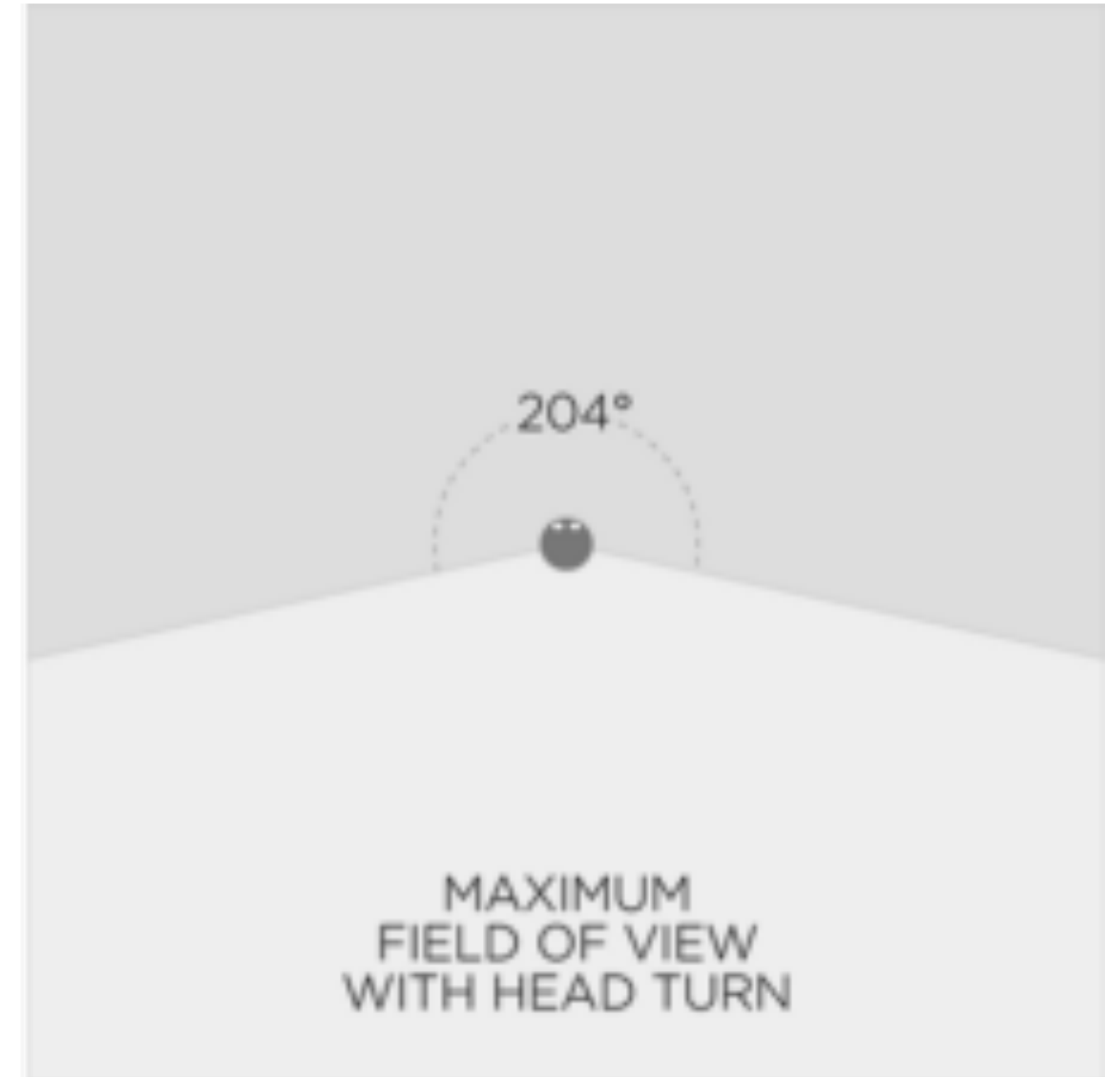
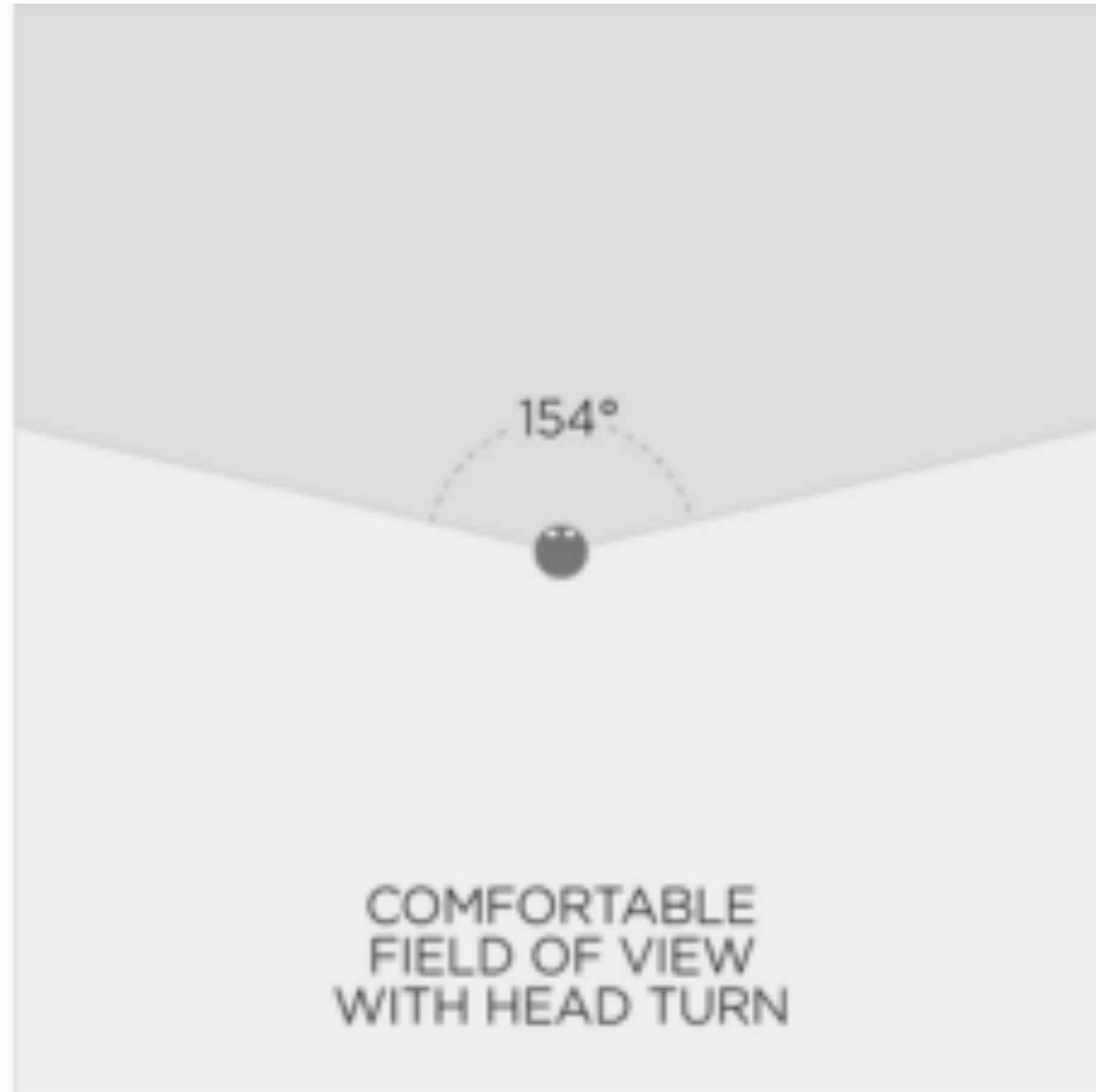
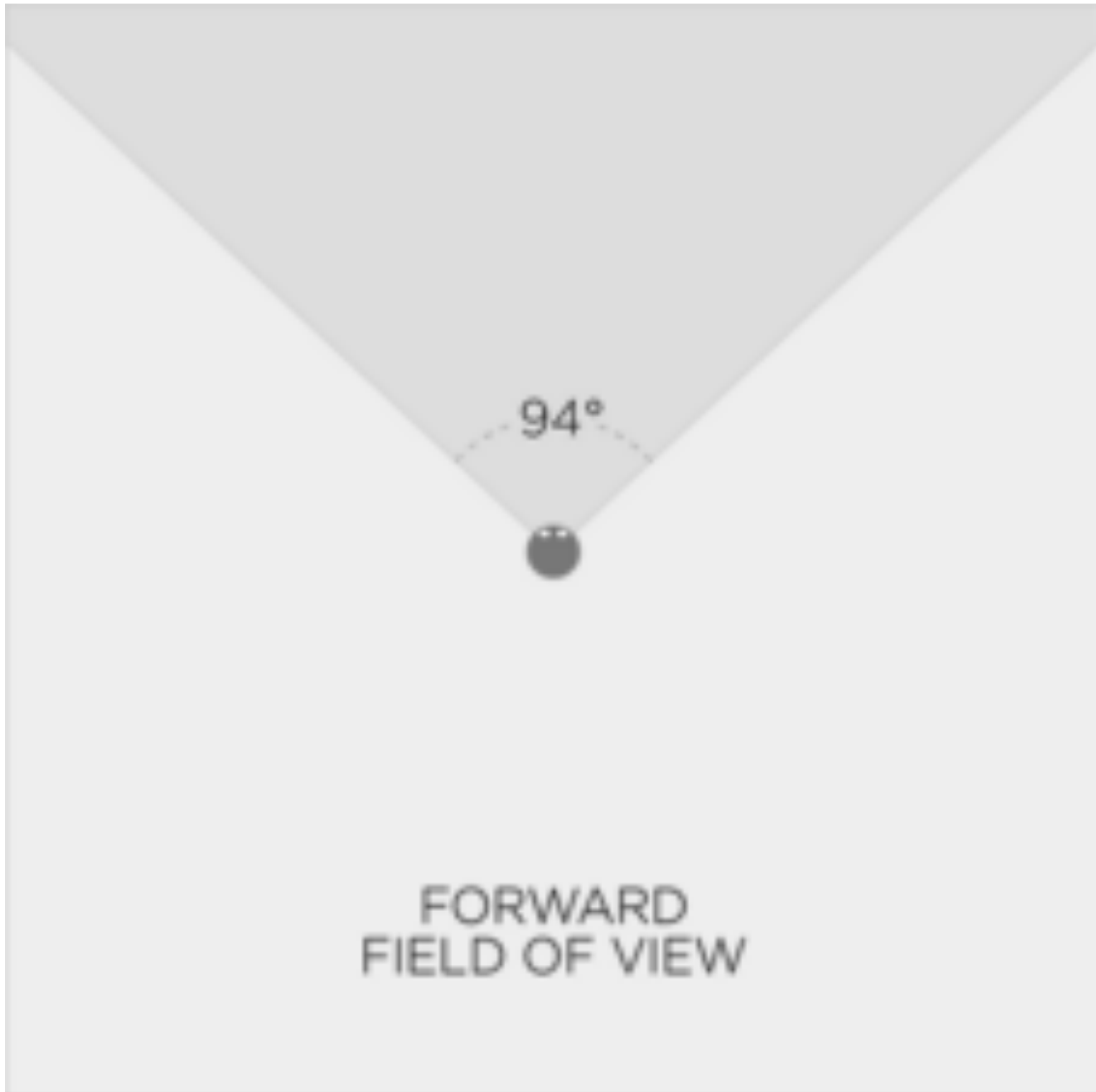
Based on the “sphere”  
Audience controls the view





# 360 FIELD OF VIEW

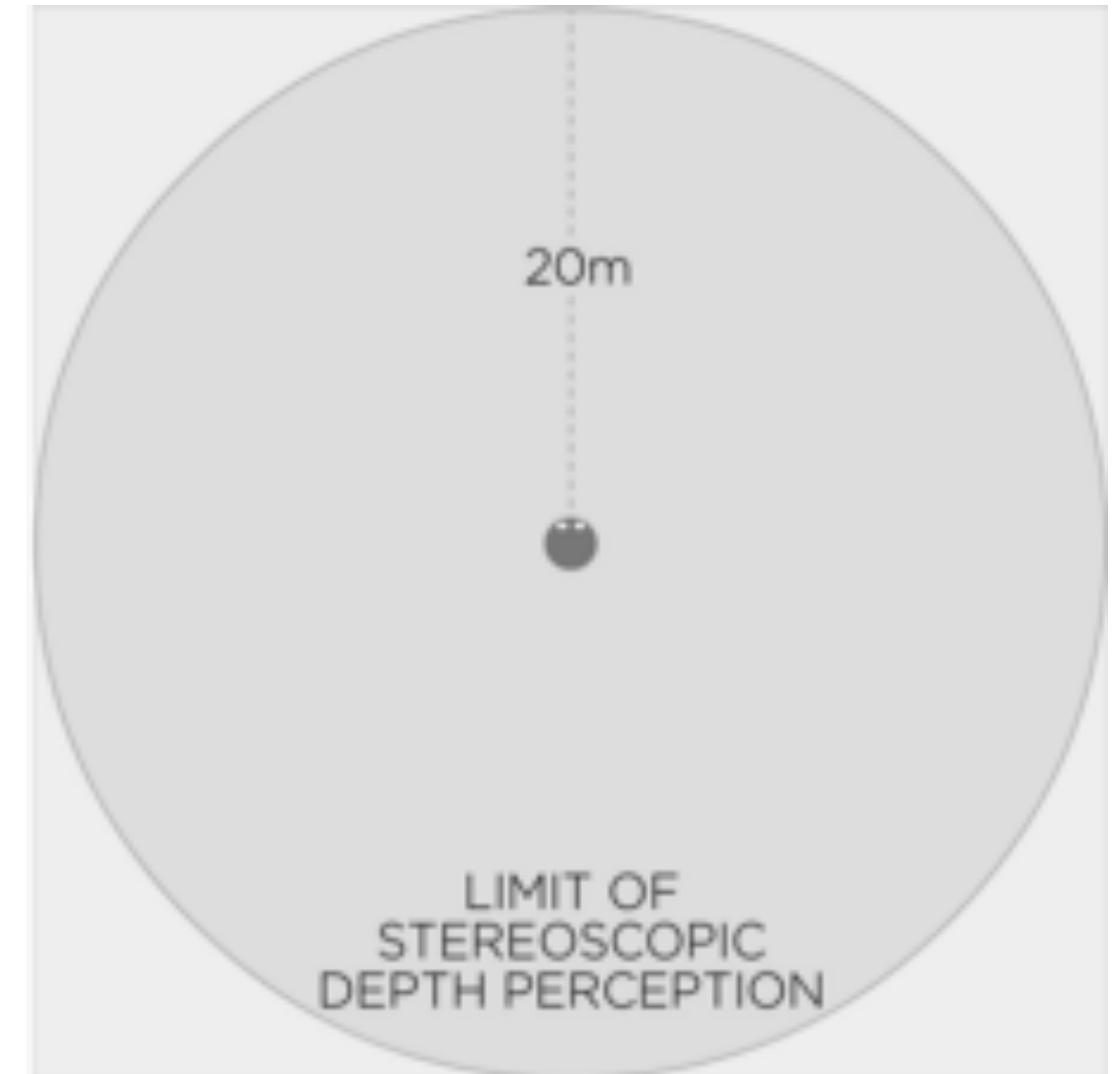
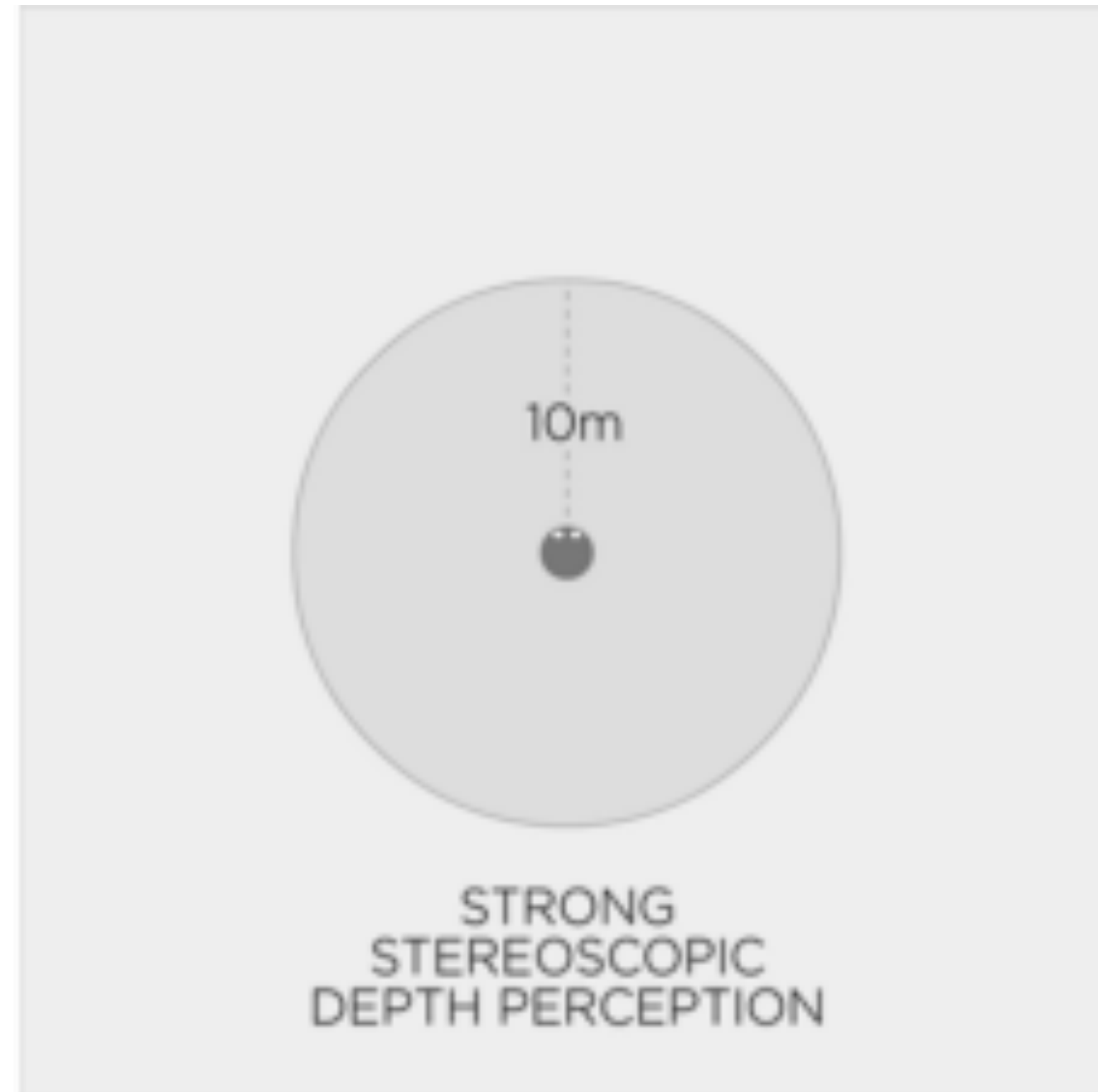
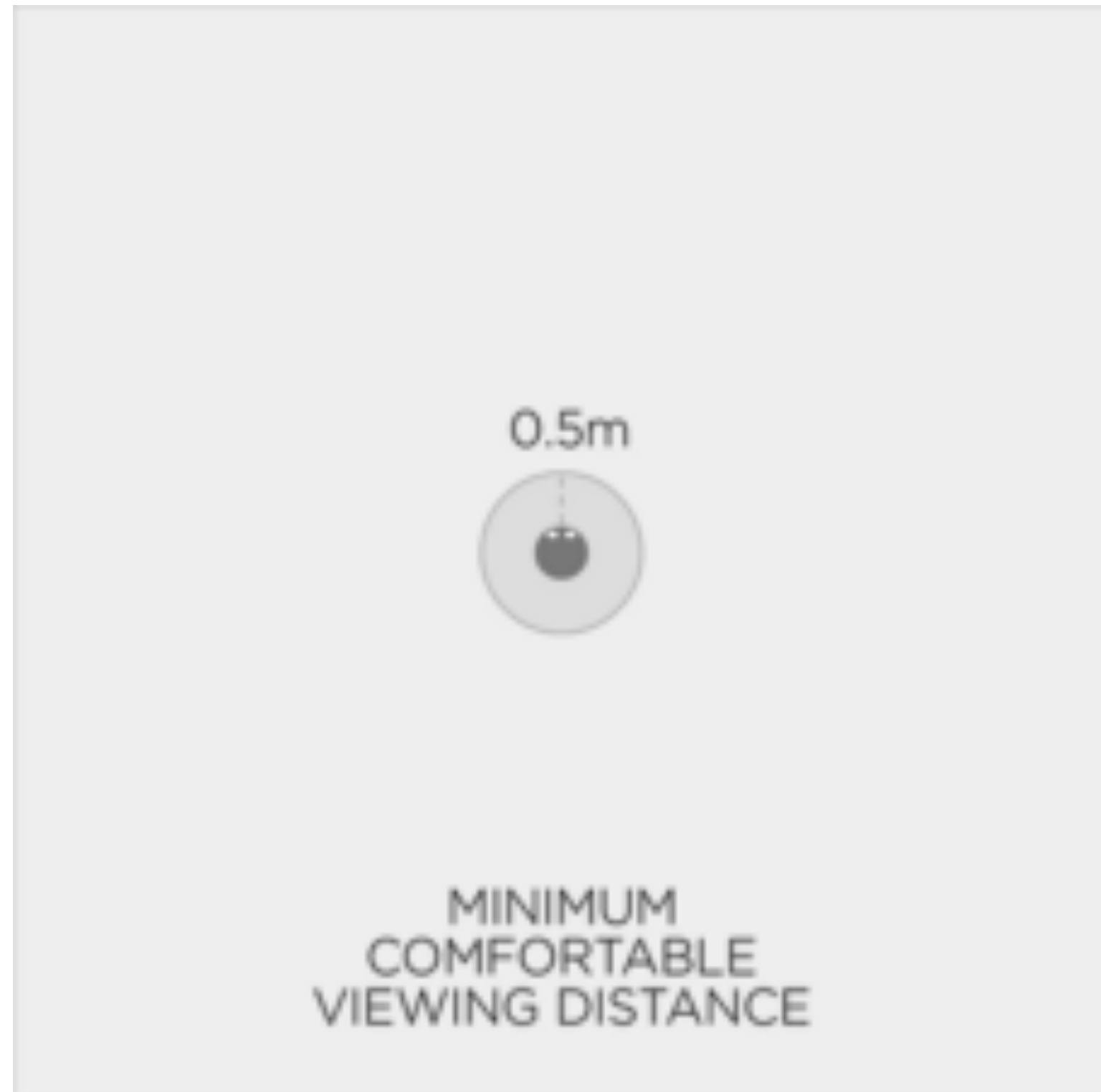
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# 360 VIEWING DISTANCE

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# DEGREES OF FREEDOM (DOF)

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## 3 DoF

Left / Right - Up / Down - Head pivot left / right

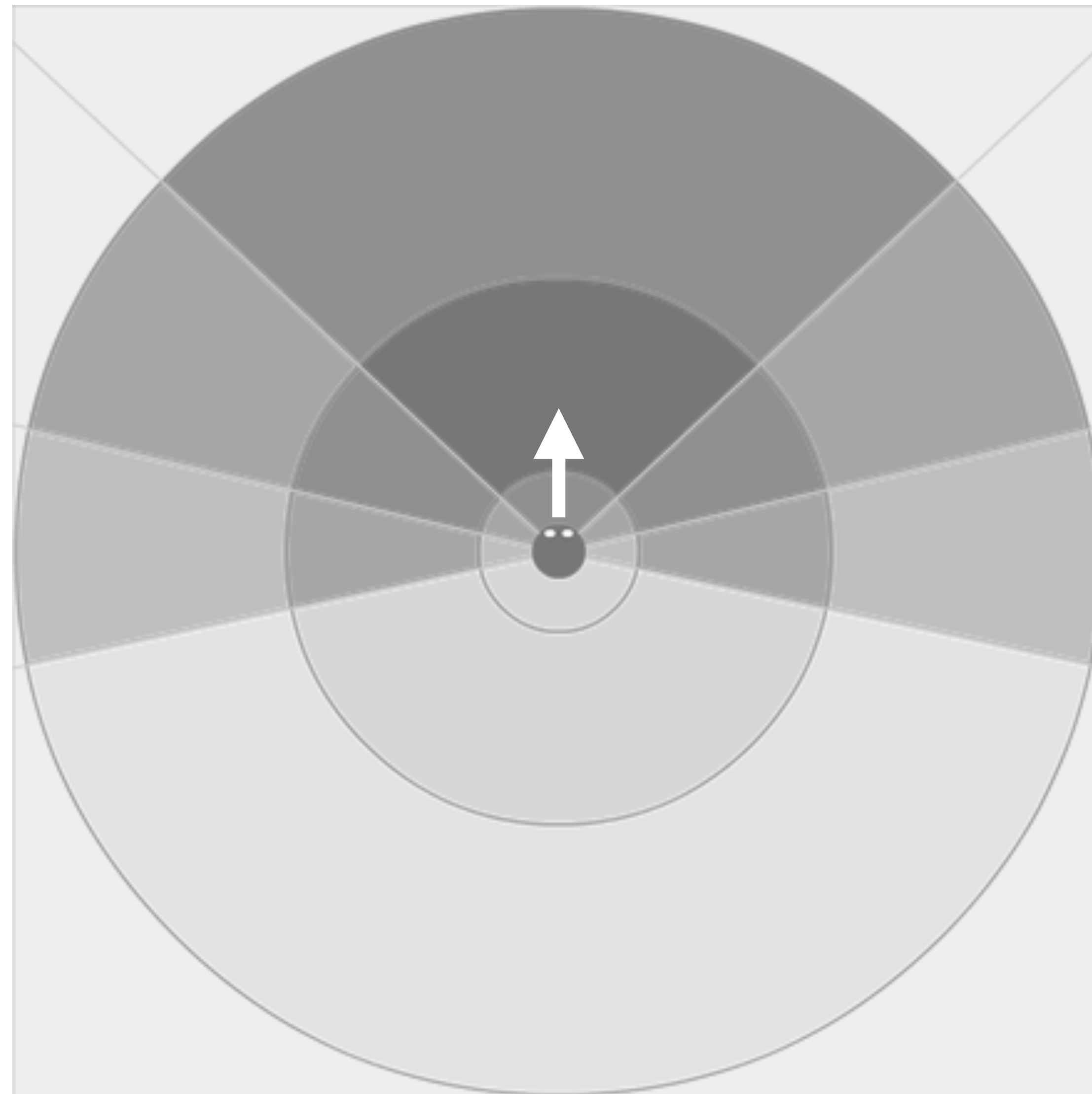
## 6 DoF

Forward - Backward - Sideways - Up/Down



# 360 AREAS OF INTEREST

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# PLANNING FOR 360

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Storyboard

Check Location

Physical

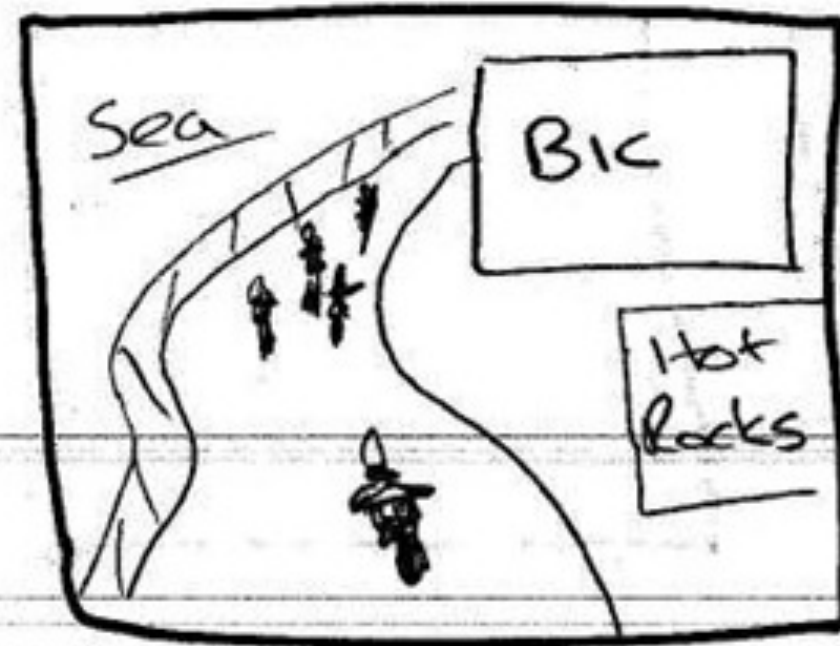
Audio

Lighting - light source direction

~~Lights?~~

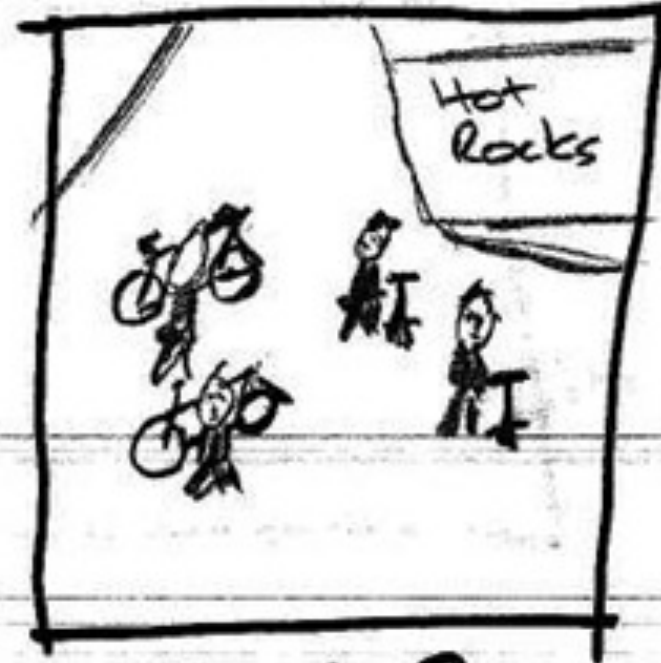


# TRADITIONAL STORYBOARD (LINEAR VIDEO)



Shot 1

Note: Zoom out as cycles come down the hill.



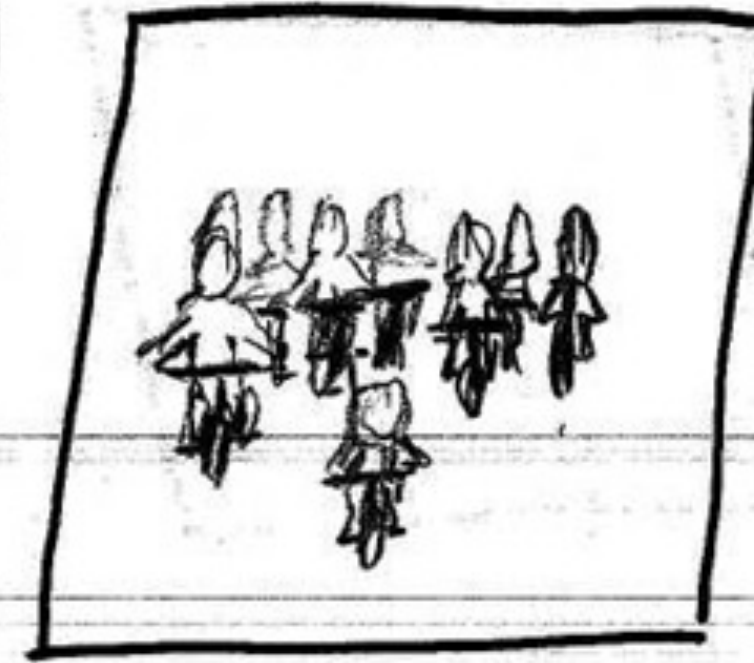
Shot 2

Note: As the cyclist walk thier bike around us filming.



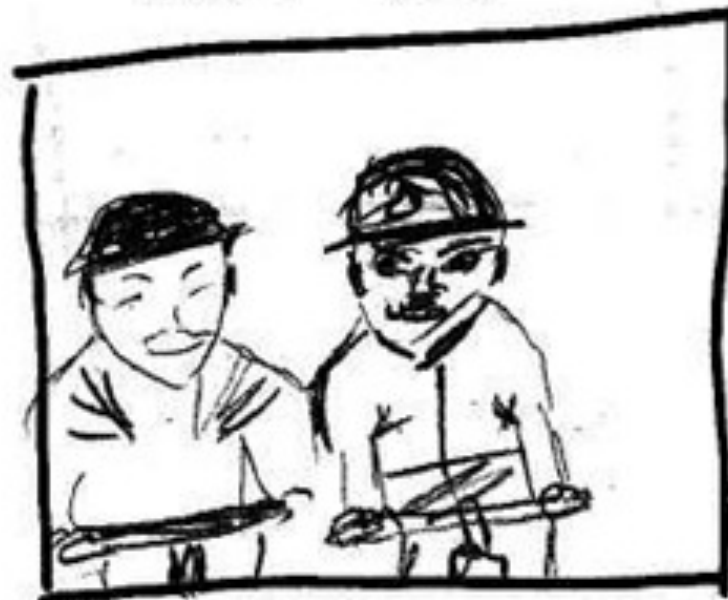
Shot 3

Note: Close up of the FlagCarrier following the car.



Shot 4

Note: Mid shot of groups of cycles in silhouette. (vary shots)



Shot 5

Note: Close ups & mid shots of cyclist try and zoom in on faces - linger & then move on. (Vary shots)



Shot 6

Note: Cycle around roundabout x2 then follow flag carrier as he dismounts and runs towards steps (wide shot)



Shot 7

Note: Flag carrier runs up the steps. (mid shot)



Shot 8

Note: Flag carrier waves the Flag at the top of the steps - race over. (Close up)



# 360 STORYBOARD

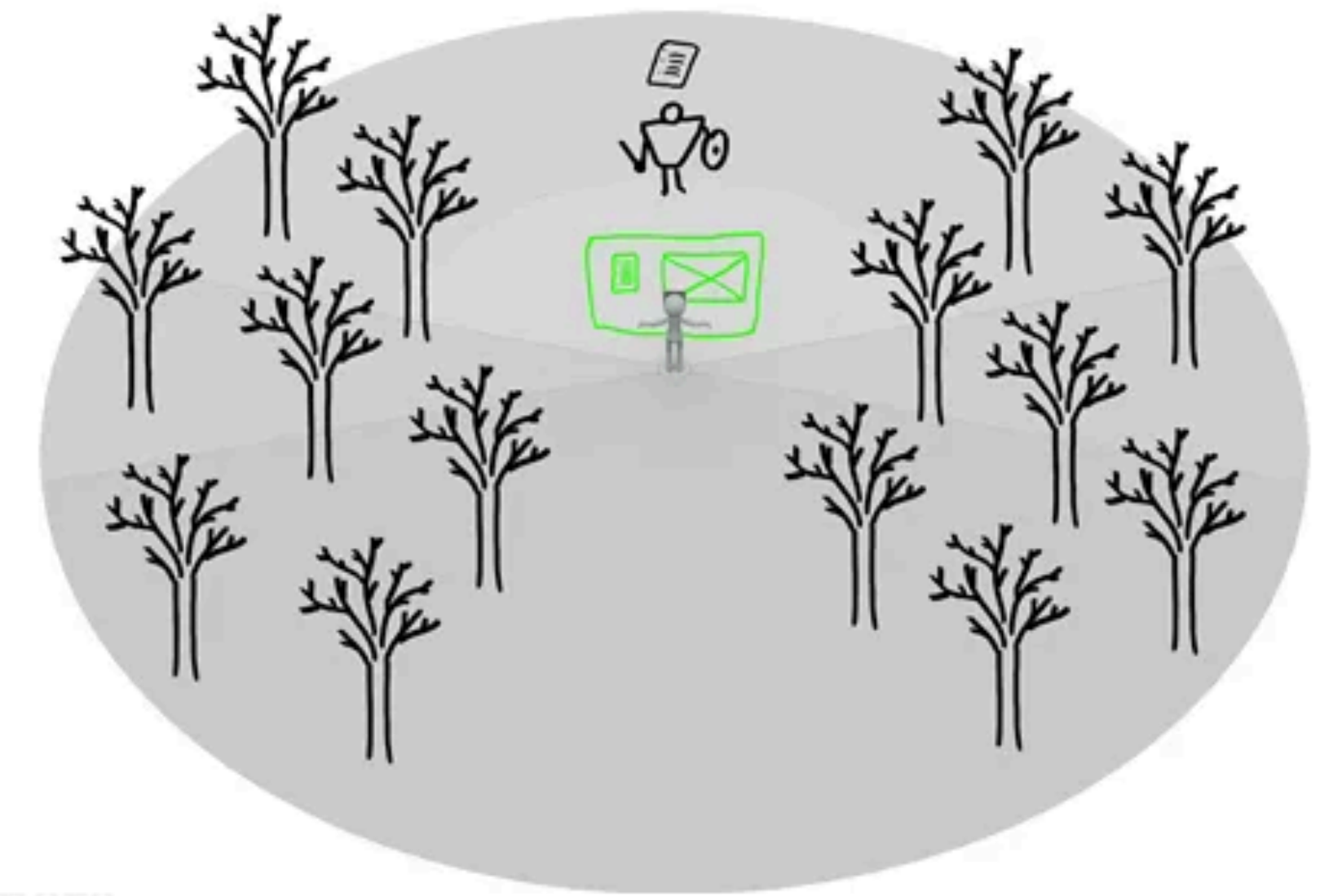
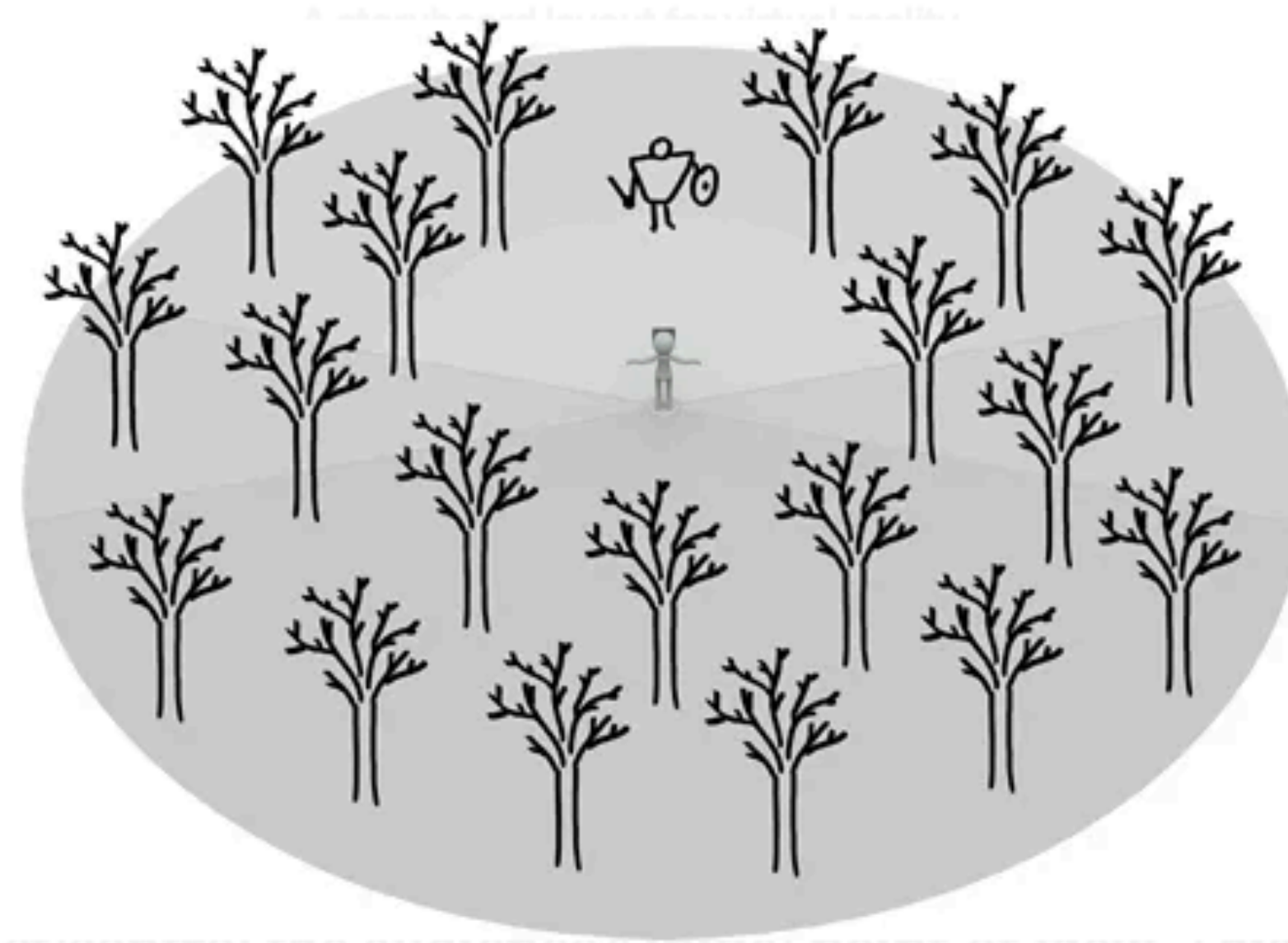
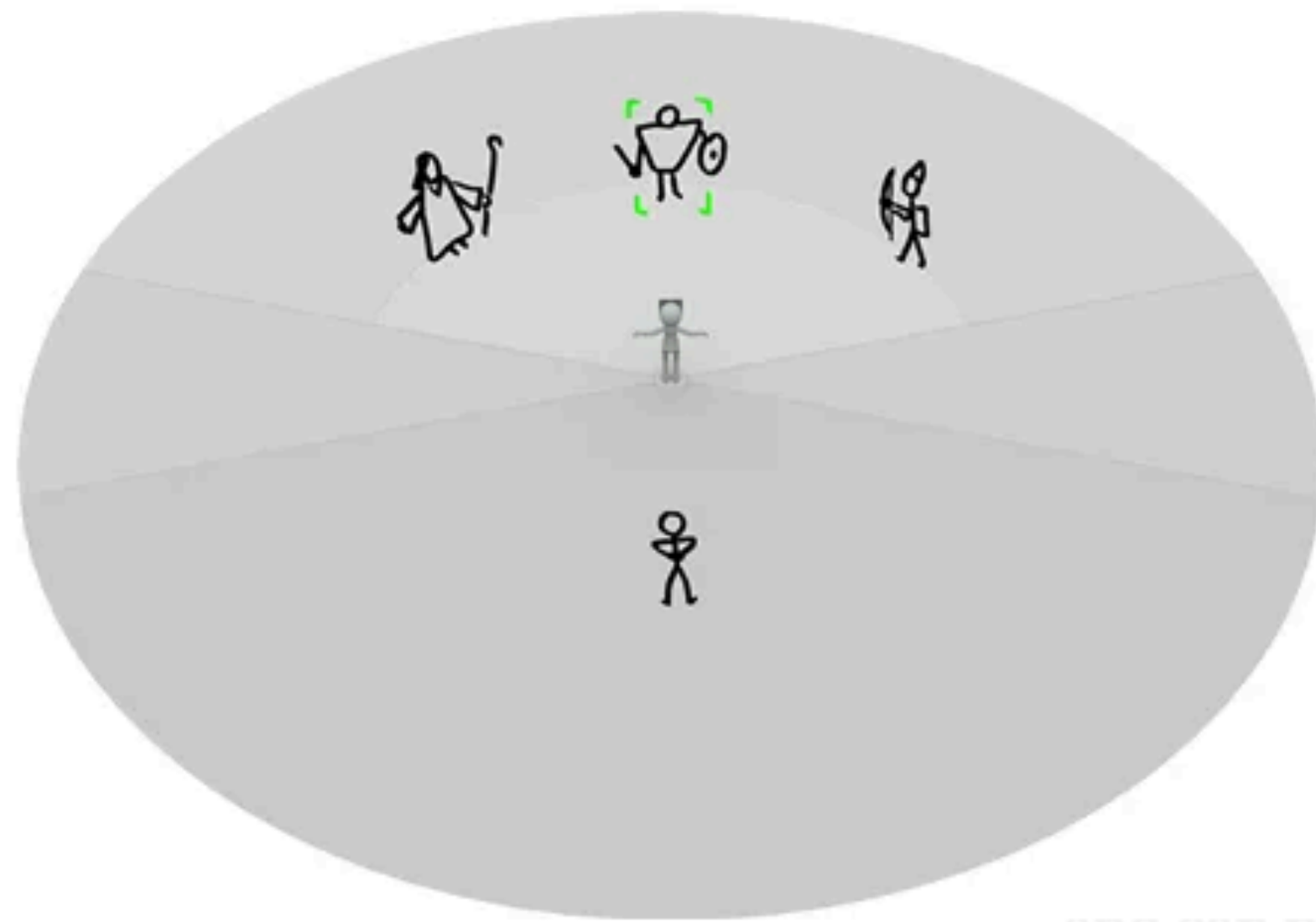
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# 360 STORYBOARD FRAMES

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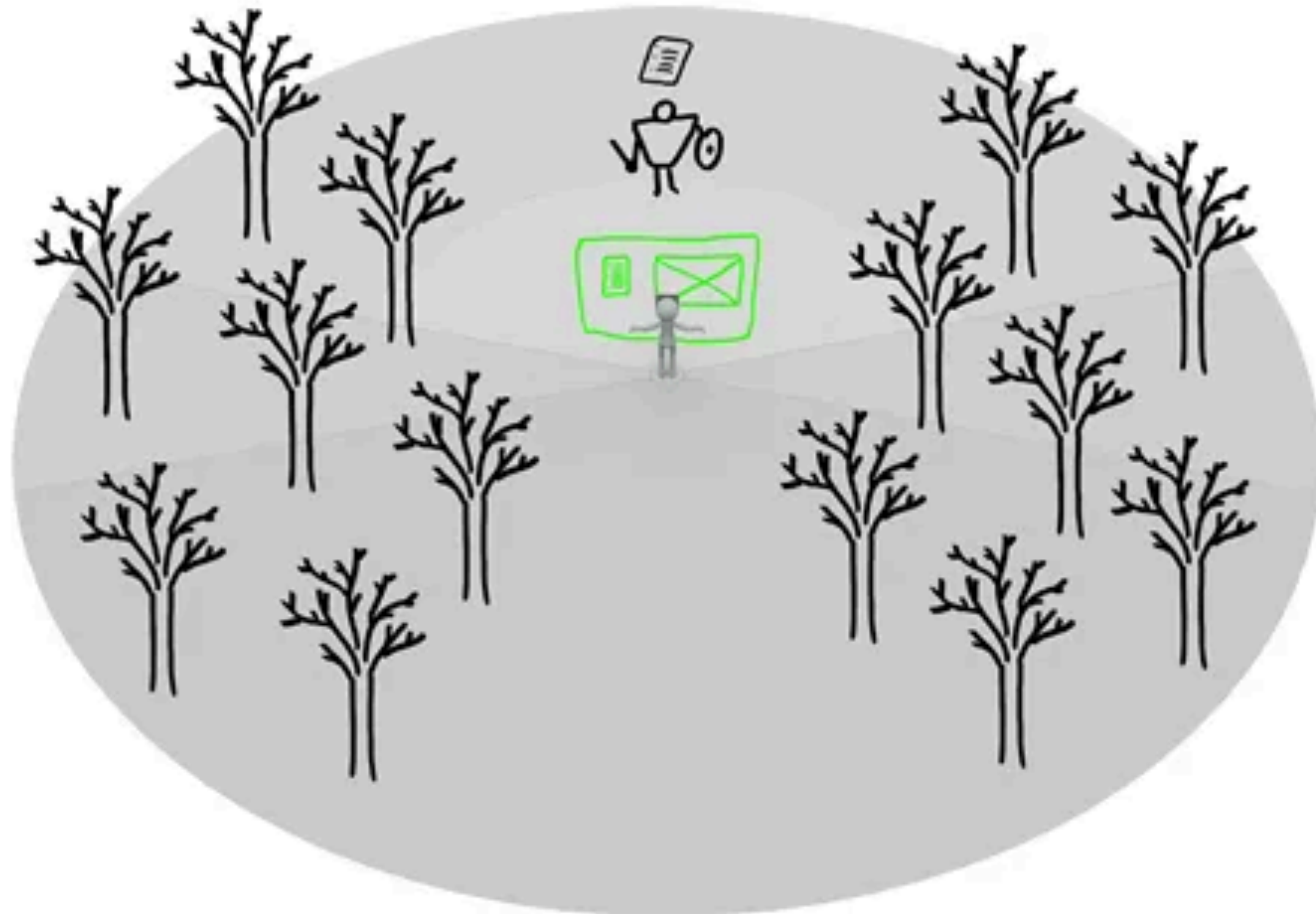


and can predict/control the audience's initial point-of-view. This is more



# 360 STORYBOARD FRAME DETAIL

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# **DIRECTING ATTENTION - LINEAR**

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**Camera movement**

**Edits and/or effects between shots**



# DIRECTING ATTENTION – 360

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**Visual cues**

**Audio cues**



# DIRECTING ATTENTION – POINTS OF INTEREST

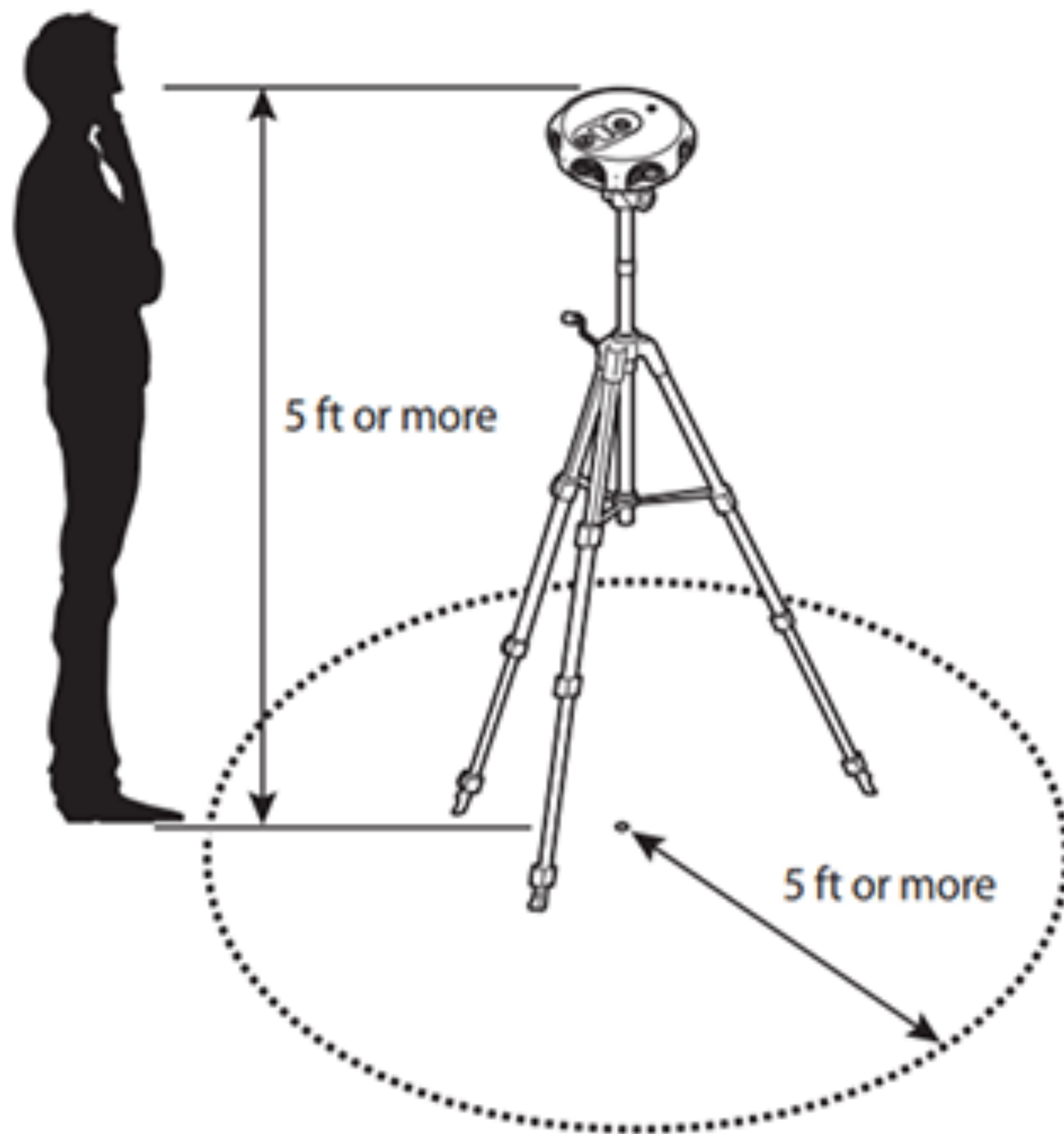
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# 360 CAMERA SET-UP

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# 360 PRODUCTION - SET-UP

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## Camera Mounting

Light stand - 1/4-20 bolt mount

Monopod

Selfie Stick

Tripod

Charge Batteries

Format SD card



# STITCHING

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Where individual images join

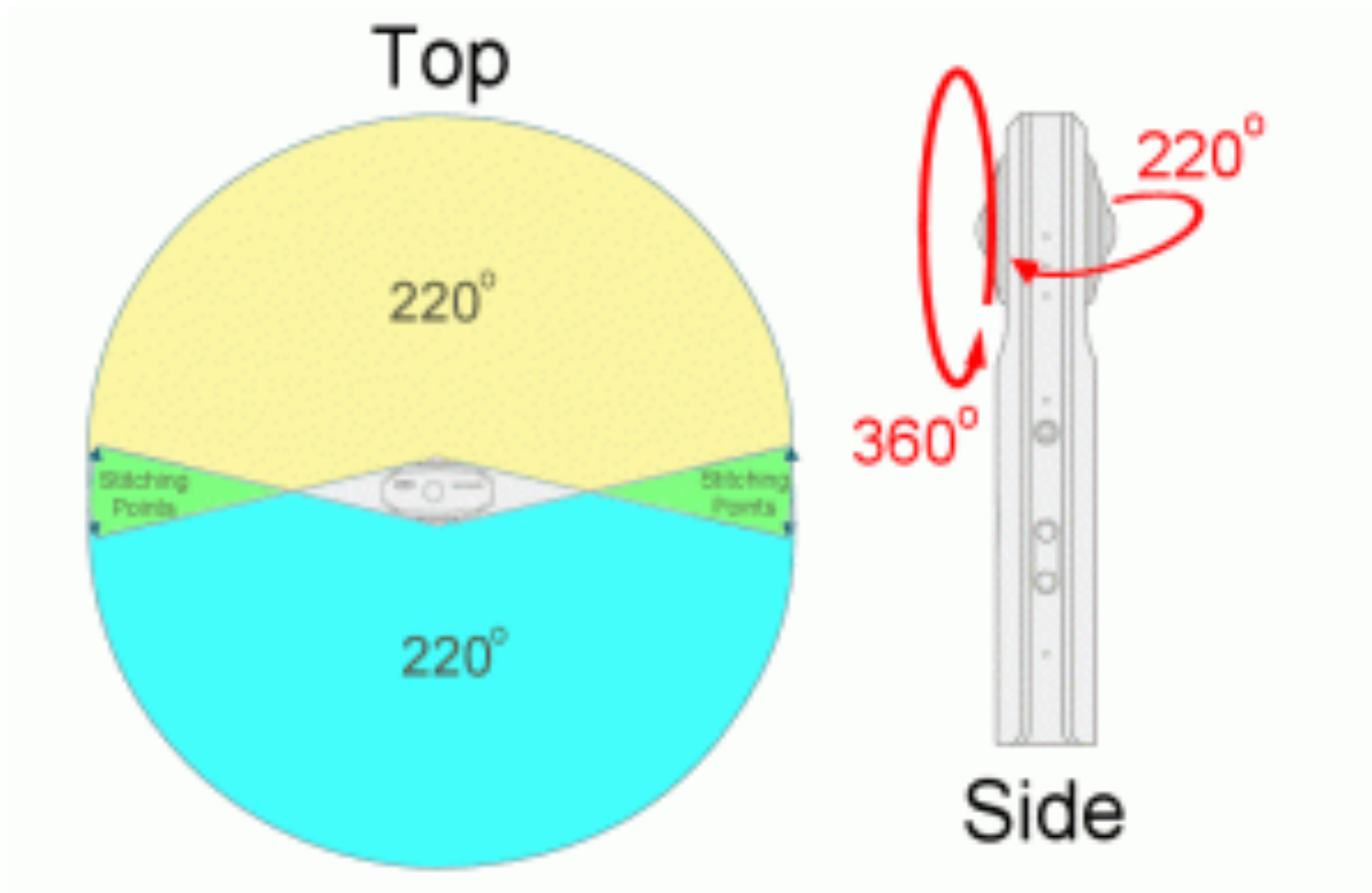
Take into account when setting your shot

Keep the main subject out of the stitch line



# STITCHING AREAS

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# STITCHING ERROR

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# AFTER RECORDING

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Download files to your phone - WiFi

Download files to your computer - SD Card, USB cable



# **AMBISONIC AUDIO**

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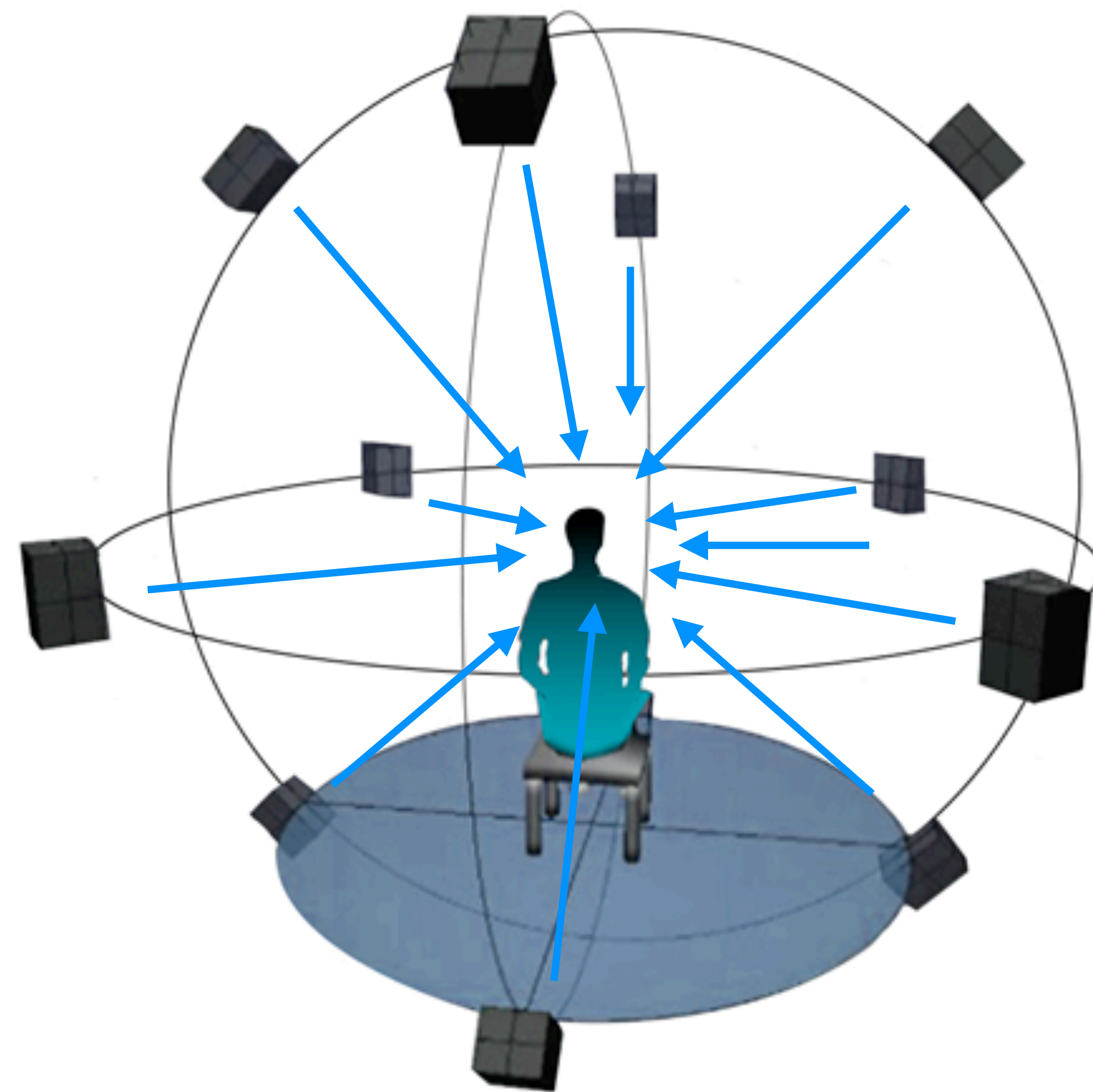
**Full-sphere surround sound format**

**Horizontal plane, above and below**



# TRADITIONAL VS AMBISONIC AUDIO

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# 360 VIDEO EDITING PRE-PROCESSING

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## Ricoh Theta X

No processing needed - creates files in video format

## Insta360 One X

Import .insv files to Premier

(Insta360 plugin installed with Insta360 Studio 2022)



# 360 POST-PRODUCTION

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**Edit in Desktop application (Insta360 Studio 2022)**

**Edit in Adobe Premiere**



# 360 PUBLISHING

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Spec	YouTube	Facebook
Format	.mp4, .mov	.mp4, .mov
Codec		H.264 (MPEG-4 AVC)
File Type	Equirectangular	Equirectangular
Aspect Ratio	2:1	2:1
Resolution	7168 x 3584 8192 x 4096	Up to 5120 x 2560
Framerate (FPS)	24, 25, 30, 48, 50, or 60	30

**QUESTIONS?**